BABY-FRIENDLY HOSPITAL INITIATIVE
Revised, Updated and Expanded
for Integrated Care

SECTION 1
BACKGROUND AND IMPLEMENTATION

2009

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These multi-country and multi-organizational contributions were invaluable in helping to fashion a set of tools and guidelines designed to address the current needs of countries and their mothers and babies, facing a wide range of challenges in many differing situations.

Preface for the 2009 BFHI materials: Revised, Updated and Expanded for Integrated Care

Since the Baby-friendly Hospital Initiative (BFHI) was launched by UNICEF and WHO in 1991-1992, the Initiative has grown, with more than 20,000 hospitals having been designated in 156 countries around the world over the last 15 years. During this time, a number of regional meetings offered guidance and provided opportunities for networking and feedback from dedicated country professionals involved in implementing BFHI. Two of the most recent were held in Spain, for the European region, and Botswana, for the Eastern and Southern African region. Both meetings offered recommendations for updating the Global Criteria, related assessment tools, as well as the "18-hour course", in light of experience with BFHI since the Initiative began, the guidance provided by the new Global Strategy for Infant and Young Child Feeding, and the challenges posed by the HIV pandemic. The importance of addressing "mother-friendly care" within the Initiative was raised by a number of groups as well.

As a result of the interest and strong request for updating the BFHI package, UNICEF, in close coordination with WHO, undertook the revision of the materials in 2004-2005, with various people assisting in the process (Genevieve Becker, Ann Brownlee, Miriam Labbok, David Clark, and Randa Saadeh). The process included an extensive "user survey" with colleagues from many countries responding. Once the revised course and tools were drafted they were reviewed by experts worldwide and then field-tested in industrialized and developing country settings. The full first draft of the materials was posted on the UNICEF and WHO websites as the "Preliminary Version for Country Implementation" in 2006. After more than a year's trial, presentations in a series of regional multi-country workshops, and feedback from dedicated users, UNICEF and WHO[1] met with the co-authors above[2] and resolved the final technical issues that had been raised. The final version was completed in late 2007. It is expected to update these materials no later than 2018.

The revised BFHI package includes:

Section 1: Background and Implementation, which provides guidance on the revised processes and expansion options at the country, health facility, and community level, recognizing that the Initiative has expanded and must be mainstreamed to some extent for sustainability, and includes:

1.1 Country Level Implementation
1.2 Hospital Level Implementation
1.3 The Global Criteria for BFHI
1.4 Compliance with the International Code of Marketing of Breast-milk Substitutes
1.5 Baby-friendly Expansion and Integration Options
1.6 Resources, references and websites

Section 2: Strengthening and sustaining the Baby-friendly Hospital Initiative: A course for decision-makers was adapted from the WHO course "Promoting breast-feeding in health facilities: A short course for administrators and policy-makers". This can be used to orient hospital decisions-makers (directors, administrators, key managers, etc.) and policy-makers to the Initiative and the

[1] Moazzem Hossain, UNICEF NY, played a key role in organizing the multi-country workshops, launching the use of the revised materials. He, Randa Saadeh and Carmen Casanovas of WHO worked together with the co-authors to resolve the final technical issues.

[2] Miriam Labbok is currently Professor and Director, Center for Infant and Young Child Feeding and Care, Department. of Maternal and Child, University of North Carolina School of Public Health.

positive impacts it can have and to gain their commitment to promoting and sustaining "Baby-friendly". There is a Course Guide and eight Session Plans with handouts and PowerPoint slides. Two alternative session plans and materials for use in settings with high HIV prevalence have been included.

Section 3: Breastfeeding Promotion and Support in a Baby-friendly Hospital, a 20-hour course for maternity staff, which can be used by facilities to strengthen the knowledge and skills of their staff towards successful implementation of the Ten Steps to Successful Breastfeeding. This section includes:

3.1 Guidelines for Course Facilitators including a Course Planning Checklist
3.2 Outlines of Course Sessions
3.3 PowerPoint slides for the Course

Section 4: Hospital Self-Appraisal and Monitoring, which provides tools that can be used by managers and staff initially, to help determine whether their facilities are ready to apply for external assessment, and, once their facilities are designated Baby-friendly, to monitor continued adherence to the Ten Steps. This section includes:

4.1 Hospital Self-Appraisal Tool
4.2 Guidelines and Tools for Monitoring

Section 5: External Assessment and Reassessment, which provides guidelines and tools for external assessors to use both initially, to assess whether hospitals meet the Global Criteria and thus fully comply with the Ten Steps, and then to reassess, on a regular basis, whether they continue to maintain the required standards. This section includes:

5.1 Guide for Assessors, including PowerPoint slides for assessor training
5.2 Hospital External Assessment Tool
5.3 Guidelines and Tool for External Reassessment
5.4 The BFHI Assessment Computer Tool

Sections 1 through 4 are available on the UNICEF website at http://www.unicef.org/nutrition/index_24850.html or by searching the UNICEF website at http://www.unicef.org/ and, on the WHO website at http://www.who.int/nutrition/publications/infantfeeding/9789241594950/en/index.html or by searching the WHO website at www.who.int/nutrition.

Section 5: External Assessment and Reassessment, is not available for general distribution. It is only provided to the national authorities for BFHI who provide it to the assessors who are conducting the BFHI assessments and reassessments. A computer tool for tallying, scoring and presenting the results is also available for national authorities and assessors. Section 5 can be obtained, on request, from the country or regional offices or headquarters of UNICEF Nutrition Section and WHO, Department of Nutrition for Health and Development.

SECTION 1
BACKGROUND AND IMPLEMENTATION

		Page
1.1	**Country Level Implementation and Sustainability**	**1**
	Background rationale for revisions	1
	Getting started	3
	Five Steps in Implementing BFHI at the country level	4
	National Criteria for Baby-friendly Community Designation	12
	Annex 1: Five steps in implementing BFHI at the country level	13
	Annex 2: Suggested questions for a rapid baseline country assessment	14
	Annex 3: Excerpts from recent WHO, UNICEF, or other global publications or releases	17
	Annex 4: The contribution of breastfeeding and complementary feeding to achieving the Millennium Development Goals	20
1.2	**Hospital Level Implementation**	**23**
	Breastfeeding rates	23
	Supplies of Breast-milk Substitutes	23
	Support for non-breastfeeding mothers	24
	Mother-friendly care	24
	HIV and infant feeding	24
	The Baby-friendly Hospital designation process	27
	Annex 1: Applying the Ten Steps in facilities with high HIV prevalence	29
1.3	**The Global Criteria for the BFHI**	**31**
	Criteria for the 10 Steps and other components	31
	Annex 1: Acceptable medical reasons for use of breast-milk substitutes	43
1.4	**Compliance with the International Code of Marketing of Breast-milk Substitutes**	**49**
1.5	**Baby-friendly Expansion and Integration Possibilities**	**53**
	Baby-friendly communities: recreating Step Ten	53
	BFHI and Prevention of Mother-to-Child Transmission of HIV/AIDS	57
	Mother-baby friendly facilities	57
	Baby-friendly neonatal intensive care and paediatric units	59
	Baby-friendly physician's office	60
	Baby-friendly complementary feeding	61
	Mother-baby friendly health care – everywhere	64
1.6	**Resources, References and Websites**	

SECTION 1.1
COUNTRY LEVEL IMPLEMENTATION

Background Rationale for Revisions

When the Baby-friendly Hospital Initiative was conceived in the early 1990s in response to the 1990 Innocenti Declaration on the Protection, Promotion and Support of Breastfeeding call for action, there were very few countries that had dedicated Authorities or Committees to oversee and regulate infant feeding standards. Today, after nearly 15 years of work in support of optimal infant and young child feeding, 156 countries have, at one time or another, assessed hospitals and designated at least one facility "Baby-friendly." The BFHI has measurable and proven impact,[3] however, it is clear that only a comprehensive, multi-sector, multi-level effort to protect, promote and support optimal infant and young child feeding, including legislative protection, social promotion and health worker and health system support via BFHI and additional approaches, can hope to achieve and sustain the behaviours and practices necessary to enable every mother and family to give every child the best start in life.

The 2002 WHO/UNICEF *Global Strategy for Infant and Young Child Feeding* (GSIYCF) calls for renewed support - with urgency - for exclusive breastfeeding from birth for 6 months, and continued breastfeeding with timely and appropriate complementary feeding for two years or longer. This Strategy and the associated "Planning Framework for Implementation" being prepared by WHO and UNICEF reconfirm the importance of the Innocenti Declaration goals, while adding attention to support for complementary feeding, maternal nutrition, and community action.

The nine operational areas of the Global Strategy are:

1. Appoint a national breastfeeding co-ordinator, and establish a breastfeeding committee.
2. Ensure that every maternity facility practices the *Ten Steps to Successful Breastfeeding*.
3. Take action to give effect to the International Code of Marketing of Breast-milk Substitutes and subsequent relevant resolutions of the World Health Assembly.
4. Enact imaginative legislation protecting the breastfeeding rights of working women.
5. Develop, implement, monitor and evaluate a comprehensive policy covering all aspects of infant and young child feeding.
6. Ensure that the health care system and other relevant sectors protect, promote and support exclusive breastfeeding for six months and continued breastfeeding for up to two years of age or beyond, while providing women with the support that they require to achieve this goal, in the family, community and workplace.
7. Promote timely, adequate, safe and appropriate complementary feeding with continued breastfeeding.
8. Provide guidance on feeding of infants and young children in exceptionally difficult circumstances, which include emergencies and parental HIV infection.

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[3] Kramer MS, Chalmers B, Hodnett ED, et al: PROBIT Study Group (Promotion of Breastfeeding Intervention Trial) Promotion of Breastfeeding Intervention Trial (PROBIT): a randomized trial in the Republic of Belarus. JAMA. 2001;285:413-420, and Merten S, Dratva J, Ackermann-Liebrich U. Do baby-friendly hospitals influence breastfeeding duration on a national level? Pediatrics. 2005;116(5):e702-e708.

9. Consider what new legislation or other suitable measures may be required to give effect to the principles and aim of the International Code of Marketing of Breast-milk Substitutes and to subsequent relevant World Health Assembly resolutions.

This implementation plan encourages all countries to revitalize action programmes according to the Global Strategy, including the Baby-friendly Hospital Initiative (BFHI). The original BFHI addresses targets 1 and 2 and 8, above, and this version adds some clarity to 1, 2, 6, 7 and 8.

In 2003, nine UN agencies joined in the development and launching of "HIV and Infant Feeding - Framework for Priority Action". This document recommends key actions to governments related to infant and young child feeding, and covers the special circumstances associated with HIV/AIDS. The aim of these actions is to create and sustain an environment that encourages appropriate feeding practices for all infants while scaling-up interventions to reduce HIV transmission.

The five recommended actions include the need for ensuring support for optimal infant and young child feeding for all, including the need for BFHI, as requisites to successful counselling of the HIV-positive mother:

1. Develop or revise (as appropriate) a comprehensive national infant and young child feeding policy that includes HIV and infant feeding.
2. Implement and enforce the International Code of Marketing of Breast-milk Substitutes and subsequent relevant World Health Assembly Resolutions.
3. Intensify efforts to protect, promote and support appropriate infant and young child feeding practices in general, while recognizing HIV as one of a number of exceptionally difficult circumstances.

   This action specifically includes a call for revitalization and scale-up of coverage of the Baby-friendly Hospital Initiative and to extend it beyond hospitals, including through the establishment of breastfeeding support groups. It also encourages making provision for expansion of activities to prevent HIV transmission to infants and young children hand-in-hand with promotion of BFHI principles. HIV/Infant Feeding counselling training recommendations from WHO/UNICEF note that BFHI or other breastfeeding support training should precede training on infant feeding counselling for the HIV-positive mother.
4. Provide adequate support to HIV-positive women to enable them to select the best feeding option for themselves and their babies, to successfully carry out their infant feeding decisions.
5. Support research on HIV and infant feeding, including operations research, learning, monitoring and evaluation at all levels, and disseminate findings.

In 2005, the fifteenth anniversary of the Innocenti Declaration, an assessment of progress and challenges was carried out, culminating in a second Innocenti Declaration 2005 on Infant and Young Child Feeding, highlighting the importance of early initiation of breastfeeding, suggesting ways to strengthen action on breastfeeding and outlining urgent activities for the nine operational areas of the Global Strategy.

BFHI Section 1, Background and Implementation, presents a methodology for encouraging nations to reinvigorate, restore or launch the BFHI in today's realities, facilitating the changes needed in maternity facilities, practices, and health worker training in those facilities, in accordance with the WHO and UNICEF "Ten Steps to Successful Breastfeeding." The original documents written during the 1990s have been

revised to take into account the current global context, with consideration given to HIV/AIDS, to address obstacles to the processes that have been encountered over the years, and include recent evidence-based findings related to infant and young child feeding. The Annexes to Section 1.1 include Annex 1: a summary framework for implementation at the national level, Annex 2: suggested questions for a self-assessment, Annex 3: excerpts from recent publications that may be helpful in sensitisation of decision-makers regarding the importance of early and exclusive breastfeeding and Annex 4: an illustration of how breastfeeding is essential for the achievement of the Millennium Development Goals (MDGs).

Getting Started

Most countries have taken steps to start national Baby-friendly campaigns, including vigorous steps towards improved support to breastfeeding in hospitals, actions to protect breastfeeding by national policy implementation, and public promotion campaigns. The recommendations and steps below are presented to help re-invigorate, restore, modify or strengthen such national initiatives, or to help launch such activities where none exist.

The Ten Steps to Successful Breastfeeding, a summary of the guidelines for maternity care facilities presented in the Joint WHO/UNICEF Statement Protecting, Promoting and Supporting Breastfeeding: The Special Role of Maternity Services, (WHO, 1989) have been accepted as the minimum global criteria for attaining the status of a Baby-friendly Hospital.

TEN STEPS TO SUCCESSFUL BREASTFEEDING

Every facility providing maternity services and care for newborn infants should:

1. Have a written breastfeeding policy that is routinely communicated to all health care staff.
2. Train all health care staff in skills necessary to implement this policy.
3. Inform all pregnant women about the benefits and management of breastfeeding.
4. Help mothers initiate breastfeeding within a half-hour of birth.
5. Show mothers how to breastfeed, and how to maintain lactation even if they should be separated from their infants.
6. Give newborn infants no food or drink other than breastmilk unless *medically* indicated.
7. Practise rooming in - allow mothers and infants to remain together - 24 hours a day.
8. Encourage breastfeeding on demand.
9. Give no artificial teats or pacifiers (also called dummies or soothers) to breastfeeding infants.
10. Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or clinic.

The process of becoming a baby-friendly hospital is outlined in Section 1.2. In brief, it is a process that starts with self-appraisal by the facility. This initial self-assessment includes an analysis of the practices that encourage or hinder breastfeeding, and then helps identify the actions that will help to make the necessary changes. It follows the accepted triple-A sequence (Assessment, Analysis and Action), which characterises much of UNICEF Programme development. After a facility is satisfied that it meets a high standard, this achievement is confirmed objectively by an external assessment of whether the facility has achieved, or nearly achieved, the “Global Criteria” for BFHI and thus can be awarded the Global Baby-friendly Hospital designation and plaque.

The key documents that serve to guide the Baby-friendly Hospital Initiative are Section 1: Background and Implementation - the guidelines for implementation of the Initiative that include initiation at the country and hospital levels, compliance with the International Code of Marketing of Breast-milk Substitutes, and approaches to expansion, integration and sustainability; Section 2: Strengthening and sustaining the Baby-friendly Hospital Initiative - a course for decision-makers adapted from "Promoting breast-feeding in health facilities a short course for administrators and policy-makers"; Section 3: the BFHI Training Course - with updated content for HIV, maternity practices and emergencies; Sections 4: Self- Appraisal and Monitoring; and Section 5: External Assessment and Reassessment.

Five Steps in Implementing BFHI at the Country Level (also see Section 1.1, Annex 1)

Today many countries’ BFHI programmes are well underway. Therefore, this section will offer a five-step approach, based on what has been used for more than a decade with modifications for today’s circumstances. This section addresses both those settings where there is no BFHI or it has become quiescent, as well as those where the BFHI effort is ongoing. Each step includes suggested activities. These five essential steps are summarised on page 13, including the process, the inputs and outputs associated with them.

Step 1:
Establish, re-energize, or plan a meeting of the National Breastfeeding, Infant and Young Child Feeding, or Nutrition Authority, to establish or assess its functions related to BFHI.

If your country has an established national authority, ensure that it is up to the current standards as outlined in the Global Strategy for Infant and Young Child Feeding. If not, the following provides guidance for its membership and functions.

- *1A. Who are the members of a National Authority?*

According to the Global Strategy, the national authority should be multi-sectoral. The National Authority should not be confined to the medical of health sector. Possible composition would include:

- Representative(s) of the national government’s health and nutrition sector that supports women and children’s health outcomes,
- Representative(s) of the national government’s financial planning,
- Representative(s) of the national government’s social sector,
- Technical representative(s) from the academic sector,
- Community action leadership, such as NGOs, and
- Representative(s) from committee(s) that supports BFHI and/or Code implementation,

- Communications specialist,
- Monitoring and evaluation specialist.

- *1B. What is the role of the National Authority in relation to BFHI?*

The national authority will have government endorsement to have oversight of all nine Global Strategy targets, as operationalised in the four major action areas: 1) national policy and legislation, 2) health system and health worker standards, reform and related actions, 3) multi-sectoral mobilisation and community action, and 4) special circumstances. As such the primary roles are to:

- strategise and plan national IYCF activities;
- oversee implementation of specific activity areas such as BFHI and the Code; and
- monitor and evaluate the status of programmes and activities as well as the outcomes in terms of changes in feeding behaviours.

These activities demand ongoing assessment and feedback. Therefore, the national authority must also:

- advocate for data collection, both ongoing in health systems as well as periodic surveys,
- be mandated by the national or regional government, and
- have support and funding in the national or regional financial plan and budget.

The specific roles and responsibilities of the national authority include:

- Coordinating and fostering collaboration across Ministries, stipulating a process for sustainable reassessment, e.g., via insurance, taxes.
- Incorporating support for breastfeeding and complementary feeding into ongoing mechanisms.
- Setting goals based on international standards. In general:
  - The goal for early initiation should be that newborns are placed skin-to-skin within minutes of birth, remaining for 60 minutes or longer, with all mothers encouraged to support the infant to breastfeed when their babies show signs of readiness.
  - The goal for exclusive breastfeeding, as determined at the UN Standing Committee on Nutrition, 2004, should be to increase exclusive breastfeeding to 6 months of age to a minimum of 60% by 2015, with the ultimate goal of approaching 100%.
    Note: in countries where women receive voluntary counselling for HIV/AIDS, a proportion of these women will choose replacement feeding. Even though some of the HIV-positive women will choose exclusive breastfeeding, in such settings, the ultimate goal will remain less than 100%.
  - The goal for complementary feeding, as determined at the UN Standing Committee on Nutrition, 2004, from 6 months to 23 months or longer, is that breastfeeding continue to supply 350-500 calories a day, and an additional 3-5 feedings of nutrient rich complementary foods is needed, as described under "optimal feeding".
- Achieving stated IYCF goals. Therefore, a regular budget and budget line must be identified by the government from governmental sources to support these functions.
- Overseeing standards for health worker training and legislation to protect optimal infant and young child feeding, such as undergraduate health worker

curricula, working with professional organizations to upgrade standards of practice, and legislation to implement the Code of Marketing and maternity protection.

- Adapting criteria for baby-friendly expansion into the community and other expansion approaches (see section 1.5).
- Incorporating baby-friendly principles into any and all related health (e.g., Saving Newborn Lives, C-IMCI), nutrition (e.g., Ending Child Hunger and Undernutrition Initiative, work on MDGs) or social programmes (e.g., Early Child Development).
- Providing technical oversight and review as necessary of the BFHI Coordination Group's assessments – including how it administers self-appraisals, assessments and re-assessment at least once every 3-5 years.
- Overseeing ethics of the designation processes and insure avoidance of conflict of interest, whether with a manufacturer, training programme, or other, that may bias assessments and designations.
- Carrying out, at least annually, an assessment and evaluation of health service data on breastfeeding and complementary feeding for baby-friendly-designated facilities and other settings.

In addition, the National Authority will develop a multi-year plan of action and associated budget for government support and consideration, and will meet regularly to assess progress against each goal, as well as to assess progress on agreed upon objectives.

Step 2:
Identify – or re-establish – national BFHI goals and approaches.

Many countries have BFHI committees and goals in place, but they may or may not be part of current comprehensive or integrated health system and health worker training policies and plans. The first step is to ensure that these goals are currently part of national or regional programming. If there has not been recent action on these goals, consider conducting a rapid baseline survey or literature review of country-level breastfeeding and complementary feeding practices, support activities, number and location of facilities previously designated, and status of those facilities to assess current standards of practice. (see the sample questionnaire for rapid assessment in Annex 2 of this Section 1.1.).

The concept of BFHI is no longer limited to the Ten Steps in maternities, but has been adapted to include many possibilities for expansion into other parts of the health system, including maternal care, paediatrics, health clinics, and physicians' offices, and into other sectors and venues such as community, commercial sector, and agricultural or educational systems. Baby-friendly care concepts derived from the Ten Steps can also be provided in tandem with other international initiatives, such as Community IMCI or HIV/AIDS/PMTCT programming.

The National Authority may decide to include some of these new components and emphases in developing a new, greater picture of Baby-friendly care in the local context. Some examples of these options are presented later in the Section 1.5: Expansion and Integration Possibilities.

Step 3:
Identify, designate or develop a BFHI Coordination Group (BCG).

Coordinating the BFHI designation process may or may not be considered to be additional role for the National Breastfeeding, Infant and Young Child Feeding, or Nutrition Authority. However, it is highly recommended that these be at least two separate groups, both recognized by the government, so that the National Authority might provide oversight for the activities of the other, and so that there is a place that a facility might seek recourse if there is any question concerning the designation process.

- *3A. Who selects the BFHI Coordination Group?*

The National Authority, whether located in the Ministry of Health, another Ministry, or as a government-sanctioned NGO, will assist the government in the designation of a BFHI Coordination Group and maintain oversight with intent to ensure ongoing quality assurance and a code of ethics. The national government may choose to designate this group, with confirmation by the National Authority, or vice versa.

- *3B. What are the roles of this Group?*

The BFHI Coordination Group (BCG) is responsible for coordinating the process and procedures for facility designation. The BCG itself may or may not carry out the assessments for designation, depending on the number of facilities in the country, the structure of the group, and the resources available. Alternatively, the BCG could serve to ensure that all BFH Designating Committees or Designating Processes continue to use standardized procedures (see Step 5).

The BCG is responsible for acquiring the BFH designation posters from the UNICEF supply catalogue or through locally developed image creation, and for having the BFHI designation plaques printed in the local language, with specified dates of designation and end of designation period. Specifications for the plaques are available from UNICEF or WHO representatives.

The BFH Designating Committees (BDCs) may be considered arms of the BCG. These committees are qualified by the BCG to carry out assessments and recommend facilities for Designation. "Designation" means the formal recognition by the BCG that there is conformity with the BFHI Hospital Assessment Criteria (see Section 1.2).

There are at least eight models for development of the BCG and the approach to assessment and credentialing/designating hospitals and maternities as "Baby-friendly":

1. *Develop, legislate and regulate standards for health facilities that include the components of BFHI.* In this model, there would be no BCG aside from the oversight by the National Authority. Legislating BFHI will support sustainability; however, without activities to ensure the quality of the activity, this model could result in superficial activities alone. Therefore this model would require ongoing monitoring and enforcement regulations in the legislation.
2. *Incorporate Baby-friendly assessment criteria into national health facility credentialing board procedures that are national standards for all hospitals and maternities.* In some countries, such credentialing is under the auspices of the professional societies, in others a separate association is established to provide quality assurance. In this case, the national board would serve the function of the BCG, and regular re-credentialing would be sustained. This probably is the most cost-efficient option, however, technical oversight by the national authority may be necessary.

3. *Encourage a professional organization or professional network to include BFHI in its mandate*. For example, in Australia, the professional society of nurse-midwifery is the BCG and is responsible for assessments. This could be with or without government support. BFHI could, logically, be the responsibility of any health profession that serves mothers and newborns and could designate, with National Authority oversight. This model would appear to offer enhanced quality control; however, some professional societies do not have the structural or fiscal base to take on this task.
4. *Establish a system whereby facilities assess each other and help each other to achieve designation status.* This model reduces the burden and the costs for the central authority, in that there only need be spot checks as to ongoing status, and would lessen the load for the BDC. However, with this reduced direct oversight, there may be a risk of collusion or other biases.
5. *Allow one professional organisation or other NGO, independent of the National Authority, to take responsibility for designation.* This approach, similar to 3, above, without oversight, reduces the costs for governments and allows independence in assessment, but it may lead to breeches in quality assurance and may result in conflict of interest, e.g., if the NGO also provides and charges for training, charges for preparation for assessment, and charges for helping the facility to improve if they fail the assessment may be practicing with inherent conflict of interest. In some settings, charges for the assessments may be prohibitive for smaller facilities or those in poorer settings. This last option is currently functioning in many countries. If selected, there are modifications (6 and 7, below) that could provide checks and balances for this approach.
6. *Allow any interested professional organization or NGO to apply to the National Authority for the right to coordinate the designation process (BCG) or to serve as a designating committee (BDC).* One or more NGOs could be approved by the National Authority to create a network of BDCs or carry out the assessments and designations themselves, depending on the number of facilities and the capacity of the NGO. The National Authority would be the organization that oversees this and grants the designations. There is a possibility of competition between NGOs that could be minimized by regional responsibility and careful oversight (see 7 below).
7. *Allow any interested professional organization or NGO to apply to the National Authority for the right to coordinate the designation process (BCG) or to serve as a designating committee (BDC) for a specific region of the country.* This approach is similar to 5 and 6 above, however, it includes aspects of oversight while reducing the possibility of inappropriate competitive activities. This approach may present a greater administrative burden for the National Authority.
8. While not ideal, *UNICEF country offices may assist* this function for a very limited period of time until the National Authority and BCG are established.

Many other constructs are possible, but each should be examined for sustainability, cost containment and insurance of oversight or checks and balances to ensure ongoing quality.

Regardless of the approach selected, it is essential that all necessary measures are taken to avoid a) any compromise to the high standards required for BFHI accreditation and b) any conflict of interest. Particular care should be taken where the national authority has given the BFHI designation group responsibility for delivering or monitoring standards of clinical care, or for delivering general health professional education and/or for

providing specific breastfeeding training. The National Authority (as described above) is essential for oversight or quality and ethical considerations.

Step 4:
The National Authority:

a) ensures that the BFHI Coordinating Group fulfils its responsibility to provide, directly or indirectly through BFHI Designating Committees, the initial or ongoing assessments of facilities,
b) helps plan training and curriculum revision,
c) ensures that the national health information system includes a record of feeding status on all contacts with children under 2 years of age, and
d) develops and implements a monitoring and evaluation plan.

Note: if the BFHI program is ongoing, it may not be necessary to carry out all parts of this step, as there may be an existing record of current status, a roster of trainers and assessors, and a training plan ongoing, with curriculum revisions being enacted. However, the BFHI may not as yet include health information system updates to ensure that feeding status of all children is recorded.

- *4A. Ensuring that the BFHI Coordinating Group fulfils its responsibility to provide, directly or indirectly through BDCs, the initial or ongoing assessments of facilities*

Once the National Authority has developed the BCG, initial assessments of current status of the BFHs should be the next activity. No matter which model of BCG is instituted, initial assessments should be carried out by specially trained local or external assessors. Following the assessment or review of current status, establishing if there is a roster of individuals with expertise to serve as 1) local assessors, 2) trainers for each level of training, 3) curriculum specialists, and 4) health information system specialists, plans may be developed to engage these individuals in these tasks. If there is not a sufficient number of individuals with each of these skill areas, consider holding further trainings or sending individuals to regional or global training courses.

Current regional and global training courses can be accessed at: http://www.unicef.org/nutrition/index_events.html or at http://www.who.int or on the Nutrition Quarterly, last section, found in the right hand column of: http://www.unicef.org/nutrition/index_bigpicture.html.

The National Authority has the authority to modify or change the BCG as needed to maintain the function of ongoing assessment and designation.

- *4B. Helps plan training and curriculum revision*

Once the needs and the rosters are available, the needed curriculum revisions and trainings should be planned. Based on the assessed needs, a plan should be developed for carrying out the 20-hour course in every facility as well as for periodically conducting curricula updates. In addition, special training should be ensured for those health workers who will serve as the referral expert lactation consultants. The trainings should be carried out by individuals with appropriate training and skills. It is reasonable to develop a phased plan, so that those trained in one facility may support trainings in a near-by site. It is important that there be on-site ongoing training by supervisors, as well. Therefore, each BFH facility must have on staff individuals with significantly more training, such as a Certified Lactation Consultant or other certified specialists on this issue.

If BFHI assessors are available and facilities are ready, assessment may begin immediately without waiting for the training plans to be implemented. If there is an insufficient number to carry out assessments, all levels of training, and/or curricula reform, the plan should address these needs.

Even where few births take place in facilities, training may be necessary to create a standard of care and to ensure that all health care personnel are skilled in breastfeeding protection, promotion and support. In addition, consideration should be given to development of "Baby-friendly" community designation (see Section 1.5), or other national programme approaches to ensure support for early, exclusive and continued breastfeeding with age-appropriate complementary feeding. These efforts can be linked to facilities directly, or through health or social systems, to ensure consistency in messages and support approaches.

Phased work should begin immediately, with all training materials and curricula updates developed, and sufficient resources identified to complete this work in a timely manner.

In addition to BFHI materials, National Authorities should consider providing handbooks such as "Protecting Infant Health: A Health Workers' Guide to the International Code of Marketing of Breast-milk Substitutes", a basic breastfeeding support manual, and a summary of local regulations, law and policy.

- *4C. Ensuring that national health information system includes a record of feeding status on all contacts with children under 2 years old*

This new responsibility, developed to address the operational objectives of the Global Strategy and other programme needs, dealing with the Ministry of Health, academia, Ministry of Education, Ministry of Plan, and Demographics, depending on which has the responsibility for data collection. Existing health information systems should be amended to include the new growth standards of WHO, notation on feeding pattern at each contact with mothers and children under age 2, and regular planned review by health practitioners.

In addition, the National Authority should review the summaries of these records, as well as periodic surveys, to assess progress and area where programme adjustment may be necessary.

- *4D. Monitoring and evaluation plan*

The National Authority is responsible for keeping records and supporting the planning necessary to ensure that all facilities are encouraged or mandated to follow the BFHI criteria. In addition, this body will review all available data and ensure that analyses are carried out, in collaboration with Health information system directorate and national statistics offices, and the information used to improve programming and further the IYCF goals.

Step 5:
BFHI Coordination Group coordinates facility-level assessments, re-assessments and designation of "Baby-friendly" status.

"Baby-friendly" assessments and designations may begin as soon as the BCG, with or without BDCs, is established by the National Authority, and after the facilities carry out the self-assessment and consider themselves compliant with the "Ten Steps". Designations should be based on an assessment as per national guidelines and should be monitored, and, where necessary, probationary periods established. Once designation is achieved, the designation must be for a pre-set number of months or years, based on in-

country experience with duration of compliance. The date of designation, as well as the end date of the period of designation, must be posted on the designation plaque. If this is a new programme, it is suggested that designation not be for a period greater than 3 years.

If facilities fail to be in compliance when re-assessed, they will be allowed one additional opportunity to achieve the necessary standards. If facilities only fail on a few steps or *Global Criteria*, they can be retested just on these specific components. If the areas in which they lack compliance are major, a full "reassessment" should be scheduled. The second reassessment (either partial or full) will determine if the "Baby-friendly" designation must be removed, or if a new plaque, with the new date of obsolescence, will be granted.

Re-assessment is necessary prior to the date when designation will elapse. Records should be kept by the National Authority of the status of every maternity facility in the country, and every effort should be made to achieve 100% designation. [N.B. criteria and assessment tools have been adapted to allow for settings where there is a high incidence of HIV- positive mothers].

If a facility has 1) a designation that has expired, or 2) been observed/reported as having experienced deterioration of its adherence to the Ten Steps, the BCG, or the BDC as its agent, should arrange for a reassessment. The expiration dates should be kept on record by the BCG/BDC and arrangements should be initiated in a timely manner for re-assessment. Between assessments, if a health professional or other observer reports deterioration, the facility should be notified and asked for response. If the BCG/BDC finds the response inadequate, an interim visit can be arranged.

If a designation has expired or a facility is found to be non-compliant during the term of its designation, the National Authority should remove any designation plaques and remove this hospital from the list of those facilities that are designated as "Baby-friendly" until such time as re-assessment and restoration of status occurs. A probationary period may be granted, with a quality assessment team sent to work with the facility if needed, and then reassessment arranged, before resorting to removal of the plaque. These steps will depend in part on which model has been established by the National Authority for assessment.

In most case the National Authority is responsible for the formal presentation of the designation, but may assign this role to the BCG, which is responsible for acquiring the designation posters from the UNICEF supply catalogue and for having the designation plaques printed in the local language. Specifications for the plaques are available on the UNICEF intranet.

The BCG should develop a plan, to be approved by the National Authority, to ensure designation of all public and private facilities nation-wide, and re-designation of those facilities that have failed to maintain standards, and whose designation has been rescinded.

Section 1.1, Annex 1 presents a simplified table with the basic inputs and outputs for each of these 5 steps.

National Criteria for Baby-friendly Community Designation

In order to ensure community support, as outlined in Step 10 of the BFHI, there is a need to more actively involve the community in support of optimal IYCF. The concept of "Baby-friendly Communities" emerged from the recognition that Step 10 was the least likely to be fully effective in practice. In some countries, there are established criteria for Baby-friendly Community Health Services. This approach is applicable where not all of the population has ready access to facilities, and may work best where community services fully reach all mothers and children.

In settings where the health system outreach may not be as comprehensive, a national effort to create Baby-friendly Communities may be necessary to achieve optimal feeding practices. The Model National Baby-friendly Community components presented here are provided as a basis for discussion with the community concerning its needs, reflecting on all applicable Global Criteria for the BFHI (the Ten Steps, the Code, mother-friendly care, and HIV and infant feeding). Locally developed criteria should be developed with the participation of community political and social leadership, both male and female, committed to making a change in support of optimal IYCF, and of all health facilities that are designated "Baby-friendly" and actively support both early and exclusive breastfeeding (0-6 months).

Baby-friendly Community planning might include:

1. community leadership;
2. representatives of healthcare facilities, especially those that are baby-friendly;
3. those who support in-home and community-based births.

Baby-friendly Community criteria might include:

1. All local health workers have appropriate breastfeeding support and maternity support training.
2. All workers know where and how to refer for additional care.
3. Support for mothers is available in the community to assist mothers in making appropriate choices and succeeding with them.
4. Mother-to-mother support system, or similar, is in place.
5. No practices, distributors, shops or services violate the International Code (as applicable) in the community.
6. Local government or civil society has convened, created and supports implementation of at least one political or social normative change and/or additional activity to support mothers and families.

It is also suggested that simplified job-aids for assisting and for assessing home deliveries (including those performed by skilled midwives and, if possible, traditional birth attendants) have been developed and are in use.

More detail on the development of the Baby-friendly Community approach, other expansion and mainstreaming approaches are available in Section 1.5.

Section 1.1 - Annex 1: Five Steps in Implementing BFHI at the Country Level: Suggested Inputs and Outputs

Step	Inputs	Outputs
1. Establish, re-energize, or plan a meeting of the National Authority (Breastfeeding, Infant and Young Child Feeding, or Nutrition Authority) to establish or assess its functions related to BFHI.	Government commitment to the Global Strategy for Infant and Young Child Feeding, including BFHI evidenced by willingness to incorporate support into national budget or national accrediting approach. Review of existing data on breastfeeding, and BFHI if already established, completed. (if data are not available), rapid baseline survey(s) of country-level breastfeeding practices, support, and status using short questionnaire or WHO implementation planning tool carried out and analysed.	Government supported or endorsed National Authority established, with commitment to developing/ strengthening BFHI. Analysis of current status on IYCF and BFHI completed, with listing of all national facilities and their BFHI status.
2. Identify - or re-establish - national BFHI goals and approaches.	Necessary meetings and functions convened by National Authority to identify national goals, specific and measurable objectives and indicators, and possible expansion/integration approaches to BFHI in the local context.	Five-year strategic plan with budget for the National Authority and BFHI-associated activities created.
3. Identify, designate or develop a BFHI Coordination Group (BCG), and, where appropriate, BFHI Designating Committees (BDCs).	Most appropriate BCG option identified by the National Authority for their setting and resources based on the decisions concerning BFHI and possible expansions areas. The BCG plan of action in response to the 5-year strategic plan presented to the National Authority for approval and support.	A sustainable approach has been selected. BCG and/or procedures and processes for designation that might include BDCs established and approved by National Authority and recognized by government. BCG activated.
4. Ensure: 1) that the BCG fulfils its responsibility to provide, directly or indirectly, the initial or ongoing assessments of facilities, 2) development of a plan for pre-and in-service curricula revision (if needed) and BFHI training, 3) that national health information system includes a record of feeding status on all contacts with children under 2 years of age, and 4) monitoring and evaluation plan.	Regular reports provided by BCG to the National Authority. Meetings/functions as necessary to review content of curricula of all health workers and auxiliary workers, convened by National Authority. Support for curricula revision identified, with National Authority assistance as necessary. Coverage and analyses discussed/ensured through meetings of the National Authority with Health information system directorate and national statistics offices.	Feedback is provided by the National Authority to the BCG, and to Government and civil society. Training and curricula are updated. HIS records of feeding pattern and growth for all children under age 2+ are available and analysed. Periodic surveys on feeding patterns are conducted. Analyses carried out to identify programme adjustments necessary.
5. Coordinate facility-level assessments, re-assessments and designation of “Baby-friendly” status.	BCG instituted plan of action, including the training of BDCs if determined necessary to meet national goals, with assistance as needed from National Authority.	BCG form and function, including the possibility of subsidiary BDC, is finalised and functioning. Facilities, communities, etc. are assessed and designations made in accordance with plan. Plan reviewed regularly for feasibility and adaptation if needed.

Section 1.1 - Annex 2

Suggested questions for a rapid baseline country assessment, to include literature review and key informant interviews

Where there is already an active National Authority or BFHI programme, ensure that data are available to fully answer:

1. What is the status of BFHI?
   How is assessment carried out?
   What group grants the designation?
   How is it funded?
   Is there any potential conflict of interest in its functions?
   How many and what percent of hospitals have ever been designated?
   What percentage of births take place in facilities currently designated as Baby Friendly?
   How many of these have been assessed or re-assessed in the last 3-5 years and found to be in compliance?
   What percentage of facilities continues to be in compliance?
2. Is there a list of the names and locations of all maternities, hospital-based or free-standing, in the country?
3. Is there a list of the names, locations, and contact individuals of all BFH-designated facilities, with date of initial designation and dates of re-assessments/re-designations?
4. What are the names and addresses of trained external assessors and BFHI trainers, as well as other national expertise, such as Certified Lactation Consultants or Fellows of the Academy of Breastfeeding Medicine?
5. What is the current status and enforcement of law related to the International Code of Marketing of Breast-milk Substitutes?
6. What are the current standards of practice promulgated by professional medical and healthcare organizations?
7. What are the trends and levels of immediate postpartum breastfeeding? Exclusive breastfeeding in the first 6 months? Continued breastfeeding at about 2 years?
8. What are the local complementary feeding practices? Have the 10 Principles of Complementary Feeding been adopted/initiated?
9. What are the names, descriptions and contacts for all IYCF-supportive programmes in country, including HIV/IF counselling, emergency preparedness agencies, extension workers in the agricultural or social arenas, etc.?
10. What additional related services and structures could help support IYCF?

Where there is not as yet an active BFHI programme, gather current baseline information.

Suggested approach: Interview 25 key informants, selected from among knowledgeable individuals in both public and private health sectors, non-governmental infant and young child feeding support, or other persons familiar with hospital activities, and request copies of any standards of practice, curricula, lists, laws or contacts mentioned.

1. Have any studies been carried out on feeding practices of infants and young children, whether by nutrition, health, reproductive health or other interest groups?
2. Have any surveys or other data collection instruments been used to assess:
   - immediate postpartum breastfeeding rates,
   - six months exclusive breastfeeding rates,
   - and/or
   - continued breastfeeding with complementary feeding?
   - are there any trend data for any of these patterns?
3. Are there government policies or laws that pertain to infant and young child feeding?
   - for hospitals/maternities?
   - for the commercial sector? Is there a national law implementing the International Code of Marketing of Breast-milk Substitutes and subsequent WHA resolutions?
   - for the workplace?
   - for emergencies?
   - for HIV/AIDS?
4. What training courses or curricula exist to train:
   - health workers in the "Breastfeeding Promotion and Support in a BFHI hospital" (20-hour course)?
   - trainers for facilitating the 20-hour course?
   - specialists in lactation support to act as referral/resource people?
   - assessors or credentialing boards?
   - health workers trained in "Infant and Young Child Feeding Counselling: an integrated course"?
   - other? Specify.
5. Do you know of any Academic Centres involved in supporting Infant and Young Child Feeding? (list all with contacts).
   Please explain whether this is training, research, and/or support of staff to breastfeed.
6. What Professional Societies are active in the area of Infant and Young Child Feeding and who are the contacts? Do they have standards of practice for their specialty?
7. What group certifies hospitals and maternities?
8. Do you know of any NGOs involved in supporting Infant and Young Child Feeding? (list all with contacts)

9. Do you know of any government, NGO or community entities involved in supporting and/or monitoring:
   - Infant and Young Child Feeding related activities?
   - BFHI?
   - International Code of Marketing of Breast-milk Substitutes?
   - Any other issue that relates to mothers or children, whether health, social, or other sector?

10. Do you know of any data bases that are maintained regularly on any aspect of IYCF? (list all with contacts).

11. Do you know any individuals, or rosters of individuals, with:
   - Experience of conducting BFHI assessments?
   - Specialist training and experience dealing with unusual or difficult breastfeeding situations?
   - Training in breastfeeding support skills?
   - Training in providing support for infant feeding in the context of HIV and support for the non-breastfed infant?
   - Training on Code-related issues such as development of legislation of the Code, monitoring and enforcement?
   - Training in emergency settings, including relactation and therapeutic feeding?
   - Experience in facilitating training in breastfeeding for health workers?

   (develop lists).

12. What resources are available to support BFHI? From what sources? Is this support sustainable?

13. Are there additional breastfeeding support activities in other health/nutrition /social/development programming?

14. Do you know of any government agency(ies) or individuals who are interested in supporting IYCF?

Section 1.1 - Annex 3

Excerpts from recent WHO, UNICEF, and other global publications and releases

Occasionally, those implementing BFHI in a country may need to call upon excerpts from globally recognized sources to support their actions and plans. This section is provided to address this need.

From UNICEF Press Release, September 2007

> "Much of the progress reflected [reduction in number of child deaths from 13 million in 1990 to 9.7 million] is due to widespread adoption of basic health interventions such as early and exclusive breastfeeding…"
>
> http://www.unicef.org/childsurvival/index_40850.html

From WHO Statement on Infant Feeding and HIV

> "Exclusive breastfeeding for 6 months is recommended for all women, and for HIV-infected women unless replacement feeding is acceptable, feasible, affordable, sustainable and safe (AFASS), in which case all breastfeeding should be avoided and infants should receive replacement feeding from birth".
>
> "After 6 months, breastfeeding should be continued unless AFASS replacement feeding is available".

From Innocenti +15

> "Current challenges only reinforce the need to act rapidly in support of infant and young child feeding".
>
> "Scientific evidence, the Global Strategy for Infant and Young Child Feeding, and demonstrated results from national and other large-scale programmes provide a sound foundation for moving forward. This requires government and donor commitment to: Increase resources for infant and young child feeding....Implement the Global Strategy for Infant and Young Child Feeding [and] Apply existing knowledge and experience".
>
> "Exclusive breastfeeding is the leading preventive child survival intervention. Nearly two million lives could be saved each year through six months of exclusive breastfeeding and continued breastfeeding with appropriate complementary feeding for up to two years or longer. The lasting impact of improved feeding practices is healthy children who can achieve their full potential for growth and development".
>
> "New scientific evidence and programmatic experience place child advocates in a better position now than in 1990 to protect, promote, and support improved infant and young child feeding practices. Yet the majority of health professionals and community workers have not been adequately educated or trained to put the knowledge and skills into practice. Appropriate materials and guidelines exist and should urgently be taken to scale for pre-service and in-service training and for

policy and program assessment, implementation, and monitoring. As forcefully stated by the executive heads of WHO and UNICEF in their forward to the Global Strategy for Infant and Young Child Feeding, There can be no delay in applying the accumulated knowledge and experience to help make our world a truly fit environment where all children can thrive and achieve their full potential".

From UNICEF Executive Director Ann M Veneman for World Breastfeeding Week, 2005:

"If we are to fulfill the promise of the Millennium Declaration and the Millennium Development Goals, we must renew our attention to those interventions that are effective, affordable and have significant impact. Improvements in breastfeeding and complementary feeding are essential for success in child survival, in reducing hunger, and to ensure that children develop in a manner that they may best benefit from education and opportunity".

"UNICEF applauds the commitment of all of those involved in support of child survival through optimal infant and young child feeding in the celebration of this year's World Breastfeeding Week".

From "Investing in Development: Practical Plan to Achieve the Millennium Development Goals". 2005, Millennium Project, New York, p. 26 "The Quick Wins needed to be embedded in the longer term investment policy framework of the MDG-based poverty reduction strategy".

"[In the design of] community nutrition programs that support breastfeeding, provide access to locally produced complementary foods, and, where needed, provide micronutrient…supplementation for pregnant and lactating women…".

From World Health Assembly 2004:

From: Global strategy on diet, physical activity and health A57/9 and WHA 57/17:

"11. Maternal health and nutrition before and during pregnancy, and early infant nutrition may be important in the prevention of non-communicable diseases throughout the life course. Exclusive breastfeeding for six months and appropriate complementary feeding contribute to optimal physical growth and mental development".

From: Family and health in the context of the tenth anniversary of the International Year of the Family A57/12:

"6. Almost 50% of all infant deaths in developing countries occur in the first 28 days after birth. As most infants in these countries are born at home, improvements in facility-based services will address only part of the problem and must be complemented by interventions in the home and community. A few simple interventions, such as aiding birth with skilled attendants, keeping the neonate warm, initiating breastfeeding early and recognizing and treating common infections, will greatly increase chances of neonatal survival".

From A57/18 Biennial Updates:
E. Infant and Young Child Nutrition: Biennial Progress Report 48.

"Despite overall improvements in exclusive breastfeeding …, practices fall far short of WHO's global public health recommendation: exclusive breastfeeding for six months followed by safe and appropriate complementary feeding with continued breastfeeding for up to two years of age or beyond (resolution WHA54.2)".

Fifty-Seventh World Health Assembly WHA57.14, Agenda item 12.1 22 May 2004:

"Scaling up treatment and care within a coordinated and comprehensive response to HIV/AIDS
2. URGES Member States, as a matter of priority: (3) to pursue policies and practices that promote:
(h) integration of nutrition into a comprehensive response to HIV/AIDS;
(i) promotion of breastfeeding in the light of the United Nations Framework for Priority Action on HIV and Infant Feeding and the new WHO/UNICEF Guidelines for Policy-Makers and Health-Care Managers".

Section 1.1 - Annex 4
The contribution of Breastfeeding and Complementary Feeding to achieving the Millennium Development Goals[4]

Goal Number and Targets		Contribution of Infant and Young Child feeding[5]
1	**Eradicate extreme poverty and hunger** Halve, between 1990 and 2015, the proportion of people whose income is less than $1 a day, and who suffer from hunger.	Breastfeeding significantly reduces early childhood feeding costs, and exclusive breastfeeding halves the cost of breastfeeding[6]. Exclusive breastfeeding and continued breastfeeding for two years is associated with reduction in underweight[7] and is an excellent source of high quality calories for energy. By reducing fertility, exclusive breastfeeding reduces reproductive stress. Breastfeeding provides breast milk, serving as low-cost, high quality, locally produced food and sustainable food security for the child.
2	**Achieve universal primary education** Ensure that by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary education.	Breastfeeding and adequate complementary feeding are prerequisites for readiness to learn[8]. Breastfeeding and quality complementary foods significantly contribute to cognitive development and capacity. In addition to the balance of long chain fatty acids in breast milk, which support neurological development, initial exclusive breastfeeding and complementary feeding address micronutrient and iron deficiency needs and, hence, support appropriate neurological development and enhance later school performance.
3	**Promote gender equality and empower women** Eliminate gender disparity in primary and secondary education, preferably by 2005 and in all levels of education no later than 2015.	Breastfeeding is the great equalizer, giving every child a fair start on life. Most differences in growth between sexes begin as complementary foods are added into the diet, and gender preference begins to act on feeding decisions. Breastfeeding also empowers women: - increased birth spacing secondary to breastfeeding helps prevents maternal depletion from short birth intervals; - only women can provide it, enhancing women's capacity to feed children; - increases focus on need for women's nutrition to be considered.

[4] Developed by the UN Standing Committee on Nutrition Working Group on Breastfeeding and Complementary Feeding, 2003/4.
[5] Early and Exclusive Breastfeeding, continued breastfeeding with complementary feeding and related maternal nutrition.
[6] Bhatnagar, S, Jain, N. P. and Tiwari, V. K. Cost of infant feeding in exclusive and partially breastfed infants. *Indian Pediatrics*. 1996; 33:655-658.
[7] Dewey, K. G. Cross-cultural patterns of growth and nutritional status of breast-fed infants. *Am. J. Clin. Nutr*. 1998; 67:10-17.
[8] Anderson, J. W., Johnstone, B. M. and Remley, D. T. Breast-feeding and cognitive development: a meta-analysis. *Am. J. Clin. Nutr.* 1990; 70:525-535.

4	**Reduce child mortality** Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate.	By reducing infectious disease incidence and severity, breastfeeding could readily reduce child mortality by about 13%, and improved complementary feeding would reduce child mortality by about 6%.[9] In addition, about 50-60% of under-5 mortality is caused by mal-nutrition due to inadequate complementary foods and feeding following on poor breastfeeding practices[10] and, also, to low birth weight. The impact is increased in unhygienic settings. The micronutrient content of breast milk, especially during exclusive breastfeeding, and from complementary feeding can provide essential micronutrients in adequate quantities, as well as necessary levels of protein and carbohydrates.
5	**Improve maternal health** Reduce by three-quarters, between 1990 and 2015, the maternal mortality ratio.	The activities called for in the Global Strategy include increased attention to support for the mother's nutritional and social needs. In addition, breastfeeding is associated with decreased maternal postpartum blood loss, breast cancer, ovarian cancer, and endometrial cancer, as well as the probability of decreased bone loss post-menopause. Breastfeeding also contributes to the duration of birth intervals, reducing maternal risks of pregnancy too close together, including lessening risk of maternal nutritional depletion from repeated, closely-spaced pregnancies. Breastfeeding promotes return of the mother's body to pre-pregnancy status, including more rapid involution of the uterus and postpartum weight loss (obesity prevention).
6	**Combat HIV/AIDS, malaria and other diseases** Have halted by 2015 and begun to reverse the spread of HIV/AIDS.	Based on extrapolation from the published literature on the impact of exclusive breastfeeding on MTCT, exclusive breastfeeding in a population of untested breastfeeding HIV-infected population could be associated with a significant and measurable reduction in MTCT.
7	**Ensure environmental sustainability**	Breastfeeding is associated with decreased milk industry waste, pharmaceutical waste, plastics and aluminium tin waste, and decreased use of firewood/fossil fuels for alternative feeding preparation,[11] less CO_2 emission as a result of fossil fuels, and less emissions from transport vehicles as breast milk is locally produced.
8	**Develop a global partnership for development**	The Global Strategy for Infant and Young Child Feeding fosters multi-sectoral collaboration, and can build upon the extant partnerships for support of development through breastfeeding and complementary feeding. In terms of future economic productivity, optimal infant feeding has major implications.

[9] Jones, G. et al. How many child deaths can we prevent this year? *Lancet* 2003; 362:65-71.
[10] Pelletier D.Frongillo, E. Changes in child survival are strongly associated with changes in malnutrition in developing countries. *Journal of Nutrition*. 2003;133:107-119.
[11] Labbok M. Breastfeeding as a women's issue: conclusions and consensus, complementary concerns, and next actions. *International Journal of Gynecology Obstetrics* 1994; 47(Suppl):S55-S61.

SECTION 1.2
HOSPITAL LEVEL IMPLEMENTATION

Breastfeeding rates

The Baby-friendly Hospital Initiative (BFHI) seeks to provide mothers and babies with a good start for breastfeeding, increasing the likelihood that babies will be breastfed exclusively for the first six months and then given appropriate complementary foods while breastfeeding continues for two years or beyond.

For purposes of assessing a maternity facility, the number of women breastfeeding exclusively from birth to discharge may serve as an approximate indicator of whether protection, promotion, and support for breastfeeding are adequate in that facility. The maternity facility's annual statistics should indicate that at least 75% of the mothers who delivered in the past year are either exclusively breastfeeding or exclusively feeding their babies human milk from birth to discharge or, if not, this is because of acceptable medical reasons. (in settings where HIV status is known, if mothers have made fully informed decisions to replacement feed, these can be considered "acceptable medical reasons", and thus counted towards the 75% exclusive breastfeeding goal). If fewer than 75% of women who deliver in a facility are breastfeeding exclusively from birth to discharge, the managers and staff may wish to study the results from the *Self Appraisal*, consider the *Global Criteria* carefully, and work, through the Triple A process of assessment, analysis, and action, to increase their exclusive breastfeeding rates. Once the 75% exclusive breastfeeding goal has been achieved, an external assessment visit should be arranged.

The BFHI cannot guarantee that women who start out breastfeeding exclusively will continue to do so for the recommended 6 months. However, research studies have shown that delay in initiation of breastfeeding and early supplemental feeding in hospital are associated with less exclusive breastfeeding thereafter. By establishing a pattern of exclusive breastfeeding during the maternity stay, hospitals are taking an essential step towards longer durations of exclusive breastfeeding after discharge.

If hospital staff believes that antenatal care provided elsewhere contributes to rates of less than 75% breastfeeding after the birth, or that community practices need to be more supportive of breastfeeding, they may consider how to work with the antenatal caregivers to improve antenatal education on breastfeeding and with breastfeeding advocates to improve community practices (see Section 1.5 for a discussion of strategies for fostering Baby-friendly Communities).

Supplies of breast-milk substitutes

Research has provided evidence that clearly shows that breast-milk substitute marketing practices influence health workers' and mothers' behaviours related to infant feeding. Marketing practices prohibited by *The International Code of Marketing of Breast-milk Substitutes* (the *Code)* have been shown to be harmful to infants, increasing the likelihood that they will be given formula and other items under the scope of *The Code* and decreasing optimal feeding practices. The 1991 UNICEF Executive Board called for the ending of free and low-cost supplies of formula to all hospitals and maternity wards by the end of 1992. Compliance with *The Code* is required for health facilities to achieve Baby-friendly status.

Questions have been added to the *Self-Appraisal Tool* that will help the national BFHI coordination groups and maternity facilities determine how well their maternity services are complying with *The Code* and subsequent WHA resolutions and what actions are needed to achieve full compliance.

Support for non-breastfeeding mothers

This revised version of the assessment includes specific questions related to the training staff has received on providing support for "non-breastfeeding mothers" and what actual support these mothers have received. The inclusion of these questions does NOT mean that the BFHI is promoting formula feeding but, rather, that the Initiative wants to help insure that ALL mothers, regardless of feeding method, get the feeding support they need.

Mother-friendly care

New *Global Criteria* and questions have been added to insure that practices are in place for mother-friendly labour and delivery. These practices are important, in their own right, for the physical and psychological health of the mothers themselves, and also have been shown to enhance infants' start in life, including breastfeeding. Many countries have explored options for including mother-friendly criteria within the Initiative, in some cases re-terming their national initiatives as "mother and baby friendly". Other countries have adopted full "mother-friendly" initiatives. New self-appraisal and assessment questions on this topic offer a way for countries that have not done so already to add a component focused on the key "mother-friendly" criteria needed for an optimal "continuum of care" for both mother and child from the antenatal to postpartum period.[12] These criteria should be required only after health facilities have had time to train their staff on policies and practices related to mother-friendly care.

HIV and infant feeding

The increasing prevalence of HIV among women of childbearing age in many countries has made it important to give guidance on how to offer appropriate information and support for women related to HIV within the BFHI. Thus, as mentioned earlier, components on HIV and infant feeding have been added to the *20-hour course* and to the *Global Criteria* and assessment tools.

The course material aims to raise the awareness of participants as to why BFHI continues to be important in areas of high HIV prevalence and ways to assist mothers who are HIV-positive as part of regular care in the health facility. This 20-hour course does not train participants to counsel women who are HIV-positive on infant feeding decisions. Another course and counselling aids are available from WHO for that specialized training and counselling.

<u>It is recommended that the BFHI national authorities and coordination groups in each country work with other relevant national decision-makers to determine whether the HIV components of the assessment will be required</u> and whether this requirement will be for all facilities or only those meeting specified criteria. The decision should be based on the prevalence of HIV among pregnant women and mothers and, therefore, the need for information and support on this issue. If this information is not available, surveys

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[12] See the website for the Coalition for Improving Maternity Services (CIMS) http://www.motherfriendly.org/MFCI/ for a description of *The Mother-Friendly Childbirth Initiative*.

may be necessary to determine what percentages of pregnant women and mothers using the antenatal and delivery services in maternity facilities are HIV positive. It is suggested that if a maternity facility has a prevalence of more than 20% HIV positive clients, and/or has a PMTCT[13] programme, this component of the assessment should be required. If prevalence is over 10%, the use of this component is strongly advised. National decision-makers in countries with high HIV prevalence may decide to include additional HIV-related criteria and questions, depending on their needs.

The *Global Criteria*, *Self-Appraisal Tool* and *Hospital External Assessment Tool* all have HIV-related items added in such a way that they can be included or not, depending on the need. The HIV and Infant Feeding criteria are listed separately in the *Global Criteria*. The questions related to HIV in both the *Self-Appraisal* and the various interviews in the *Assessment Tool* are either presented in separate sections or at the end of the respective interviews. There is a separate Summary Sheet in the *Assessment Tool* to display the HIV-related results.

A handout that provides guidance for "Applying the Ten Steps in facilities with high HIV prevalence" is attached as Annex 1 of Section 1.2.

The Baby-friendly Hospital designation process

The BFHI is initiated at national level, with the BFHI national authority and coordination group, UNICEF, WHO, breastfeeding, nutrition and other health groups, and others interested parties as catalysts. The *Global Criteria* and *Self-Appraisal Tool* are available to all who are interested in accessing it on the UNICEF website. UNICEF and WHO will encourage the national authorities and BFHI coordination groups to access it and encourage health facilities to join or continue to participate in the Initiative. For details on country level implementation, please read Section 1.1 of this document.

At the facility level the assessment and designation process includes a number of steps, with facilities following differing paths, depending on the outcomes at various stages of the process. Once a facility has used the *Self-Appraisal Tool* to conduct a "self assessment" of whether it meets baby-friendly standards and has studied the *Global Criteria* to determine whether an external assessment is likely to give the same results, it will decide whether or not it is ready for external assessment.

If the facility determines that it is ready for external assessment in some countries the next step would be an optional or required pre-assessment visit during which an outside consultant explores the readiness of the hospital for a full assessment, using the *Self-Appraisal Tool* and *Global Criteria*. This could be done through an on site visit or by means of an extensive telephone interview/survey, if travel costs are prohibitive. This can be a quite useful intermediate step, as many hospitals overrate their compliance with the *Global Criteria* and this type of visit, followed by working on any further improvements needed, can save a lot of time, money, and anguish both for the hospital and the national BFHI coordination group.

If a facility has used the *Self-Appraisal Tool,* studied the *Global Criteria*, and received feedback during a pre-assessment visit or telephone interview, if scheduled, and determined that it does not yet meet the BFHI standards and recognizes its need for improvement, it should analyse its deficiencies and develop plans to address them. This may include scheduling the 20-hour course (presented in Section 3 of these BFHI

[13] Prevention of mother-to-child-transmission (of HIV/AIDS).

materials) for its maternity staff, if this training has not been given or was conducted very long ago.

The facility may also request a *Certificate of Commitment* while it is working to become baby-friendly, if the BFHI coordination group supplies this for facilities at this stage of the process. When it is ready, the facility should then request an external assessment, following the process described in the paragraph above.

The next step, as mentioned above, would be for a facility to request or invite an external assessment. The BFHI coordination group may review the *Self Appraisal* results, any supporting documents that it requires, and the results from a pre-assessment visit or telephone interview, if one has been made, to help determine if the facility is ready. The external assessment will determine whether the facility meets the *Global Criteria for a Baby-friendly Hospital*. If so, the BFHI coordination group should award the facility the Global BFH Award and Plaque for a specified period.

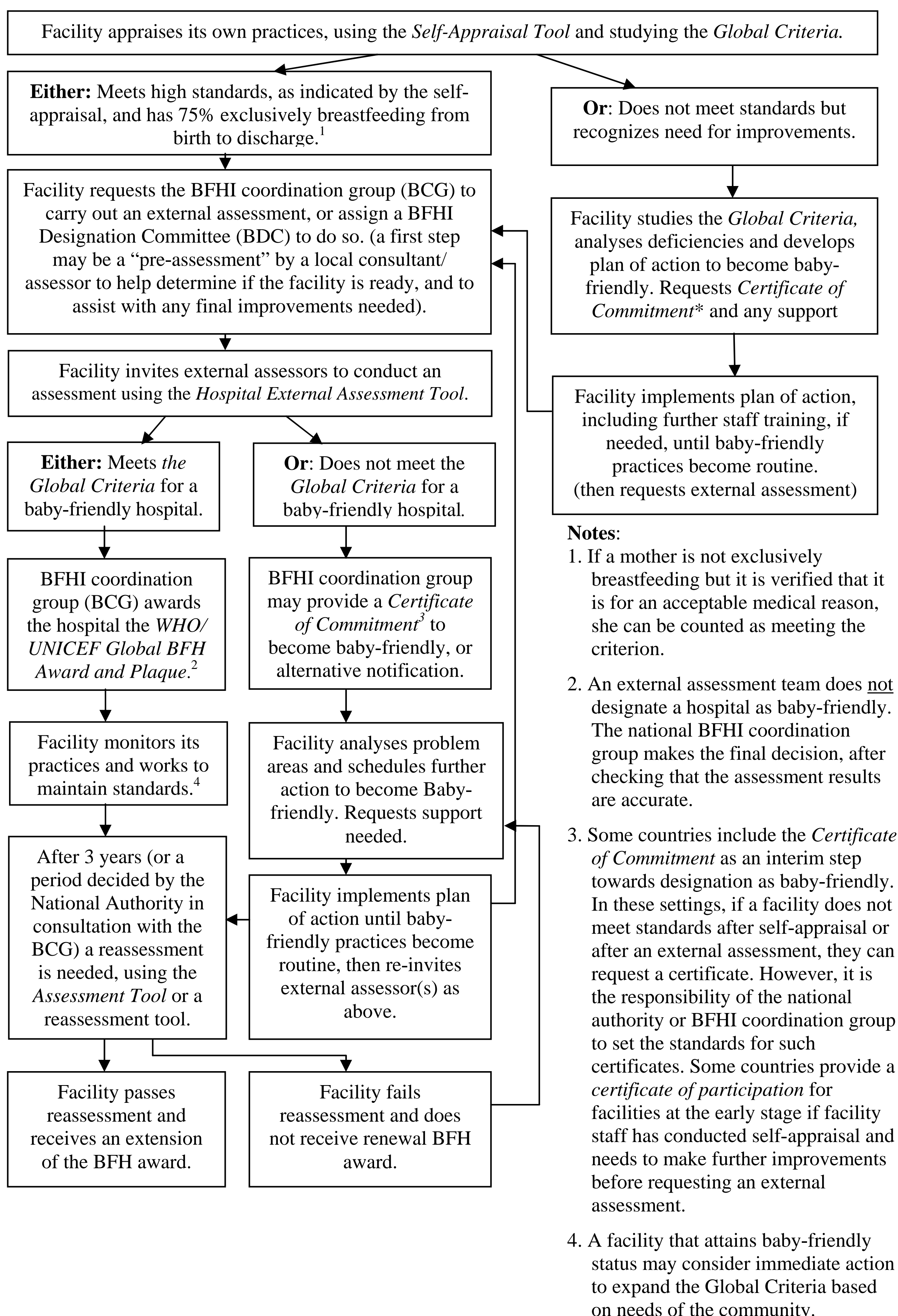
If the facility, on the other hand, does not meet the *Global Criteria*, it would be awarded a *Certificate of Commitment* to becoming baby-friendly and would be encouraged or supported to further analyse problem areas and take whatever actions are needed to comply, then inviting another assessment. Whether this second assessment would be a full one, or only partial, focusing on those criteria on which the facility did not originally comply, would depend on the decision made by the assessors and BFHI coordination group at the time of the original assessment.

If the national BFHI coordination group finds that hospitals that have been assessed as failing at times do not agree with the conclusions reached by the assessors, it might consider setting up an appeal process, when necessary, with a review of results by panels of assessors not involved in the original assessments.

Reassessments should be scheduled for baby-friendly hospitals, after the specified period for the Award. If the facility passes the reassessment, it should be given a renewal. If not, it needs to work to address any identified problems and then apply again for reassessment.

This process is illustrated in graphic form in the flow chart on the following page.

THE BABY-FRIENDLY HOSPITAL DESIGNATION PROCESS



Notes:

1. If a mother is not exclusively breastfeeding but it is verified that it is for an acceptable medical reason, she can be counted as meeting the criterion.
2. An external assessment team does not designate a hospital as baby-friendly. The national BFHI coordination group makes the final decision, after checking that the assessment results are accurate.
3. Some countries include the *Certificate of Commitment* as an interim step towards designation as baby-friendly. In these settings, if a facility does not meet standards after self-appraisal or after an external assessment, they can request a certificate. However, it is the responsibility of the national authority or BFHI coordination group to set the standards for such certificates. Some countries provide a *certificate of participation* for facilities at the early stage if facility staff has conducted self-appraisal and needs to make further improvements before requesting an external assessment.
4. A facility that attains baby-friendly status may consider immediate action to expand the Global Criteria based on needs of the community.

Section 1.2: Annex 1

Applying the Ten Steps in facilities settings with high HIV prevalence[14]

The "Ten Steps" for Successful Breastfeeding	Guidance on applying the "Ten Steps" in facilities with high HIV prevalence
Step 1: Have a written policy on breastfeeding that is routinely communicated to all health care staff.	Expand the policy to focus on infant feeding, including guidance on the provision of support for HIV positive mothers and their infants.
Step 2: Train all health care staff in skills necessary to implement this policy.	Ensure that the training includes information on infant feeding options for HIV-positive women and how to support them.
Step 3: Inform all pregnant women about the benefits and management of breastfeeding.	Where voluntary testing and counselling for HIV and PTMCT is available, counsel all pregnant women on the benefits of knowing their HIV status so that, if they are positive, they can make informed decisions about infant feeding, considering the risks and benefits of various options. Counsel HIV-positive mothers on the various feeding options available to them and how to select options that are acceptable, feasible, affordable, sustainable and safe. Promote breastfeeding for women who are HIV negative or of unknown status.
Step 4: Help mothers initiate breastfeeding within a half-hour of birth.	Place all babies in skin-to-skin contact with their mothers immediately following birth for at least an hour. Encourage mothers who have chosen to breastfeed to recognize when their babies are ready to breastfeed, offering help if needed. Offer mothers who are HIV positive and have chosen not to breastfeed help in keeping their infants from accessing their breasts.
Step 5: Show mothers how to breastfeed, and how to maintain lactation even if they should be separated from their infants.	Show mothers who have chosen to replacement feed how to prepare and give other feeds, as well as how to maintain optimal feeding practices and dry up their breast milk while maintaining breast health.

[14] The application of the Steps for facilities with high HIV prevalence provided in this handout has been developed to provide additional guidance for health care managers and staff working in these settings. Guidance has been prepared, taking account of the: *Report of a meeting on BFHI in the context of HIV/AIDS, Gaborone, June 2nd – 4th 2003,* sample infant feeding policies for settings with high HIV prevalence, and the Consensus Statement for the WHO HIV and Infant Feeding Technical Consultation, Geneva, October 25-27, 2006.

The "Ten Steps" for Successful Breastfeeding	Guidance on applying the "Ten Steps" in facilities with high HIV prevalence
Step 6: Give newborn infants no food or drink other than breast milk, unless medically indicated.	Counsel HIV positive mothers on the importance of feeding their babies exclusively by the option they have chosen (breastfeeding or replacement feeding) and the risks of mixed feeding (that is, giving both the breast and replacement feeds).
Step 7: Practise rooming-in — allow mothers and infants to remain together — 24 hours a day.	Protect the privacy and confidentiality of mother' HIV status by providing the same routine care to all mothers and babies, including rooming-in.
Step 8: Encourage breastfeeding on demand.	Address the individual needs of mothers and infants who are not breastfeeding, encouraging replacement feeding at least 8 times a day.
Step 9: Give no artificial teats or pacifiers (also called dummies or soothers) to breastfeeding infants.	Apply this step for both breastfeeding and non-breastfeeding infants.
Step 10: Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or clinic.	Provide on-going support from the hospital or clinic and foster community support for HIV positive mothers to help them maintain the feeding method of their choice and avoid mixed feeding. Offer infant feeding counselling and support, particularly at key points when feeding decisions may be reconsidered, such as the time of early infant diagnosis and at six months of age. If HIV positive mothers are breastfeeding, counsel them to exclusively breastfeed for the first 6 months of life unless replacement feeding is acceptable, feasible, affordable, sustainable and safe for them and their infants before that time.

SECTION 1.3
THE GLOBAL CRITERIA FOR THE BFHI

Criteria for the 10 Steps and other components

The Global Criteria for the Baby-friendly Hospital Initiative serve as the standard for measuring adherence to each of the Ten Steps for Successful Breastfeeding and the International Code of Marketing of Breast-milk Substitutes. The criteria listed below for each of the Ten Steps and the Code are the minimum global criteria for baby-friendly designation. Additional criteria are provided for ”mother-friendly care” and “HIV and infant feeding”. It is recommended that the criteria for “mother-friendly care” be implemented gradually, after maternity staff has received necessary training on this topic. Relevant decision-makers in each country should decide whether the criteria on HIV and infant feeding should be required, depending on the prevalence of HIV among women using the maternity facilities.

The BFHI Self-Appraisal Tool, presented in Section 4 of this series, gives maternity facilities a tool for making a preliminary assessment of whether they are fully implementing the Ten Steps, adhering to the International Code of Marketing, and meeting criteria related to mother-friendly care and HIV and infant feeding. The Global Criteria actually describe how “baby-friendliness” will be judged during the external assessment, and thus can be very useful for maternity staff to study as they work to get ready for assessment. The Global Criteria are listed both here and after the respective sections of the Self Appraisal Tool, for easy reference during self-appraisal.

It is important that the hospital consider adding the collection of statistics on infant feeding and implementation of the Ten Steps into its maternity record-keeping system, if it has not done so already. It is best if this data collection process be integrated into whatever information gathering system is already in place. If the hospital needs guidance on how to gather this data and possible forms to use, responsible staff can refer to the sample data-gathering tools available in Section 4.2: Guidelines and Tools for Monitoring BFHI.

STEP 1. Have a written breastfeeding policy that is routinely communicated to all health care staff.

Global Criteria - Step One

The health facility has a written breastfeeding or infant feeding policy that addresses all 10 Steps and protects breastfeeding by adhering to the International Code of Marketing of Breast-milk Substitutes. It also requires that HIV-positive mothers receive counselling on infant feeding and guidance on selecting options likely to be suitable for their situations. The policy should include guidance for how each of the "Ten Steps" and other components should be implemented (see Section 4.1, Annex 1 for suggestions).

The policy is available so that all staff members who take care of mothers and babies can refer to it. Summaries of the policy covering, at minimum, the Ten Steps, the Code and subsequent WHA Resolutions, and support for HIV-positive mothers, are visibly posted in all areas of the health care facility which serve pregnant women, mothers, infants, and/or children. These areas include the labour and delivery area, antenatal care in-patient wards and clinic/consultation rooms, post partum wards and rooms, all infant care areas, including well baby observation areas (if there are any), and any special care baby units. The summaries are displayed in the language(s) and written with wording most commonly understood by mothers and staff.

STEP 2. Train all health care staff in skills necessary to implement the policy.

Global Criteria - Step Two

The head of maternity services reports that all health care staff members who have any contact with pregnant women, mothers, and/or babies, have received orientation on the breastfeeding/infant feeding policy. The orientation that is provided is sufficient.

A copy of the curricula or course session outlines for training in breastfeeding promotion and support for various types of staff is available for review, and a training schedule for new employees is available.

Documentation of training indicates that 80% or more of the clinical staff members who have contact with mothers and/or infants and have been on the staff 6 months or more have received training at the hospital, prior to arrival, or though well-supervised self-study or on-line courses that covers all 10 Steps, the Code and subsequent WHA resolutions, mother-friendly care. It is likely that at least 20 hours of targeted training will be needed to develop the knowledge and skills necessary to adequately support mothers. At least three hours of supervised clinical experience are required.

Documentation of training also indicates that non-clinical staff members have received training that is adequate, given their roles, to provide them with the skills and knowledge needed to support mothers in successfully feeding their infants.

Training on how to provide support for non-breastfeeding mothers is also provided to staff. A copy of the course session outlines for training on supporting non-breastfeeding mothers is also available for review. The training covers key topics such as:

- the risks and benefits of various feeding options;
- helping the mother choose what is acceptable, feasible, affordable, sustainable and safe (AFASS) in her circumstances;
- the safe and hygienic preparation, feeding and storage of breast-milk substitutes;
- how to teach the preparation of various feeding options, and

Global Criteria - Step Two

(continued from previous page)

- how to minimize the likelihood that breastfeeding mothers will be influenced to use formula.

The type and percentage of staff receiving this training is adequate, given the facility's needs

Out of the randomly selected clinical staff members*:
- At least 80% confirm that they have received the described training or, if they have been working in the maternity services less than 6 months, have, at minimum, received orientation on the policy and their roles in implementing it.
- At least 80% are able to answer 4 out of 5 questions on breastfeeding support and promotion correctly.
- At least 80% can describe two issues that should be discussed with a pregnant woman if she indicates that she is considering giving her baby something other than breast milk.

Out of the randomly selected non-clinical staff members**:
- At least 70% confirm that they have received orientation and/or training concerning the promotion and support of breastfeeding since they started working at the facility.
- At least 70% are able to describe at least one reason why breastfeeding is important.
- At least 70% are able to mention one possible practice in maternity services that would support breastfeeding.
- At least 70% are able to mention at least one thing they can do to support women so they can feed their babies well.

**These include staff members providing clinical care for pregnant women, mothers and their babies.*
*** These include staff members providing non-clinical care for pregnant women, mother and their babies or having contact with them in some aspect of their work.*

STEP 3. Inform all pregnant women about the benefits and management of breastfeeding.

Global Criteria - Step Three

If the hospital has an affiliated antenatal clinic or an in-patient antenatal ward:

A written description of the minimum content of the breastfeeding information and any printed materials provided to all pregnant women is available.

The antenatal discussion covers the importance of breastfeeding, the importance of immediate and sustained skin-to-skin contact, early initiation of breastfeeding, rooming-in on a 24 hour basis, feeding on cue or baby-led feeding, frequent feeding to help assure enough milk, good positioning and attachment, exclusive breastfeeding for the first 6 months, the risks of giving formula or other breast-milk substitutes, and the fact that breastfeeding continues to be important after 6 months when other foods are given.

Out of the randomly selected pregnant women in their third trimester who have come for at least two antenatal visits:
- At least 70% confirm that a staff member has talked with them individually or offered a group talk that includes information on breastfeeding.
- At least 70% are able to adequately describe what was discussed about two of the following topics: importance of skin-to-skin contact, rooming-in, and risks of supplements while breastfeeding in the first 6 months.

STEP 4. Help mothers initiate breastfeeding within a half-hour of birth.

This Step is now interpreted as:

Place babies in skin-to-skin contact with their mothers immediately following birth for at least an hour. Encourage mothers to recognize when their babies are ready to breastfeed and offer help if needed.

Global Criteria - Step Four

Out of the randomly selected mothers with vaginal births or caesarean sections without general anaesthesia in the maternity wards:

- At least 80% confirm that their babies were placed in skin-to-skin contact with them immediately or within five minutes after birth and that this contact continued without separation for an hour or more, unless there were medically justifiable reasons.

  (Note: It is preferable that babies be left even longer than an hour, if feasible, as they may take longer than 60 minutes to breastfeed).

- At least 80% also confirm that they were encouraged to look for signs for when their babies were ready to breastfeed during this first period of contact and offered help, if needed.

  (Note: The baby should not be forced to breastfeed but, rather, supported to do so when ready. If desired, the staff can assist the mother with placing her baby so it can move to her breast and latch when ready).

If any of the randomly selected mothers have had caesarean deliveries with general anaesthesia, at least 50% should report that their babies were placed in skin-to-skin contact with them as soon as the mothers were responsive and alert, with the same procedures followed.

At least 80% of the randomly selected mothers with babies in special care report that they have had a chance to hold their babies skin-to-skin or, if not, the staff could provide justifiable reasons why they could not.

Observations of vaginal deliveries, if necessary to confirm adherence to Step 4, show that in at least 75% of the cases babies are placed with their mothers and held skin-to-skin within five minutes after birth for at least 60 minutes without separation, and that the mothers are shown how to recognize the signs that their babies are ready to breastfeed and offered help, or there are justified reasons for not following these procedures.

STEP 5. Show mothers how to breastfeed and how to maintain lactation, even if they should be separated from their infants.

Global Criteria - Step Five

The head of maternity services reports that mothers who have never breastfed or who have previously encountered problems with breastfeeding receive special attention and support both in the antenatal and postpartum periods.

Observations of staff demonstrating how to safely prepare and feed breast-milk substitutes confirm that in 75% of the cases, the demonstrations were accurate and complete, and the mothers were asked to give “return demonstrations”.

Out of the randomly selected clinical staff members:

- At least 80% report that they teach mothers how to position and attach their babies for breastfeeding and are able to describe or demonstrate correct techniques for both or, if not, can describe to whom they refer mothers on their shifts for this advice.
- At least 80% report that they teach mothers how to hand express and can describe or demonstrate an acceptable technique for this, or, if not, can describe to whom they refer mothers on their shifts for this advice.
- At least 80% can describe how non-breastfeeding mothers can be assisted to safely prepare their feeds, or can describe to whom they refer mothers on their shifts for this advice.

Out of the randomly selected mothers (including caesarean):

- At least 80% of those who are breastfeeding report that someone on the staff offered further assistance with breastfeeding within six hours of birth.
- At least 80% of those who are breastfeeding report that someone on the staff offered them help with positioning and attaching their babies for breastfeeding.
- At least 80% of those who are breastfeeding are able to demonstrate or describe correct positioning of their babies for breastfeeding.
- At least 80% of those who are breastfeeding are able to describe what signs would indicate that their babies are attached and suckling well.
- At least 80% of those who are breastfeeding report that they were shown how to express their milk by hand or given written information and told where they could get help if needed.
- At least 80% of the mothers who have decided not to breastfeed report that they have been offered help in preparing and giving their babies feeds, can describe the advice they were given, and have been asked to prepare feeds themselves, after being shown how.

Out of the randomly selected mothers with babies in special care:

- At least 80% of those who are breastfeeding or intending to do so report that they have been offered help to start their breast milk coming and to keep up the supply within 6 hours of their babies’ births.
- At least 80% of those breastfeeding or intending to do so report that they have been shown how to express their breast milk by hand.
- At least 80% of those breastfeeding or intending to do so can adequately describe and demonstrate how they were shown to express their breast milk by hand.
- At least 80% of those breastfeeding or intending to do so report that they have been told they need to breastfeed or express their milk 6 times or more every 24 hours to keep up their supply.

STEP 6. Give newborn infants no food or drink other than breast milk, unless medically indicated.

Global Criteria - Step Six

Hospital data indicate that at least 75% of the babies delivered in the last year have been exclusively breastfed or exclusively fed expressed breast milk from birth to discharge or, if not, that there were documented medical reasons.

Review of all clinical protocols or standards related to breastfeeding and infant feeding used by the maternity services indicates that they are in line with BFHI standards and current evidence-based guidelines.

No materials that recommend feeding breast milk substitutes, scheduled feeds or other inappropriate practices are distributed to mothers.

The hospital has an adequate facility/space and the necessary equipment for giving demonstrations of how to prepare formula and other feeding options away from breastfeeding mothers.

Observations in the postpartum wards/rooms and any well baby observation areas show that at least 80% of the babies are being fed only breast milk or there are acceptable medical reasons for receiving something else.

At least 80% of the randomly selected mothers report that their babies had received only breast milk or expressed or banked human milk or, if they had received anything else, it was for acceptable medical reasons, described by the staff.

At least 80% of the randomly selected mothers who have decided not to breastfeed report that the staff discussed with them the various feeding options and helped them to decide what was suitable in their situations.

At least 80% of the randomly selected mothers with babies in special care who have decided not to breastfeed report that staff has talked with them about risks and benefits of various feeding options.

STEP 7. Practice rooming-in - allow mothers and infants to remain together – 24 hours a day.

Global Criteria - Step Seven

Observations in the postpartum wards and any well-baby observation areas and discussions with mothers and staff confirm that at least 80% of the mothers and babies are together or, if not, have justifiable reasons for being separated.

At least 80% of the randomly selected mothers report that their babies have been in the same room with them without separation or, if not, there were justifiable reasons.

STEP 8. Encourage breastfeeding on demand.

Global Criteria - Step Eight

Out of the randomly selected breastfeeding mothers:

- At least 80% report that they have been told how to recognize when their babies are hungry and can describe at least two feeding cues.
- At least 80% report that they have been advised to feed their babies as often and for as long as the babies want or something similar.

STEP 9. Give no artificial teats or pacifiers (also called dummies or soothers) to breastfeeding infants.

Global Criteria - Step Nine

Observations in the postpartum wards/rooms and any well baby observation areas indicate that at least 80% of the breastfeeding babies observed are not using bottles or teats or, if they are, their mothers have been informed of the risks.

Out of the randomly selected breastfeeding mothers:

- At least 80% report that, as far as they know, their infants have not been fed using bottles with artificial teats (nipples).
- At least 80% report that, as far as they know, their infants have not sucked on pacifiers.

STEP 10. Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or clinic.

Global Criteria - Step Ten

The head/director of maternity services reports that:

- Mothers are given information on where they can get support if they need help with feeding their babies after returning home, and the head/director can also mention at least one source of information.
- The facility fosters the establishment of and/or coordinates with mother support groups and other community services that provide breastfeeding/infant feeding support to mothers, and can describe at least one way this is done.
- The staff encourages mothers and their babies to be seen soon after discharge (preferably 2-4 days after birth and again the second week) at the facility or in the community by a skilled breastfeeding support person who can assess feeding and give any support needed and can describe an appropriate referral system and adequate timing for the visits.

A review of documents indicates that printed information is distributed to mothers before discharge, if appropriate, on how and where mothers can find help on feeding their infants after returning home and includes information on at least one type of help available.

Out of the randomly selected mothers at least 80% report that they have been given information on how to get help from the facility or how to contact support groups, peer counsellors or other community health services if they have questions about feeding their babies after return home and can describe at least one type of help that is available.

Compliance with the International Code of Marketing of Breast-milk Substitutes

Global Criteria – Code compliance

The head/director of maternity services reports that:

- No employees of manufacturers or distributors of breast-milk substitutes, bottles, teats or pacifiers have any direct or indirect contact with pregnant women or mothers.
- The hospital does not receive free gifts, non-scientific literature, materials or equipment, money, or support for in-service education or events from manufacturers or distributors of breast-milk substitutes, bottles, teats or pacifiers.
- No pregnant women, mothers or their families are given marketing materials or samples or gift packs by the facility that include breast-milk substitutes, bottles/teats, pacifiers, other infant feeding equipment or coupons.

A review of the breastfeeding or infant feeding policy indicates that it uphold the Code and subsequent WHA resolutions by prohibiting:

- The display of posters or other materials provided by manufacturers or distributors of breast-milk substitutes, bottles, teats and dummies or any other materials that promote the use of these products.
- Any direct or indirect contact between employees of these manufacturers or distributors and pregnant women or mothers in the facility.
- Distribution of samples or gift packs with breast-milk substitutes, bottles or teats or of marketing materials for these products to pregnant women or mothers or members of their families.
- Acceptance of free gifts (including food), literature, materials or equipment, money or support for in-service education or events from these manufacturers or distributors by the hospital.
- Demonstrations of preparation of infant formula for anyone that does not need them.
- Acceptance of free or low cost breast-milk substitutes or supplies.

A review of records and receipts indicates that any breast-milk substitutes, including special formulas and other supplies, are purchased by the health care facility for the wholesale price or more.

Observations in the antenatal and maternity services and other areas where nutritionists and dieticians work indicate that no materials that promote breast-milk substitutes, bottles, teats or dummies, or other designated products as per national laws, are displayed or distributed to mothers, pregnant women, or staff.

Observations indicate that the hospital keeps infant formula cans and pre-prepared bottles of formula out of view unless in use.

At least 80% of the randomly selected clinical staff members can give two reasons why it is important not to give free samples from formula companies to mothers.

Mother-friendly care

Global Criteria – Mother-friendly care

(Note: These criteria should be required only after health facilities have trained their staff on policies and practices related to mother-friendly care).

A review of the hospital policies indicates that they require mother-friendly labour and birthing practices and procedures including:

- Encouraging women to have companions of their choice to provide continuous physical and/or emotional support during labour and birth, as desired.
- Allowing women to drink and eat light foods during labour, as desired.
- Encouraging women to consider the use of non-drug methods of pain relief unless analgesic or anaesthetic drugs are necessary because of complications, respecting the personal preferences of the women.
- Encouraging women to walk and move about during labour, if desired, and assume positions of their choice while giving birth, unless a restriction is specifically required for a complication and the reason is explained to the mother.
- Care that does not involve invasive procedures such as rupture of the membranes, episiotomies, acceleration or induction of labour, instrumental deliveries, or caesarean sections unless specifically required for a complication and the reason is explained to the mother.

Out of the randomly selected clinical staff members:

- At least 80% are able to describe at least two recommended practices and procedures that can help a mother be more comfortable and in control during labour and birth.
- At least 80% are able to list at least three labour or birth procedures that should not be used routinely, but only if required due to complications.
- At least 80% are able to describe at least two labour and birthing practices and procedures that make it more likely that breastfeeding will get off to a good start

Out of the randomly selected pregnant women:

- At least 70% report that the staff has told them women can have companions of their choice with them throughout labour and birth and at least one reason it could be helpful.
- At least 70% report that they were told at least one thing by the staff about ways to deal with pain and be more comfortable during labour, and what is better for mothers, babies and breastfeeding.

HIV and infant feeding (optional)

(Note: The national BFHI coordination group and/or other appropriate national decision-makers will determine whether or not maternity services should be assessed on whether they provide support related to HIV and infant feeding).

Global Criteria – HIV and infant feeding

The head/director of maternity services reports that:

- The hospital has policies and procedures that seem adequate concerning providing or referring pregnant women for testing and counselling for HIV, counselling women concerning PMTCT of HIV, providing individual, private counselling for pregnant women and mothers who are HIV positive on infant feeding options, and insuring confidentiality.
- Mothers who are HIV positive or concerned that they are at risk are referred to community support services for HIV testing and infant feeding counselling, if they exist.

A review of the infant feeding policy indicates that it requires that HIV-positive mothers receive counselling, including information about the risks and benefits of various infant feeding options and specific guidance in selecting the options for their situations, supporting them in their choices.

A review of the curriculum on HIV and infant feeding and training records indicates that training is provided for appropriate staff and is sufficient, given the percentage of HIV positive women and the staff needed to provide support for pregnant women and mothers related to HIV and infant feeding. The training covers basic facts on:

- the risks of HIV transmission during pregnancy, labour and delivery and breastfeeding and its prevention;
- the importance of testing and counselling for HIV;
- local availability of feeding options;
- the dangers of mixed feeding for HIV transmission;
- facilities/provision for counselling HIV positive women on advantages and disadvantages of different feeding options; assisting them in exclusive breastfeeding or formula feeding (note: may involve referrals to infant feeding counsellors);
- how to assist HIV positive mothers who have decided to breastfeed; including how to transition to replacement feeds at the appropriate time
- how to minimize the likelihood that a mother whose status is unknown or HIV negative will be influenced to replacement feed.

A review of the antenatal information indicates that it covers the important topics on this issue. (these include the routes by which HIV-infected women can pass the infection to their infants, the approximate proportion of infants that will (and will not) be infected by breastfeeding; the importance of counselling and testing for HIV and where to get it; and the importance of HIV positive women making informed infant feeding choices and where they can get the needed counselling).

A review of documents indicates that printed material is available, if appropriate, on how to implement various feeding options and is distributed to or discussed with HIV positive mothers before discharge. It includes information on how to exclusively replacement feed, how to exclusively breastfeed, how to stop breastfeeding when appropriate, and the dangers of mixed feeding.

Continued on next page

Global Criteria – HIV and infant feeding

(continued from previous page)

Out of the randomly selected clinical staff members:

- At least 80% can describe at least one measure that can be taken to maintain confidentiality and privacy of HIV positive pregnant women and mothers.
- At least 80% are able to mention at least two policies or procedures that help prevent transmission of HIV from an HIV positive mother to her infant during feeding within the first six months.
- At least 80% are able to describe two issues that should be discussed when counselling an HIV positive mother who is deciding how to feed her baby.

Out of the randomly selected pregnant women who are in their third trimester and have had at least two antenatal visits or are in the antenatal in-patient unit:

- At least 70% report that a staff member has talked with them or given a talk about HIV/AIDS and pregnancy.
- At least 70% report that the staff has told them that a woman who is HIV-positive can pass the HIV infection to her baby.
- At least 70% can describe at least one thing the staff told them about why testing and counselling for HIV is important for pregnant women.
- At least 70% can describe at least one thing the staff told them about what women who do not know their HIV status should consider when deciding how to feed their babies.

Section 1.3 - Annex 1

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WHO/FCH/CAH/09.01

Acceptable medical reasons for use of breast-milk substitutes

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Preface

A list of acceptable medical reasons for supplementation was originally developed by WHO and UNICEF as an annex to the Baby-friendly Hospital Initiative (BFHI) package of tools in 1992.

WHO and UNICEF agreed to update the list of medical reasons given that new scientific evidence had emerged since 1992, and that the BFHI package of tools was also being updated. The process was led by the departments of Child and Adolescent Health and Development (CAH) and Nutrition for Health and Development (NHD). In 2005, an updated draft list was shared with reviewers of the BFHI materials, and in September 2007 WHO invited a group of experts from a variety of fields and all WHO Regions to participate in a virtual network to review the draft list. The draft list was shared with all the experts who agreed to participate. Subsequent drafts were prepared based on three inter-related processes: a) several rounds of comments made by experts; b) a compilation of current and relevant WHO technical reviews and guidelines (see list of references); and c) comments from other WHO departments (Making Pregnancy Safer, Mental Health and Substance Abuse, and Essential Medicines) in general and for specific issues or queries raised by experts.

Technical reviews or guidelines were not available from WHO for a limited number of topics. In those cases, evidence was identified in consultation with the corresponding WHO department or the external experts in the specific area. In particular, the following additional evidence sources were used:
-*The Drugs and Lactation Database* (LactMed) hosted by the United States National Library of Medicine, which is a peer-reviewed and fully referenced database of drugs to which breastfeeding mothers may be exposed.
-*The National Clinical Guidelines for the management of drug use during pregnancy, birth and the early development years of the newborn*, review done by the New South Wales Department of Health, Australia, 2006.

The resulting final list was shared with external and internal reviewers for their agreement and is presented in this document.

The list of acceptable medical reasons for temporary or long-term use of breast-milk substitutes is made available both as an independent tool for health professionals working with mothers and newborn infants, and as part of the BFHI package. It is expected to be updated by 2012.

Acknowledgments

This list was developed by the WHO Departments of Child and Adolescent Health and Development and Nutrition for Health and Development, in close collaboration with UNICEF and the WHO Departments of Making Pregnancy Safer, Essential Medicines and Mental Health and Substance Abuse. The following experts provided key contributions for the updated list: Philip Anderson, Colin Binns, Riccardo Davanzo, Ros Escott, Carol Kolar, Ruth Lawrence, Lida Lhotska, Audrey Naylor, Jairo Osorno, Marina Rea, Felicity Savage, María Asunción Silvestre, Tereza Toma, Fernando Vallone, Nancy Wight, Anthony Williams and Elizabeta Zisovska. They completed a declaration of interest and none identified a conflicting interest.

Introduction

Almost all mothers can breastfeed successfully, which includes initiating breastfeeding within the first hour of life, breastfeeding exclusively for the first 6 months and continuing breastfeeding (along with giving appropriate complementary foods) up to 2 years of age or beyond.

Exclusive breastfeeding in the first six months of life is particularly beneficial for mothers and infants.

Positive effects of breastfeeding on the health of infants and mothers are observed in all settings. Breastfeeding reduces the risk of acute infections such as diarrhoea, pneumonia, ear infection, *Haemophilus influenza*, meningitis and urinary tract infection (1). It also protects against chronic conditions in the future such as type I diabetes, ulcerative colitis, and Crohn's disease. Breastfeeding during infancy is associated with lower mean blood pressure and total serum cholesterol, and with lower prevalence of type-2 diabetes, overweight and obesity during adolescence and adult life (2). Breastfeeding delays the return of a woman's fertility and reduces the risks of post-partum haemorrhage, pre-menopausal breast cancer and ovarian cancer (3).

Nevertheless, a small number of health conditions of the infant or the mother may justify recommending that she does not breastfeed temporarily or permanently (4). These conditions, which concern very few mothers and their infants, are listed below together with some health conditions of the mother that, although serious, are not medical reasons for using breast-milk substitutes.

Whenever stopping breastfeeding is considered, the benefits of breastfeeding should be weighed against the risks posed by the presence of the specific conditions listed.

INFANT CONDITIONS

Infants who should not receive breast milk or any other milk except specialized formula

- Infants with classic galactosemia: a special galactose-free formula is needed.
- Infants with maple syrup urine disease: a special formula free of leucine, isoleucine and valine is needed.
- Infants with phenylketonuria: a special phenylalanine-free formula is needed (some breastfeeding is possible, under careful monitoring).

Infants for whom breast milk remains the best feeding option but who may need other food in addition to breast milk for a limited period

- Infants born weighing less than 1500 g (very low birth weight).
- Infants born at less than 32 weeks of gestation (very preterm).
- Newborn infants who are at risk of hypoglycaemia by virtue of impaired metabolic adaptation or increased glucose demand (such as those who are preterm, small for gestational age or who have experienced significant intrapartum hypoxic/ischaemic stress, those who are ill and those whose mothers are diabetic (5) if their blood sugar fails to respond to optimal breastfeeding or breast-milk feeding.

MATERNAL CONDITIONS

Mothers who are affected by any of the conditions mentioned below should receive treatment according to standard guidelines.

Maternal conditions that may justify permanent avoidance of breastfeeding

- HIV infection[15]: if replacement feeding is acceptable, feasible, affordable, sustainable and safe (AFASS) (6). Otherwise, exclusive breastfeeding for the first six months is recommended.

Maternal conditions that may justify temporary avoidance of breastfeeding

- Severe illness that prevents a mother from caring for her infant, for example sepsis.
- Herpes simplex virus type 1 (HSV-1): direct contact between lesions on the mother's breasts and the infant's mouth should be avoided until all active lesions have resolved.
- Maternal medication:
  - sedating psychotherapeutic drugs, anti-epileptic drugs and opioids and their combinations may cause side effects such as drowsiness and respiratory depression and are better avoided if a safer alternative is available (7);
  - radioactive iodine-131 is better avoided given that safer alternatives are available - a mother can resume breastfeeding about two months after receiving this substance;
  - excessive use of topical iodine or iodophors (e.g., povidone-iodine), especially on open wounds or mucous membranes, can result in thyroid suppression or electrolyte abnormalities in the breastfed infant and should be avoided;
  - cytotoxic chemotherapy requires that a mother stops breastfeeding during therapy.

Maternal conditions during which breastfeeding can still continue, although health problems may be of concern

- Breast abscess: breastfeeding should continue on the unaffected breast; feeding from the affected breast can resume once treatment has started (8).
- Hepatitis B: infants should be given hepatitis B vaccine, within the first 48 hours or as soon as possible thereafter (9).
- Hepatitis C.
- Mastitis: if breastfeeding is very painful, milk must be removed by expression to prevent progression of the condition(8).
- Tuberculosis: mother and baby should be managed according to national tuberculosis guidelines (10).
- Substance use[16] (11):
  - maternal use of nicotine, alcohol, ecstasy, amphetamines, cocaine and related stimulants has been demonstrated to have harmful effects on breastfed babies;
  - alcohol, opioids, benzodiazepines and cannabis can cause sedation in both the mother and the baby.

  Mothers should be encouraged not to use these substances, and given opportunities and support to abstain.

[15] The most appropriate infant feeding option for an HIV-infected mother depends on her and her infant's individual circumstances, including her health status, but should take consideration of the health services available and the counselling and support she is likely to receive. Exclusive breastfeeding is recommended for the first six months of life unless replacement feeding is AFASS. When replacement feeding is AFASS, avoidance of all breastfeeding by HIV-infected women is recommended. Mixed feeding in the first 6 months of life (that is, breastfeeding while also giving other fluids, formula or foods) should always be avoided by HIV-infected mothers.

[16] Mothers who choose not to cease their use of these substances or who are unable to do so should seek individual advice on the risks and benefits of breastfeeding depending on their individual circumstances. For mothers who use these substances in short episodes, consideration may be given to avoiding breastfeeding temporarily during this time.

References

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(9) *Hepatitis B and breastfeeding*. Geneva, World Health Organization, 1996. (Update No. 22).

(10) *Breastfeeding and Maternal tuberculosis*. Geneva, World Health Organization, 1998 (Update No. 23).

(11) *Background papers to the national clinical guidelines for the management of drug use during pregnancy, birth and the early development years of the newborn.* Commissioned by the Ministerial Council on Drug Strategy under the Cost Shared Funding Model. NSW Department of Health, North Sydney, Australia, 2006. http://www.health.nsw.gov.au/pubs/2006/bkg_pregnancy.html

Further information on maternal medication and breastfeeding is available at the following United States National Library of Medicine (NLM) website:
http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?LACT

For further information, please contact:

Department of Nutrition for Health and Development
E-mail: nutrition@who.int
Web: www.who.int/nutrition

Department of Child and Adolescent Health and Development
E-mail: cah@who.int
Web: www.who.int/child_adolescent_health

Address: 20 Avenue Appia, 1211 Geneva 27, Switzerland

SECTION 1.4
COMPLIANCE WITH THE INTERNATIONAL CODE OF MARKETING OF BREAST-MILK SUBSTITUTES

What is the Code?

The Code was adopted in 1981 by the World Health Assembly to promote safe and adequate nutrition for infants, by the protection and promotion of breastfeeding and by ensuring the proper use of breast-milk substitutes, when these are necessary. One of the main principles of the Code is that health care facilities should not be used for the purpose of promoting breast milk substitutes, feeding bottles or teats. Subsequent WHA resolutions have clarified the Code and closed loopholes.

How is the Code relevant to the Baby-friendly Hospital Initiative?

In launching the BFHI in 1991, UNICEF and WHO were hoping to ensure that all maternities would become centres of breastfeeding support. In order to achieve this, hospitals must avoid being used for the promotion of breast milk substitutes, bottles or teats, or the distribution of free formula. The Code, together with the subsequent relevant Resolutions of the World Health Assembly, lays down the basic principles necessary for this. In addition, in adopting the Code in 1981, the World Health Assembly called upon health workers to encourage and protect breastfeeding, and to make themselves familiar with their responsibilities under the Code.

Which products fall under the scope of the Code?

The Code applies to breast milk substitutes, including infant formula; other milk products, foods and beverages, including bottle-fed complementary foods, when marketed or otherwise represented to be suitable, with or without modification, for use as a partial or total replacement of breast milk; feeding bottles and teats.

Since exclusive breastfeeding is to be encouraged for 6 months, any food or drink shown to be suitable for feeding a baby during this period is a breast milk substitute, and thus covered by the Code. This would include baby teas, juices and waters. Special formulas for infants with special medical or nutritional needs also fall under the scope of the Code.

Since continued breastfeeding is to be encouraged for two years or beyond, any milk product shown to be substituting for the breast milk part of the child's diet between six months and two years, such as follow-on formula, is a breast-milk substitute and is thus covered by the Code.

What does the Code say?

The main points in the Code include:

- no advertising of breast-milk substitutes and other products to the public;
- no free samples to mothers;
- no promotion in the health services;
- no donations of free or subsidized supplies of breast-milk substitutes or other products in any part of the health care system;
- no company personnel to contact or advise mothers;
- no gifts or personal samples to health workers;
- no pictures of infants, or other pictures or text idealizing artificial feeding, on the labels of the products;
- information to health workers should only be scientific and factual;

- information on artificial feeding should explain the benefits of breastfeeding and the costs and dangers associated with artificial feeding;
- unsuitable products, such as sweetened condensed milk, should not be promoted for babies.

Who is a “health worker” for the purposes of the Code?

According to the Code, any person working in the health care system, whether professional or non-professional, including voluntary and unpaid workers, in public or private practice, is a health worker. Under this definition, ward assistants, sweepers, nurses, midwives, social workers, dieticians, counsellors, in-hospital pharmacists, obstetricians, administrators, clerks, etc. are all health workers.

What are a health worker’s responsibilities under the Code?

1. Encourage and protect breast-feeding. Health workers involved in maternal and infant nutrition should make themselves familiar with their responsibilities under the Code, and be able to explain the following:

- the benefits and superiority of breastfeeding;
- maternal nutrition, and the preparation for and maintenance of breastfeeding;
- the negative effect on breastfeeding of introducing partial bottle-feeding;
- the difficulty of reversing the decision not to breastfeed; and
- where needed, the proper use of infant formula, whether manufactured industrially or home-prepared.

When providing information on the use of infant formula, health workers should be able to explain:

- the social and financial implications of its use;
- the health hazards of inappropriate foods or feeding methods; and
- the health hazards of unnecessary or improper use of infant formula and other breast-milk substitutes.

2. Ensure that the health facility is not used for the display of products within the scope of the Code, for placards or posters concerning such products. Ensure that packages of breast-milk substitutes and other supplies purchased by the health facility are not on display or visible to mothers.

3. Refuse any gifts offered by manufacturers or distributors.

4. Refuse samples (meaning single or small quantities) of infant formula or other products within the scope of the Code, or of equipment or utensils for their preparation or use, unless necessary for the purpose of professional evaluation or research at the institutional level.

5. Never pass any samples to pregnant women, mothers of infants and young children, or members of their families.

6. Disclose any contribution made by a manufacturer or distributor for fellowships, study tours, research grants, attendance at professional conferences, or the like to management of the health facility.

7. Be aware that support and other incentives for programmes and health professionals working in infant and young-child health should not create conflicts of interests.

Does the Code ban all free and low-cost supplies of infant formula and other breast-milk substitutes (including follow-on formula) in health facilities?

Yes. Although there were some ambiguities in the wording of Articles 6.6 and 6.7 of the Code, these were clarified in 1994 by World Health Assembly Resolution (WHA 47.5) which urged Governments:

> "to ensure that there are no donations of free or subsidized supplies of breast-milk substitutes and any other products covered by the International Code of Marketing of Breast-milk Substitutes in any part of the health care system".

Breast-milk substitutes should be obtained through "normal procurement channels" so as not to interfere with the protection and promotion of breastfeeding. Procurement means purchase.

Should free supplies be donated for pre-term and low birth weight infants? Some argue that these infants need early supplementation, and therefore free supplies should be permitted.

No. The prohibition applies to all types of infant formula, including those for special medical purposes. In any case, breast milk is the medically indicated feeding of choice for almost all pre-term and low birth weight babies.[17] Obtaining free supplies for these babies encourages bottle (artificial) feeding, which further threatens their survival and healthy development.

Moreover, once free supplies are available in the maternities and nurseries, it is extremely difficult to control their distribution and misuse.

Should free supplies be donated for infants of HIV-positive mothers who have chosen to formula feed?

No. As stated above, once free supplies are available in the health care system it is virtually impossible to prevent their misuse and the undermining of breastfeeding. Governments should procure the formula needed through normal procurement channels.

Should the prohibition extend to Maternal Child Health, primary health, and rural clinics?

Yes. The Code defines the health care system as: "governmental, non-governmental or private institutions or organizations engaged, directly or indirectly, in health care for mothers, infants and pregnant women; and nurseries or child-care institutions. It also includes health workers in private practice".

Why not permit free supplies in paediatric wards, since older infants may already be using feeding bottles?

Because free supplies to paediatric services or other special services for sick infants can seriously undermine breastfeeding. The WHO/UNICEF guidelines suggest, in paragraph 50:

> "There will, of course, always be a small number of infants in these services who will need to be fed on breast-milk substitutes. Suitable substitutes, procured and distributed as part of the regular inventory of foods and medicines of any such health care facility, should be provided for those infants".

[17] See WHO/UNICEF "Guidelines concerning the main health and socioeconomic circumstances in which infants have to be fed on breast-milk substitutes" (WHO, A39/8 Add. 1, 10 April 1986). The 1986 World Health Assembly based its adoption of WHA 39.28 on this document.

Is there a working definition for "low-cost" supplies?

Yes. There is a general agreement that ending "low-cost" or "low-price" sales means ending sales at prices below the wholesale price or lower that 80 percent of the retail price, in the absence of a standard wholesale price. The reason for stopping low price sales is that low prices lead to the overuse of breast-milk substitutes.

Is the Code still relevant in view of the HIV pandemic and the increased need for formula?

Yes. Indeed the Code is even more important in the context of HIV, since the Code and resolutions:

- encourage governments to regulate the distribution of free or subsidized supplies of breast-milk substitutes to prevent "spillover";
- protect children fed on replacement foods by ensuring that product labels carry necessary warnings and instructions for safe preparation and use; and
- ensure that a given product is chosen on the basis of independent medical advice.

The Code is relevant to, and fully covers the needs of, mothers who are HIV-positive. Even where the Code has not been implemented, its provisions still apply.

SECTION 1.5 BABY-FRIENDLY EXPANSION AND INTEGRATION POSSIBILITIES

Over the last 15 years of work on BFHI, many lessons have been learned. Perhaps the clearest lesson is the need for more attention to Step 10 and the community. A second pressing issue has been the need to rectify the misunderstandings concerning the appropriateness of BFHI in the context of the HIV pandemic. Other issues that have arisen and have been addressed in some countries include:

- the need to ensure mother-friendly care;
- breastfeeding supportive paediatric care;
- mother and baby-friendly NICUs;
- mother and baby-friendly physician's offices;
- and last, but by no means least, the need for the mother of the exclusively breastfed child to be supported to understand the need for the age-appropriate addition of complementary foods after 6 months.

Current trends in health system and related planning indicate the need for increased flexibility, integration, and complementarity among interventions. For this reason, and to aid countries in creating synergy in their programmes and in actively addressing identified issues, a variety of alternative approaches are now included in the BFHI materials. These expansion and integration options are intended to create the possibility for more creative and supportive mother and baby-friendly care.

Presented below are a few of the many variations that have been tried around the world in order to bring truly baby-friendly care to all.

Baby-friendly communities: Creating Step Ten

Step 10, of all of the Ten Steps, has not achieved full implementation in a wide variety of settings, although many options are suggested, including mother-to-mother or peer groups, organised support by certified lactation consultants, regular outreach by the maternity staff especially in the first days postpartum, referral to community-based primary health care centres with specialized training, hotlines, etc. Efforts to date have not been optimal due to a variety of factors, not the least of which is that facility-based personnel may simply not have the skills to create community mobilization. In addition, often there is reliance on volunteers to carry out ongoing activities, so it is necessary to have regular refreshers and support activities for ongoing motivation and communication.

Perhaps of most relevance to reaching the most vulnerable populations is the reality that most deliveries in developing countries occur in the communities and even the initial baby-friendly care may not be in place.

A new initiative – Baby-friendly Communities – has been developed in some countries, and can serve as a model

1. for expanding BFHI practices and criteria into community health services,
2. for expanding BFHI practices into delivery settings where there are no community health services, and

3. for strengthening the vital tenth step in ensuring best practices and support for every mother.

Suggestions for development and content of national criteria that could be applied in these three situations are presented below:

Suggested National Baby-friendly Community components: provided for community discussion, reflecting on all applicable Global Criteria for the BFHI (the Ten Steps)

The development of the criteria should include the participation and commitment of:

1. Community political and social leadership, both male and female, who are committed to making a change in support of optimal infant and young child feeding.
2. All health facilities that include maternity services, or local health care provision, especially those that are already designated "baby-friendly" and actively support both early and exclusive breastfeeding (0-6 months).
3. If home deliveries are the norm, all who assist in these deliveries.

Locally developed criteria should specify that :

1. All who assist in facility-based or home deliveries are informed concerning mother-friendly labour and birthing practices such as encouraging mothers to have companions to provide support, minimizing invasive procedures unless medically necessary, encouraging women to move about and assume positions of their choice during labour, etc. (see "mother-friendly" section) and are informed concerning the importance of delayed cord cutting, immediate skin-to-skin continued for at least 60 minutes, and no prelacteal feeds.
2. Community access to referral site(s) with skilled support for early, exclusive and continued breastfeeding is available.
3. Support is available in the community for age-appropriate, frequent, and responsive complementary feeding with continued breastfeeding. This will generally mean that there is availability of micronutrients or animal-based foods and adequate counselling to assist mothers in making appropriate choices.
4. Mother-to-mother support system, or similar, is in place.
5. No practices, distributors, shops or services violate the International Code (as applicable) in the community.
6. Local government or civil society has convened, created and supports implementation of at least one political or social normative change and/or additional activity that actively supports mothers and families to succeed with immediate and exclusive breastfeeding practices (e.g. time-sharing of tasks, granting authority to transport breastfeeding mothers for referral if needed, identification of "breastfeeding advocates/protectors" among community leaders, breastfeeding supportive workplaces, etc.).

In addition, simplified job-aids for assisting and for assessing home deliveries (including those performed by skilled midwives and, if possible, traditional birth attendants), should be developed, are available and are in use.

Example from Gambia

An excellent example of an innovative approach to this problem and its solution is found in the *"The Baby Friendly Community Initiative (BFCI) – An Expanded Vision for Integrated Early Childhood Development in the Gambia".* The full text of this document will be available on the UNICEF website.

In summary, BFHI was used as the model for the development of the Baby-friendly Community Initiative (BFCI). The BFCI includes 10 steps to successful infant feeding incorporating maternal nutrition, infant nutrition, environmental sanitation and personal hygiene. In other settings, safe delivery or child and maternity protection might have greater relevance. In Gambia, communities identified 5 women and 2 men each, to be trained and certified "Village Support Groups on Infant Feeding". When the 10 steps developed by the community are implemented, the community is designated a "Baby- friendly Community".

Training of community representatives as Village Support Groups on infant feeding was considered the most important element of the BFCI. Men's involvement in the BFCI both as members of the Support Groups and as part of the target population may also be a crucial element for success and sustainability of the intervention. Their involvement in an area, which in the past targeted only women, sent out a clear and strong message that maternal and infant nutrition concerned both men (fathers) and women (mothers).

World Breastfeeding Week may be used as an entry point to bring together targeted politicians, Senior Government and NGO officials, as well as international Agencies for sensitization to create better understanding of the importance of breastfeeding, what has already occurred in country, and what may be possible, and create a cadre of high level support.

In Gambia, such a meeting led to recommendations:

1. intensified information, education and communication (IEC) activities to eradicate taboos and other traditional practices, which affect the practice of optimal breastfeeding;
2. inclusion of breastfeeding in the curricula of schools and training institutions;
3. setting up of support groups on breastfeeding;
4. extended maternity leave for working mothers;
5. development of breastfeeding policies;
6. similar seminars at the regional and community levels;
7. the implementation of the Baby-friendly Hospital Initiative; and
8. ensuring community involvement.

The results of this approach in Gambia were an increase from 60% to 100% in initiation of breastfeeding in the first day of life, and a decline in introduction of complementary feeding at four months of age from 90% to nearly 0%.

In Gambia, the BFHI also helped introduce other community based services that meet the needs of infants and young children are vital to many health, growth and development intervention approaches, including bed nets, HIV/AIDS awareness, immunization support, and reproductive health care. The approach promotes and protects the rights of the child to survival, growth and development.

The Ten Steps to Successful Breastfeeding in the Community:
The Gambia's Baby-friendly Community Initiative

Every village should have an enabling environment for mothers to practice optimal breastfeeding. Therefore, a trained Village Support Group on infant feeding:

1. Informs and advises all pregnant and lactating women and their spouses on the importance of an adequate maternal diet using locally available foods by explaining the benefits to both maternal and infant health.
2. Informs all pregnant women and their spouses about the benefits of breast milk including colostrum.
3. Advises and encourages mothers to initiate breastfeeding within an hour after birth and not to give any prelacteal feeds unless on the advice of a medical personnel.
4. Informs both mothers and fathers about the benefits of exclusive breastfeeding and encourages all mothers of healthy newborns to breastfeed exclusively for six months.
5. Informs both mothers and fathers about the hazards and cost of bottle-feeding, the use of formula and the use of pacifiers (comforters).
6. Ensures that orphans get breast milk by encouraging the traditional practice of wet nursing for babies who have lost their mothers at birth.
7. Advises and encourages mothers to introduce locally available complementary foods when the infant is six months of age.
8. Advises and encourages all mothers to use fermented cereal in the preparation of the complementary feeding by telling them about the benefits.
9. Teaches all mothers and caregivers about the benefits of adequate personal hygiene and environmental sanitation to infant health, including the basic principles for the preparation of safe foods for infants and young children.
10. Encourages mothers to support each other to practice optimal breastfeeding by forming their own informal support groups on infant feeding.

BFHI and Prevention of Mother-to-Child Transmission (PMTCT) of HIV/AIDS

The WHO/UNICEF guidance on infant feeding support for HIV-positive mothers strongly suggest that training on support for exclusive breastfeeding precede training on feeding options for HIV-positive mothers. For this reason, Malawi, among other countries, has decided that BFHI must be in place at the same time as the initiation of counselling for the HIV-positive mothers.

The rationale is at least 3-fold:

1. Since exclusive breastfeeding is an option for all mothers, the establishment of excellence in support of exclusive breastfeeding will benefit all.
2. For HIV-positive mothers for whom replacement feeding in not acceptable, feasible, affordable, sustainable and safe, exclusive breastfeeding is the recommended option.
3. If all counsellors understand the importance of exclusive breastfeeding, spill over and over use of artificial foods will be reduced.
4. Recent research findings indicate that exclusive breastfeeding may reduce the passage of HIV via breast milk, when compared to mixed feeding.

If this last item is proven to be consistent in additional studies, then exclusive breastfeeding among the greater population of HIV-infected women who have not been diagnosed as yet will provide a double benefit.

Mother-baby-friendly facilities

The Mother-friendly Childbirth Initiative includes the *"Ten Steps of the Mother-friendly Childbirth Initiative for mother-friendly Hospitals, Birth Centres, and Home Birth Services"* and can be initiated in concert with baby-friendly initiatives and as an integrated mother-baby aspect of a maternal-child care continuum.

The Mother-friendly Childbirth Initiative was initially developed in 1996 by the Coalition for Improving Maternity Services (CIMS) with the First Consensus Initiative. CIMS is a coalition of individuals and national organizations with concern for the care and well-being of mothers, babies, and families. The mission is to promote a wellness model of maternity care that will improve birth outcomes and substantially reduce costs. This evidence-based mother-, baby-, and family-friendly model focuses on prevention and wellness as the alternatives to high-cost screening, diagnosis, and treatment programs. The suggested "Ten steps" is based on the recognition that some current maternity and newborn practices both contribute to high costs and inferior outcomes, such as inappropriate application of technology and routine procedures that are not based on scientific evidence. The principles of this approach is respect for the normalcy (i.e., non-medical) of the birthing process, the autonomy and empowerment of the woman, caregiver responsibility and doing "no harm".

The Mother-baby-friendly Ten Steps presented here are modified to allow integration with current continuum of care approaches.

Suggested Mother-baby-friendly Ten Steps for consideration in developing national criteria in coordination with baby-friendly:

A mother-baby-friendly hospital, birth centre, or home birth:

1. Provides or refers for antenatal care, including vitamin/iron/folate supplementation, malaria prophylaxis, HIV-testing, monitoring for danger signs, and referral where appropriate.
2. Offers all birthing mothers:
   - Unrestricted access to the birth companions of her choice, including fathers, partners, children, family members, and friends.
   - Unrestricted access to continuous emotional and physical support from a skilled woman-for example, a doula or labour-support professional.
   - Access to the best available care, preferably skilled assistance and access to timely referral as needed.
   - The freedom to walk, move about, and assume the positions of her choice during labour and birth (unless restriction is specifically required to correct a complication), and discourages the use of the lithotomy[18] position.
3. Maintains records to allow for external and self-assessment and reporting purposes.
4. Provides culturally competent care - that is, care that is sensitive and responsive to the specific beliefs, values, and customs of the mother's ethnicity and religion.
5. Has clearly defined policies and procedures for:
   - Clean birthing techniques.
   - Delayed cord clamping.
   - Placenta removal and disposal.
   - Collaboration, consultation and referral with other maternity services, including maintaining communication with all caregivers when referral/transfer is necessary.
   - Linking the mother and baby to appropriate community resources, including prenatal and post-discharge follow-up and breastfeeding support.
6. Does not routinely employ practices and procedures that are unsupported by scientific evidence, including but not limited to the following:
   - Shaving; enemas; IVs (intravenous drip); withholding nourishment; early rupture of membranes; electronic fetal monitoring.

   Other interventions are limited as follows:
   - Has an induction rate of 10% or less.
   - Has an episiotomy rate of 20% or less, with a goal of 5% or less.
   - Has a total caesarean rate of 10% or less in community hospitals, and 15% or less in tertiary care (high-risk) hospitals.
   - Has a VBAC (vaginal birth after caesarean) rate of 60% or more with a goal of 75% or more.
7. Educates staff in non-drug methods of pain relief and does not promote the use of analgesic or anaesthetic drugs not specifically required to correct a complication.
8. Encourages all mothers and families, including those with sick or premature newborns or infants with congenital problems, to touch, hold, breastfeed, and care for their babies to the extent compatible with their conditions.
9. Has training in haemorrhage control, both manual and medical.
10. Strives to achieve the WHO-UNICEF *Ten Steps of the Baby-friendly Hospital Initiative* to promote successful breastfeeding.

[18] To lie flat on back with legs elevated

Key aspects of "mother-friendly care" have been integrated into the revised 20-hour course, *Global Criteria* and assessment process for BFHI, as an optional module. This provides countries with an easy way to begin the process of integrating mother-friendly childbirth practices into their maternity services, if they do not yet have a full-fledged initiative of the type described above.

Baby-friendly neonatal intensive care and paediatric units

Whereas BFHI is maternity based, its impact in support of post-discharge breastfeeding is limited to its community outreach – Step Ten. Therefore, the concept of baby-friendly paediatrics was considered. The following 10 steps are derived from the suggested 11 Steps developed in Australia[19] and are built upon the BFHI:

10 Steps to Optimal Breastfeeding in Paediatrics

1. Have a written breastfeeding policy and train staff in necessary skills.
2. When an infant is seen, for either a well visit or due to illness, ascertain the mother's infant feeding practices, and assist in establishment or management of breastfeeding as needed.
3. Provide parents with written and verbal information about breastfeeding.
4. Facilitate unrestricted breastfeeding or, if necessary, milk expression for mothers regardless of the child's age.
5. Give breastfed children other food or drink only when age appropriate or when medically indicated, and if medically indicated, use only alternative feeding methods most conducive to return to breastfeeding.
6. If hospitalization is needed, ensure facility allows 24-hours mother/child rooming in.
7. Administer medications and schedule procedures so as to cause the least possible disturbance of feeding.
8. Maintain a human milk bank, according to standards.
9. Provide information and contacts concerning community support available.
10. Maintain appropriate monitoring and records/data collection procedures to permit quality assurance assessment, progress rounds or staff meetings, and feedback.

The issue of transitioning the baby from an NICU setting to home is also extremely important. Items to include in consideration of baby-friendly treatment of the premature or ill infant should include criteria or standards for care, discharge planning, post-discharge assessment, and special support for mothers.

[19] Donohue L, Minchin M and C Minogue, 11 Step approach to Optimal Breastfeeding in the Paediatric Unit *Breastfeeding Review*. 1996; 4(2):88.

The Academy for Breastfeeding Medicine, International, in cooperation with US Department of Health and Human Services, WHO and UNICEF, has developed many protocols that may serve as a basis for national development of criteria for Baby-friendly Paediatrics or Baby-friendly NICUs. These protocols are posted and updated regularly. ABM is dedicated to continuing the development and dissemination of these standards for practice on their website: http://www.bfmed.org/protocols.html.

Baby-friendly physician's office: Optimizing care for infants and children

This guidance is derived from the ABM draft protocol which is available in full on their website. This is presented for consideration in the development of criteria for Baby-friendly Physician Offices.

Issues to consider in developing criteria for Baby-friendly physician offices[20]

1. Establish a written breastfeeding friendly office policy and inform all new staff about the policy.
2. Encourage breastfeeding mothers to exclusively breastfeed. Instruct mother not to offer bottles or a pacifier till breastfeeding is well established.
3. Offer culturally and ethnically competent care.
4. Offer a prenatal visit and show your commitment to breastfeeding during this visit.
5. Collaborate with local hospitals and maternity care professionals in the community. Convey to delivery rooms and newborn units your office policies on breastfeeding initiation.
6. Schedule a first follow-up visit 48-72 hours after hospital discharge or earlier if breastfeeding related problems, such as excessive weight loss (>7%) or jaundice are present at the time of hospital discharge.
7. Ensure availability of appropriate educational resources for parents. Educational material should be non-commercial and not advertise breast milk substitutes, bottles and nipples.
8. Do not interrupt or discourage breastfeeding in the office. Allow and encourage breastfeeding in the waiting room. Ensure an office environment that demonstrates breastfeeding promotion and support.
9. Develop and follow triage protocols to address breastfeeding concerns and problems.
10. Commend breastfeeding mothers during each visit for choosing and continuing breastfeeding.
11. Encourage mothers to exclusively breastfeed for 6 months and continue breastfeeding with complementary foods until at least 24 months and thereafter as long as mutually desired. Discuss introduction of solid food at 6 months of age, emphasizing the need for high-iron solids and assess for need for vitamin D supplementation.
12. Have a written breastfeeding policy and provide a lactation room with supplies for your employees who breastfeed or express breast milk at work. Encourage community employers and day care providers to support breastfeeding.
13. Acquire or maintain a list of community resources and support local breastfeeding support groups.

[20] Modified from ABM Protocol.

14. Work with insurance companies to encourage coverage of breast pump costs and lactation support services.
15. All clinicians and physicians should receive education regarding breastfeeding. Volunteer to let medical students and residents rotate in your practice. Participate in medical student and resident physician education. Encourage establishment of formal training programs in lactation for future and current healthcare providers.
16. Monitor breastfeeding initiation and duration rates in your practice, and analyse what additional changes can be made to enhance your support for optimal infant and young child feeding.

Baby-friendly complementary feeding

Breastfeeding and complementary feeding are a continuum; consideration of one must include consideration of the other. As the name indicates, "complementary" feeding is a complement to breastfeeding. Complementary feeding is essential for continued growth after 6 months of age. New recommendations for the addition of first foods into the diet emphasize protein and micronutrients in addition to energy needs.

The *Ten Guiding Principles of Complementary Feeding* serve as a guide for feeding behaviours, and as BFHI is integrated with other programmes, there will be an increasing number of opportunities to build on its messages.

TEN GUIDING PRINCIPLES FOR COMPLEMENTARY FEEDING[21]

1. DURATION OF EXCLUSIVE BREASTFEEDING AND AGE OF INTRODUCTION OF COMPLEMENTARY FOODS. Practice exclusive breastfeeding from birth to 6 months of age, and introduce complementary foods at 6 months of age (180 days) while continuing to breastfeed.

2. MAINTENANCE OF BREASTFEEDING. Continue frequent, on-demand breastfeeding until 2 years of age or beyond.

3. RESPONSIVE FEEDING. Practice responsive feeding, applying the principles of psychosocial care. Specifically: a) feed infants directly and assist older children when they feed themselves, being sensitive to their hunger and satiety cues; b) feed slowly and patiently, and encourage children to eat, but do not force them; c) if children refuse many foods, experiment with different food combinations, tastes, textures and methods of encouragement; d) minimize distractions during meals if the child loses interest easily; e) remember that feeding times are periods of learning and love - talk to children during feeding, with eye to eye contact.

4. SAFE PREPARATION AND STORAGE OF COMPLEMENTARY FOODS. Practice good hygiene and proper food handling by a) washing caregivers' and children's hands before food preparation and eating, b) storing foods safely and serving foods immediately after preparation, c) using clean utensils to prepare and serve food, d) using clean cups and bowls when feeding children, and e) avoiding the use of feeding bottles, which are difficult to keep clean.

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21 *Guiding principles for complementary feeding of the breastfed child.* Washington DC, Panamerican Health Organization, 2003. The whole document can be downloaded from http://www.who.int/nutrition/publications/infantfeeding/guiding_principles_compfeeding_breastfed.pdf

5. AMOUNT OF COMPLEMENTARY FOOD NEEDED. Start at 6 months of age with small amounts of food and increase the quantity as the child gets older, while maintaining frequent breastfeeding. The energy needs from complementary foods for infants with "average" breast milk intake in developing countries are approximately 200 kcal per day at 6-8 months of age, 300 kcal per day at 9-11 months of age, and 550 kcal per day at 12-23 months of age. In industrialized countries these estimates differ somewhat (130, 310 and 580 kcal/d at 6-8, 9-11 and 12-23 months, respectively) because of differences in average breast milk intake.

6. FOOD CONSISTENCY. Gradually increase food consistency and variety as the infant gets older, adapting to the infant's requirements and abilities. Infants can eat pureed, mashed and semi-solid foods beginning at six months. By 8 months most infants can also eat "finger foods" (snacks that can be eaten by children alone). By 12 months, most children can eat the same types of foods as consumed by the rest of the family (keeping in mind the need for nutrient-dense foods, as explained in #8 below). Avoid foods that may cause choking (i.e., items that have a shape and/or consistency that may cause them to become lodged in the trachea, such as nuts, grapes, raw carrots).

7. MEAL FREQUENCY AND ENERGY DENSITY. Increase the number of times that the child is fed complementary foods as he/she gets older. The appropriate number of feedings depends on the energy density of the local foods and the usual amounts consumed at each feeding. For the average healthy breastfed infant, meals of complementary foods should be provided 2-3 times per day at 6-8 months of age and 3-4 times per day at 9-11 and 12-24 months of age, with additional nutritious snacks (such as a piece of fruit or bread or chapatti with nut paste) offered 1-2 times per day, as desired. Snacks are defined as foods eaten between meals-usually self-fed, convenient and easy to prepare. If energy density or amount of food per meal is low, or the child is no longer breastfed, more frequent meals may be required.

8. NUTRIENT CONTENT OF COMPLEMENTARY FOODS. Feed a variety of foods to ensure that nutrient needs are met. Meat, poultry, fish or eggs should be eaten daily, or as often as possible. Vegetarian diets cannot meet nutrient needs at this age unless nutrient supplements or fortified products are used (see #9 below). Vitamin A-rich fruits and vegetables should be eaten daily. Provide diets with adequate fat content. Avoid giving drinks with low nutrient value, such as tea, coffee and sugary drinks such as soda. Limit the amount of juice offered so as to avoid displacing more nutrient-rich foods.

9. USE OF VITAMIN-MINERAL SUPPLEMENTS OR FORTIFIED PRODUCTS FOR INFANT AND MOTHER. Use fortified complementary foods or vitamin-mineral supplements for the infant, as needed. In some populations, breastfeeding mothers may also need vitamin mineral supplements or fortified products, both for their own health and to ensure normal concentrations of certain nutrients (particularly vitamins) in their breast milk. [Such products may also be beneficial for pre-pregnant and pregnant women].

10. FEEDING DURING AND AFTER ILLNESS. Increase fluid intake during illness, including more frequent breastfeeding, and encourage the child to eat soft, varied, appetizing, favourite foods. After illness, give food more often than usual and encourage the child to eat more.

The two figures that follow, emphasis the need to support continued breastfeeding from 6 months to 2 years or longer to meet the baby's growing needs in addition to suitable complementary foods.

Figure 1: [22]
Percentage of nutrients from 550cc of breast milk, and needs remaining to be supplied by complementary foods in the second year of life

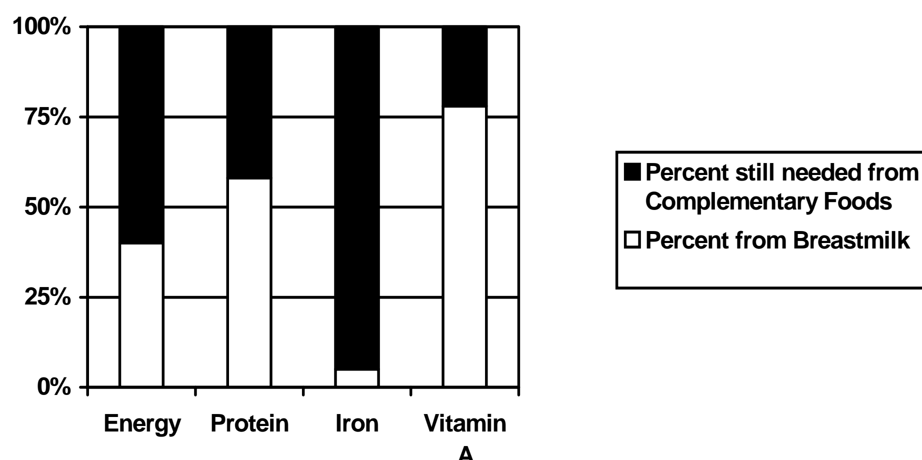

Figure 2:[23]
Minimum dietary energy density required to attain the level of energy needed from complementary foods in one to five meals per day, according to age group and level (low, average, or high) of breast milk energy intake (BME).

Energy	6–8 mo			9–11 mo			12–23 mo		
	Low BME	Average BME	High BME	Low BME	Average BME	High BME	Low BME	Average BME	High BME
Total energy required + 2SD (kcal/day)[b]	769	769	769	858	858	858	1,118	1,118	1,118
BME (kcal/day)	217	413	609	157	379	601	90	346	602
Energy required from complementary foods (kcal/day)	552	356	160	701	479	257	1,028	772	516
Minimum energy density (kcal/g)									
1 meal/day	2.22	1.43	0.64	2.46	1.68	0.90	2.98	2.24	1.50
2 meals/day	1.11	0.71	0.32	1.23	0.84	0.45	1.49	1.12	0.75
3 meals/day	0.74	0.48	0.21	0.82	0.56	0.30	0.99	0.75	0.50
4 meals/day	0.56	0.36	0.16	0.61	0.42	0.23	0.74	0.56	0.37
5 meals/day	0.44	0.29	0.13	0.49	0.34	0.18	0.60	0.45	0.30

a. Assumed functional gastric capacity (30 g/kg reference body weight) is 249 g/meal at 6–8 months, 285 g/meal at 9–11 months, and 345 g/meal at 12–23 months.
b. Total energy requirement is based on new US longitudinal data averages plus 25% (2SD).

This figure conveys the necessity of maintaining high volumes of milk for energy while adding a sufficient number of meals, dependent on their nutrient density.

[22] From the WHO/UNICEF Infant and Young Child Feeding Counselling: An Integrated Course.
[23] From Dewey K and K Brown, Update on technical issues concerning complementary feeding of young children in developing countries and implications for intervention programs. *Food and Nutrition Bulletin*. 2003; 24(1): 8, in Daelmans B, Martines J and R Saadeh (eds), Special Issue Based on a World Health Organization Expert Consultation on Complementary Feeding.

How might complementary feeding be addressed in baby-friendly care? There are many options.

- If BFHI has expanded into the paediatrics areas, it may include the “guiding principles” of complementary feeding and use of the new growth charts.
- If baby-friendly communities are in place, locally available foods may be identified for best feeding at this age.
- If BFHI Step Ten has reached out to community workers, whether from the health, agricultural, educational, or lay sectors, their training and efforts can include the “guiding principles”.

In all cases, collection of data on feeding patterns and content by age of child, whether ongoing or periodic, will provide invaluable feedback for programme improvement.

Mother-baby friendly health care - everywhere!

The principles of mother-child centred care, protection of optimal mother and child conditions, and the recognition that maternal-child dyad deserves respect and support, are the underlying principles of all of these mother and baby-friendly expansion possibilities, and can be translated to a wide variety of environments, including:

- Hospitals, including all paediatric and women’s health care units, as well as general medicine and surgery.
- Other health care facilities such as clinics, MCH centres, etc.
- Community outreach and mobilization programs.
- Faith based communities.
- Physician’s offices.
- International initiatives, such as Community IMCI, partnership activities, Accelerated Child Survival and others.

The mother and baby-friendly activity may be added into one of these other efforts, or vice versa. The priority must be to ensure a comprehensive approach to support for Infant and Young Child Feeding, including legislating the International Code of Marketing, BFHI in the health system, and mother and baby-friendly community activities, as well as any of the above synergistic activities.

SECTION 1.6
RESOURCES, REFERENCES AND WEBSITES

Concerning the resources, references and websites listed below, please remember – web sites change frequently. Search for the key words 'BFHI', baby-friendly, and breastfeeding in the sites search engine, and look under Resources, Publications and Links within the web site.

UNICEF

For more information on UNICEF's work on infant and young child feeding support of country efforts to implement the targets of the Innocenti Declaration and the Global Strategy for Infant and Young Child Feeding, or on the Baby-friendly Hospital Initiative as a whole, and to download copies as materials are updated, please refer to http://www.unicef.org/nutrition/index_breastfeeding.html.

WHO

Department of Nutrition for Health and Development (NHD)
http://www.who.int/nutrition/topics/infantfeeding/en/index.html

Department of Child and Adolescent Health (CAH)
http://www.who.int/child_adolescent_health/topics/prevention_care/child/nutrition/en/index.html

WHO/UNICEF. *Global Strategy for Infant and Young Child Feeding*. Geneva, World Health Organization, 2003. Full text in PDF in English, Arabic, Chinese, French, Russian, Spanish.

WHO HIV and Infant Feeding Consensus Statement. Technical Consultation Held on behalf of the Inter-agency Task Team (IATT) on Prevention of HIV Infections in Pregnant Women, Mothers and their Infants Geneva, October 25-27, 2006.

Edmond K, Bahl R. *Optimal feeding for the low birth weight infant: Technical review.* Geneva, World Health Organization, 2006.

WHO/UNICEF. *Implementing the Global Strategy for Infant and Young Child Feeding: Report of a technical meeting.* Geneva, World Health Organization, 2003.

WHO/UNICEF. *Breastfeeding and maternal medication: Recommendations for drugs in the eleventh WHO model list of essential drugs.* Geneva, World Health Organization, 2002.

Complementary feeding: Report of the Global Consultation, and Summary of Guiding Principles for complementary feeding of the breastfed child. Geneva, World Health Organization, 2001.

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The optimal duration of exclusive breastfeeding, Report of an expert consultation WHO/FCH/CAH/01.24. Geneva, World Health Organization, 2001.

The optimal duration of exclusive breastfeeding, A systematic review WHO/FCH/CAH/01.23. Geneva, World Health Organization, 2001.

Statement on the effect of breastfeeding on mortality of HIV-infected women. Geneva, World Health Organization, 2001.

Evidence for the Ten Steps to Successful Breastfeeding WHO/CHD/98.9 Geneva, World Health Organization. 1998. Available in English, French and Spanish.

Complementary feeding of young children in developing countries: A review of current scientific knowledge WHO/NUT/98.1. Geneva, World Health Organization, 1998.

Health aspects of maternity leave and maternity protection. Statement to ILO, Geneva, 2001.

Breastfeeding and Maternal tuberculosis. Geneva, World Health Organization, 1998 (Update No. 23)

Breastfeeding and the use of water and teas Geneva, World Health Organization, 1997 (Update No 9).

Not enough milk Geneva, World Health Organization, 1996 (Update No 21).

Hepatitis B and breastfeeding. Geneva, World Health Organization, 1996. (Update No. 22).

WHO/UNICEF. *Breastfeeding counselling: A training course* . Geneva, World Health Organization, 1993.

UNAIDS/FAO/UNHCR/UNICEF/WHO/WFP/WB/UNFPA/IAEA. *HIV and Infant Feeding: Framework for Priority Action* Geneva, World Health Organization, 2003. Available in Chinese, English, French Portuguese and Spanish.

WHO/UNAIDS/UNFPA/UNICEF. *HIV transmission through breastfeeding. A review of available evidence* (Update) .Geneva, World Health Organization, 2007.

WHO/UNAIDS/UNFPA/UNICEF. *HIV and Infant Feeding. Guidelines for decision-makers* Geneva, World Health Organization, 2004. Available in English, French and Spanish..

WHO/UNAIDS/UNFPA/UNICEF. *HIV and Infant Feeding. A guide for health-care managers and supervisors* Geneva, World Health Organization, 2004. Available in English, French and Spanish.

Mastitis. Causes and management WHO/FCH/CAH/00.13. Geneva, World Health Organization, 2000.

HIV and infant feeding counselling: A training course WHO/FCH/CAH/00.2-4. Geneva, World Health Organization, 2000. Available in English and Spanish.

Relactation. A review of experience and recommendations for practice WHO/CHS/CAH/98.14. Geneva, World Health Organization, 1998.

Persistent diarrhoea and breastfeeding WHO/CHD/97.8.

Hypoglycaemia of the newborn. Review of the literature WHO/CHD/97.1. Geneva, World Health Organization, 1997.

Department of Reproductive Health and Research (RHR),
Email: reproductivehealth@who.int
www.who.int/reproductive-health/pages_resources/listing_maternal_newborn.en.html

Pregnancy, childbirth, postpartum and newborn care - a guide for essential practice. Geneva, World Health Organization, 2003.

Kangaroo Mother Care - a practical guide. Geneva, World Health Organization, 2003

OTHER ORGANIZATIONS: POLICIES, BACKGROUND AND PROTOCOLS

Academy for Breastfeeding Medicine, International: The Academy of Breastfeeding Medicine is a worldwide organization of physicians dedicated to the promotion, protection and support of breastfeeding and human lactation: http://www.bfmed.org

ABM Executive Office
191 Clarksville Road
Princeton Junction, NJ 08550
Toll free: 1 877-836-9947 ext. 25 Fax: 1 609-799-7032
Local/International: 1 609-799-6327
Email: ABM@bfmed.org http://www.bfmed.org

Selected protocols available:

1. Hypoglycemia
   Hypoglycemia (Japanese)
2. Going Home/Discharge (English)
   Alta (Spanish)
   Going Home (Chinese)
   Going Home (German)
3. Supplementation (English)
   Alimentación suplementaria (Spanish)
   Supplementation (Chinese)
   Supplementation (Japanese)
   Supplementation (German)
4. Mastitis (English)
   Mastitis (Spanish)
   Mastitis (Chinese)
   Mastitis (Japanese)
   Mastitis (German)
5. Peripartum BF Management (English)
   Manejo en el Periparto de la Lactancia (Spanish)
   Peripartum BF Management (Chinese)
   Peripartum BF Management (German)
6. Cosleeping and BF (English)
   Cosleeping and BF (Chinese)
   Cosleeping and BF (German)
7. Model Hospital Policy
8. Human Milk Storage (English)
   Human Milk Storage (German)
9. Galactogogues (English)
   Galactogogues (German)
10. Breastfeeding the Near-term Infant
    Breastfeeding the Near-term Infant (Japanese)
11. Neonatal Ankyloglossia
12. NICU Graduate Going Home
13. Contraception and Breastfeeding
14. Breastfeeding-Friendly Physicians' Office Part 1: Optimizing Care for Infants and Children
15. Analgesia and Anesthesia for the Breastfeeding Mother
16. Breastfeeding the Hypotonic Infant

Australian National Breastfeeding Strategy,
http://www.health.gov.au/pubhlth/strateg/brfeed/

Coalition for Improving Maternity Services (CIMS),
Coalition for Improving Maternity Services (CIMS)
National Office, PO Box 2346, Ponte Vedra Beach, FL 32004 USA
www.motherfriendly.org info@motherfriendly.org

Center for Infant and Young Child Feeding and Care, Department of Maternal and Child Health, University of North Carolina, USA http://www.sph.unc.edu/mch/ciycfc aims to create an enabling environment, at the community, state, national and global levels, in which every mother is supported to choose and to succeed in optimal infant and young child feeding and care, and every child will achieve his or her full potential through this best start on life. Its goal is to promote attention to the importance of the mother/child dyad in addressing breastfeeding-mediated health and survival, growth and development by:

- Developing and implementing breastfeeding-friendly health care;
- Educating and mobilizing major future leaders and influential groups;
- Creating the evidence base for action;
- Partnering and leveraging action at the state, national and international levels.

It fosters a network of like-minded organizations and individuals to further action to enable women to succeed in optimal infant feeding through attention to the family and the reproductive health continuum.

Emergency Nutrition Network (ENN): aims to improve the effectiveness of emergency food and nutrition interventions by providing a forum for the exchange of field level experiences between staff working in the food and nutrition sector in emergencies strengthening institutional memory amongst humanitarian aid agencies working in this sector helping field staff keep abreast of current research and evaluation findings relevant to their work better informing academics and researchers of current field level experiences, priorities and constraints thereby leading to more appropriate applied research agendas

Unit 13, Standingford House, Cave Street, Oxford, OX4 1BA, UK
Tel: +44 (0)1865 722886 Fax: 44 (0)1865 722886
Email: office@ennonline.net http://www.ennonline.net/

IBFAN: the International Baby-Food Action Network - consists of public interest groups working around the world to reduce infant and young child morbidity and mortality. IBFAN aims to improve the health and well being of babies and young children, their mothers and their families through the protection, promotion and support of breastfeeding and optimal infant feeding practices.
http://www.ibfan.org/
Protecting Infant Health: A Health Workers' Guide to the International Code of Marketing of Breastmilk Substitutes (available in a variety of languages)
The Code Handbook: A Guide to Implementing the International Code of Marketing of Breastmilk Substitutes

Infant and Young Child Nutrition

Managed by PATH, the Infant and Young Child Nutrition Program (IYCN) is USAID's flagship project in this area – expanding upon 20 years of program experience to increase optimal feeding practices among mothers and their infants. This includes promoting breastfeeding, complementary feeding, infant feeding and HIV, and maternal nutrition.

International Lactation Consultant Association (ILCA), http://www.ilca.org

International Board of Lactation Consultant Examiners (IBLCE),
http://www.iblce.org/

La Leche League International (LLLI), http://www.lalecheleague.org/

LINKAGES was a USAID-funded program providing technical information, assistance, and training to organizations on breastfeeding, related complementary feeding and maternal dietary practices, and the lactational amenorrhea method - a modern postpartum method of contraception for women who breastfeed. Website includes publications to download: http://www.linkagesproject.org/

Exclusive Breastfeeding: The Only Water Source Young Infants Need - Frequently Asked Questions: Discusses the nutritional and health consequences of giving infants water during the first six months, and the role of breastfeeding in meeting an infant's water requirements. Languages Available: English (2004), French (2004), Spanish, Portuguese (2002).

Community-Based Strategies for Breastfeeding Promotion and Support in Developing Countries: WHO and LINKAGES examine the role of communities and community-based

resource persons in providing support to mothers who breastfeed. This report is based on a review of the literature and an analysis of three projects; it assesses the impact of interventions, the mechanisms through which behaviours can be changed, and the factors that are necessary to maximize and sustain the benefits of interventions. Author(s): A. Morrow, WHO Languages Available: English (2004).

Infant Feeding Options in the Context of HIV: This document identifies the specific behaviours required of a mother or caregiver to act upon the infant feeding recommendations and informed choice policy of WHO, UNICEF, UNAIDS, and UNFPA. Languages Available: English (2004).

Mother-to-Mother Support for Breastfeeding- Frequently Asked Questions: Focuses on a support group method where experienced breastfeeding mothers model optimal breastfeeding practices, share information and experiences, and offer support to other women in an atmosphere of trust and respect. Languages Available: English (2004), French (1999), Spanish (1999).

World Alliance for Breastfeeding Action (WABA), website includes publications to download: http://www.waba.org.my/

Wellstart, International: Wellstart International's mission is to advance the knowledge, skills, and ability of health care providers regarding the promotion, protection, and support of optimal infant and maternal health and nutrition from conception through the completion of weaning.

E-mail: info@wellstart.org www.wellstart.org

OTHER SOURCES

Kangaroo Mother Care This web site has downloadable resources on the research supporting Kangaroo Mother Care and experiences of implementing this practice. http://www.kangaroomothercare.com

EU Project on Promotion of Breastfeeding in Europe, Protection, promotion and support of breastfeeding in Europe: a blueprint for action. European Commission, Directorate Public Health and Risk Assessment, Luxembourg, 2004. http://europa.eu.int/comm/health/ph_projects/2002/promotion/promotion_2002_18_en.htm

JOURNAL REFERENCE SITES

Medline--National Library of Medicine http://www.ncbi.nlm.nih.gov/entrez/query.fcgi

Google are developing a free web searcher that searches research journals on open access. http://scholar.google.com/

The publishers of most of the journals have a searchable web site where the abstract and sometimes the full text of an article can be viewed or downloaded.

BFHI Committees willing to be listed in this edition:
Australia http://www.acmi.org.au/
Canada http://www.breastfeedingcanada.ca/
Ireland http://www.ihph.ie/babyfriendlyinitiative/
Netherlands http://www.zvb.borstvoeding.nl
Switzerland www.allaiter.ch
United Kingdom http://www.babyfriendly.org.uk/
USA www.babyfriendlyusa.org

There are more than 50 additional Committees and National Authorities that may be identified by a local UNICEF or WHO office.

If your committee would like to be listed in UNICEF's database, please let UNICEF know, by email: Subject line: Attn. Nutrition Section at: pdpimas@unicef.org

ADDITIONAL RESOURCES WILL BE MADE AVAILABLE AS RESOURCES PERMIT.

The Baby-friendly Hospital Initiative (BFHI) is a global effort launched by WHO and UNICEF to implement practices that protect, promote and support breastfeeding. It was launched in 1991 in response to the Innocenti Declaration. The global BFHI materials have been revised, updated and expanded for integrated care. The materials reflect new research and experience, reinforce the International Code of Marketing of Breast-milk Substitutes, support mothers who are not breastfeeding, provide modules on HIV and infant feeding and mother-friendly care, and give more guidance for monitoring and reassessment.

The revised package of BFHI materials includes five sections: 1. Background and Implementation, 2. Strengthening and Sustaining the BFHI: A course for decision-makers, 3. Breastfeeding Promotion and Support in a Baby-friendly Hospital: a 20-hour course for maternity staff, 4. Hospital Self-Appraisal and Monitoring, and 5. External Assessment and Reassessment. Sections 1 to 4 are widely available while section 5 is for limited distribution.

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BABY-FRIENDLY HOSPITAL INITIATIVE
Revised, Updated and Expanded for Integrated Care

SECTION 2

STRENGTHENING AND SUSTAINING THE BABY-FRIENDLY HOSPITAL INITIATIVE: A COURSE FOR DECISION-MAKERS

2009

Revision of BFHI course for hospital administrators prepared by WHO and Wellstart International, 1996

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The development of the original course, “Promoting breast-feeding in health facilities: A short course for administrators and policy-makers”, was a collaborative effort among staff at the World Health Organization (WHO) and Wellstart International.

The revision of this course was coordinated by Ann Brownlee, Clinical Professor at University of California, San Diego (abrownlee@ucsd.edu), as a consultant of the World Health Organization. The Course has been re-titled “Strengthening and sustaining the Baby-friendly Hospital Initiative: A course for decision-makers” and integrated with the other updated BFHI documents. Revisions of various course sessions were prepared by Ann Brownlee; Randa Saadeh at the Department of Nutrition for Health and Development at WHO; Mary Kroeger, formerly at the Academy of Education Development; and Wendelin Slusser at UCLA. Carol Guenther assisted with the design of the document layout and the development of the graphics for the slides. Carmen Casanovas at the Department of Nutrition for Health and Development at WHO conducted the final review of the revised Course, in collaboration with colleagues at the Department of Child and Adolescent Health and Development.

Acknowledgement is given to all the BFHI decision-makers, health professionals, and field workers, who, through their diligence and caring, have implemented and improved the Baby-friendly Hospital Initiative through the years, and thus contributed to the content of this revised course.

Members of various national BFHI coordination groups used the original version of the course through the years and have provided valuable feedback that contributed to the revision of the course. Constanza Vallenas and Peggy Henderson at the Department of Child and Adolescent Health and Development at WHO and Ellen Piwoz at the Academy for Educational Development also provided valuable feedback and new information and results for the new HIV-related sessions.

These multi-country and multi-organizational contributions were invaluable in helping to fashion a course designed to provide decision-makers with the understanding and commitment needed to encourage their health facilities to attain and sustain Baby-friendly status, thus providing the best support possible for the mothers and babies using their maternity services.

Preface for the 2009 BFHI materials: Revised, Updated and Expanded for Integrated Care

Since the Baby-friendly Hospital Initiative (BFHI) was launched by UNICEF and WHO in 1991-1992, the Initiative has grown, with more than 20,000 hospitals having been designated in 156 countries around the world over the last 15 years. During this time, a number of regional meetings offered guidance and provided opportunities for networking and feedback from dedicated country professionals involved in implementing BFHI. Two of the most recent were held in Spain, for the European region, and Botswana, for the Eastern and Southern African region. Both meetings offered recommendations for updating the Global Criteria, related assessment tools, as well as the "18-hour course", in light of experience with BFHI since the Initiative began, the guidance provided by the new Global Strategy for Infant and Young Child Feeding, and the challenges posed by the HIV pandemic. The importance of addressing "mother-friendly care" within the Initiative was raised by a number of groups as well.

As a result of the interest and strong request for updating the BFHI package, UNICEF, in close coordination with WHO, undertook the revision of the materials in 2004-2005, with various people assisting in the process (Genevieve Becker, Ann Brownlee, Miriam Labbok, David Clark, and Randa Saadeh). The process included an extensive "user survey" with colleagues from many countries responding. Once the revised course and tools were drafted they were reviewed by experts worldwide and then field-tested in industrialized and developing country settings. The full first draft of the materials was posted on the UNICEF and WHO websites as the "Preliminary Version for Country Implementation" in 2006. After more than a year's trial, presentations in a series of regional multi-country workshops, and feedback from dedicated users, UNICEF and WHO[1] met with the co-authors above[2] and resolved the final technical issues that had been raised. The final version was completed in late 2007. It is expected to update these materials no later than 2018.

The revised BFHI package includes:

Section 1: Background and Implementation, which provides guidance on the revised processes and expansion options at the country, health facility, and community level, recognizing that the Initiative has expanded and must be mainstreamed to some extent for sustainability, and includes:

1.1 Country Level Implementation
1.2 Hospital Level Implementation
1.3 The Global Criteria for BFHI
1.4 Compliance with the International Code of Marketing of Breast-milk Substitutes
1.5 Baby-friendly Expansion and Integration Options
1.6 Resources, references and websites

[1] Moazzem Hossain, UNICEF NY, played a key role in organizing the multi-country workshops, launching the use of the revised materials. He, Randa Saadeh and Carmen Casanovas of WHO worked together with the co-authors to resolve the final technical issues.

[2] Miriam Labbok is currently Professor and Director, Center for Infant and Young Child Feeding and Care, Department. of Maternal and Child, University of North Carolina School of Public Health.

Section 2: Strengthening and sustaining the Baby-friendly Hospital Initiative: A course for decision-makers was adapted from the WHO course "Promoting breast-feeding in health facilities: A short course for administrators and policy-makers". This can be used to orient hospital decisions-makers (directors, administrators, key managers, etc.) and policy-makers to the Initiative and the positive impacts it can have and to gain their commitment to promoting and sustaining "Baby-friendly". There is a Course Guide and eight Session Plans with handouts and PowerPoint slides. Two alternative session plans and materials for use in settings with high HIV prevalence have been included.

Section 3: Breastfeeding Promotion and Support in a Baby-friendly Hospital, a 20-hour course for maternity staff, which can be used by facilities to strengthen the knowledge and skills of their staff towards successful implementation of the Ten Steps to Successful Breastfeeding. This section includes:

- 3.1 Guidelines for Course Facilitators including a Course Planning Checklist
- 3.2 Outlines of Course Sessions
- 3.3 PowerPoint slides for the Course

Section 4: Hospital Self-Appraisal and Monitoring, which provides tools that can be used by managers and staff initially, to help determine whether their facilities are ready to apply for external assessment, and, once their facilities are designated Baby-friendly, to monitor continued adherence to the Ten Steps. This section includes:

- 4.1 Hospital Self-Appraisal Tool
- 4.2 Guidelines and Tools for Monitoring

Section 5: External Assessment and Reassessment, which provides guidelines and tools for external assessors to use both initially, to assess whether hospitals meet the Global Criteria and thus fully comply with the Ten Steps, and then to reassess, on a regular basis, whether they continue to maintain the required standards. This section includes:

- 5.1 Guide for Assessors, including PowerPoint slides for assessor training
- 5.2 Hospital External Assessment Tool
- 5.3 Guidelines and Tool for External Reassessment
- 5.4 The BFHI Assessment Computer Tool

Sections 1 through 4 are available on the UNICEF website at http://www.unicef.org/nutrition/index_24850.html or by searching the UNICEF website at http://www.unicef.org/ and, on the WHO website at http://www.who.int/nutrition/publications/infantfeeding/9789241594950/en/index.html or by searching the WHO website at www.who.int/nutrition.

Section 5: External Assessment and Reassessment, is not available for general distribution. It is only provided to the national authorities for BFHI who provide it to the assessors who are conducting the BFHI assessments and reassessments. A computer tool for tallying, scoring and presenting the results is also available for national authorities and assessors. Section 5 can be obtained, on request, from the country or regional offices or headquarters of UNICEF Nutrition Section and WHO, Department of Nutrition for Health and Development.

SECTION 2
A COURSE FOR DECISION-MAKERS

Course Guide

Background Guide-1
Course description Guide-1
Course preparation Guide-3
Course site Guide-7
Course materials Guide-7
Initial course activities Guide-10
Evaluation and reporting Guide-10
Follow-up Guide-10
Annexes
Annex A: Suggested agendas A-1
Annex B: Sample evaluation forms B-1
Annex C: Photo slide inventory C-1

Session Plans*

Session 1: The national infant feeding situation 1-1
Session 2: Benefits of breastfeeding 2-1
Session 3: The Baby-friendly Hospital Initiative 3-1
Session 4: The scientific basis for the “Ten steps to successful breastfeeding” 4-1
Session 4 HIV: The scientific basis for the “Ten steps to successful breastfeeding” for settings with high HIV prevalence .... 4-1 HIV
Session 5: Becoming Baby-friendly 5-1
Session 5 HIV: Becoming Baby-friendly for settings with high HIV prevalence .... 5-1 HIV
Session 6: Costs and savings 6-1
Session 7: Appraising policies and practices 7-1
Session 8: Developing action plans 8-1

* Each session includes a session plan and its related handouts. The website featuring this Course contains links to the slides and transparencies for the sessions in Microsoft PowerPoint files. The slides (in colour) can be used with a laptop computer and LCD projector, if available. Alternatively, the transparencies (in black and white) can be printed out and copied on acetates and projected with an overhead projector. The transparencies are also reproduced as the first handout for each session, with 6 transparencies to a page.

Course guide

Background

Since the Baby-friendly Hospital Initiative (BFHI) was launched in 1991, it has served as a motivating force for maternity facilities around the world to implement policies and practices that support breastfeeding.

Change can be difficult and slow to bring about in some health facilities, but enlightened decision-makers can play a pivotal role in enabling the transformation needed. They know how to work with personnel and budgets, and how to initiate institutional change. Once higher level administrators and policy-makers have been sensitized to the importance of breastfeeding support in health facilities and the changes necessary to attain it, they will be more likely to encourage and support the continuing education needs of mid-level health workers.

This course is designed primarily for health facility decision-makers in countries where there is a commitment to breastfeeding at the central level, but progress is slow. The course is brief (about 10-12 hours in duration), practical, and addresses specific topics relevant to their needs, such as policies and procedures, costs and savings, and how to address common barriers to change. It complements other courses that provide the knowledge and skills needed by health workers who care for mothers and infants.

The course has been fully updated, with recent studies, new data and current websites added in whenever appropriate. Since HIV/AIDS poses such a challenge, HIV-related content that may be useful in all settings has been added into the session plans. In addition, two new alternative session plans have been developed that can be substituted for sessions 4 and 5 in settings with high HIV prevalence. These sessions give useful information on HIV and infant feeding and valuable guidance on how to best implement the Ten Steps in a way that best supports both HIV positive mothers and those whose status is negative or unknown.

The course website contains links to PowerPoint slides and transparencies for the various sessions. The slides (in colour) can be used with a laptop computer and LCD projector, if available. Alternatively, the transparencies (in black and white) can be printed out and copied on acetates and projected with an overhead projector. The transparencies are also reproduced as the first handout for each of the sessions, with 6 transparencies to a page.

Course description

The course comprises eight sessions that can be presented over a period of one-and-a-half to two days. Each session contributes to the final outcome: developing an action plan to implement the "Ten steps to successful breastfeeding".

- **Session 1: The national infant feeding situation** enables participants to review the current infant feeding situation in their own country and addresses practices that affect breastfeeding rates.
- **Session 2: Benefits of breastfeeding** discusses the advantages of breastfeeding and disadvantages of artificial feeding.
- **Session 3: The Baby-friendly Hospital Initiative** describes the history and background of the BFHI and the related assessment process.

- **Session 4: The scientific basis for the "Ten steps to successful breastfeeding"** reviews the research that supports the policy recommendations.

- **Session 4: The scientific basis for the "Ten steps to successful breastfeeding for settings with high HIV prevalence"** is similar to Session 4, with added HIV and infant feeding content useful in these settings.

- **Session 5: Becoming Baby-friendly** examines strategies for the successful conversion and management of baby friendly health facilities and provides the opportunity for discussing barriers and potential solutions.

- **Session 5: Becoming Baby-friendly for settings with high HIV prevalence** is similar to Session 5, with added content in how to implement BFHI in these settings.

- **Session 6: Costs and savings** enables participants to examine the investment in breastfeeding promotion in their own health facilities and the savings that can be realized.

- **Session 7: Appraising policies and practices** provides the participants an opportunity to assess their own facilities by using the "Hospital Self-Appraisal Tool for the WHO/UNICEF Baby-friendly Hospital Initiative".

- **Session 8: Developing action plans** enables participants to prepare a written plan for change in their own health facilities and programmes.

Each session is organized using the same basic format. The session cover sheet provides:

- **Objectives** for the session.

- **Duration**.

- **Teaching methods,** such as lecture, discussion, small group work, and participant presentations.

- **Preparation for the session,** such as obtaining local breastfeeding data and reviewing research studies.

- **Training materials** to be used in the session, such as summaries of studies used in the session, handouts, transparencies, and PowerPoint slides. In some cases visual aids are recommended, with information on how to obtain them.

- **References** that will assist the faculty to prepare for the session, as well as additional reading for participants who would like more information or who would like to review the original research studies.

The session outline follows the cover sheet and is arranged in a 2-column format. The left-hand column outlines the **content** to be presented. The right-hand column presents **trainer's notes**, which provide suggestions for teaching strategies, teaching aids, and discussion points.

The course is designed to be brief and practical. All material can be covered in about 10-12 hours, not including opening and closing sessions. There is some flexibility to the course in that sessions may be shortened or expanded, depending upon the needs of a particular group and time constraints in specific situations. **Three sample agendas** for the course, provided in Annex A, illustrate how it can be conducted for varying lengths of time, depending on the time decision-makers have for this activity.

- **Sample agenda 1 (2 days)** is the preferred version, if it is possible for all participants (top-level decision-makers, policy-makers and hospital managers) to attend a full two-day event. It allows for adequate time to explore the key topics related to implementing or revitalizing BFHI that are important for decision-makers, and provides enough time for useful exercises (such as those related to "becoming Baby-friendly") and for developing full action plans).

- **Sample agenda 2 (1 ½ days)** has been adapted so that the first day would be for all the top-level decision-makers and hospital managers. The morning of the second day could be provided to all participants or, if the top-level decision-makers are "to busy" to stay, it could be attended just by the hospital managers tasked in developing BFHI action plans).

- **Sample agenda 3 (1 day)** has been adapted to include only a ½ day orientation for busy top-level decision-makers, along with hospital managers, and an additional afternoon session for hospital managers tasked in developing BFHI action plans. If this shortest version of the course is selected, it will be necessary for course planners to streamline each of the Sessions, choosing the content and PowerPoint slides of most relevance for their audience. If desired, this one-day version of the course can also be used with all participants staying for the entire day).

The order of the sessions can be changed if necessary to accommodate the needs of the group. In the first sample agenda, Session 1 (The national infant feeding situation) is presented first, to get participants thinking about their own situations. Some groups may need the motivation provided by Session 2 (Benefits of breastfeeding) before they can fully appreciate their own situation. The second sample agenda starts with this session, as this ordering may be best for some groups. If senior decision-makers will not stay for all of the Sessions, it is important to schedule all key informational sessions, including Session 6 (Costs and savings), before they leave. Thus, in the one-day program, Session 6 is scheduled before Session 5.

The time for opening and/or closing ceremonies is not included in the 8 -12 hour course duration estimate. Remember to consider the time such ceremonies will add to the length of the course. If one or both ceremonies are important to the success of the course, the time will be well spent. Mid-morning and mid-afternoon breaks are essential, as are question/discussion periods after each session; remember to plan for them. Other social events are optional.

Decide whether to have optional sessions. Some groups have suggested they would be interested in acquiring additional clinical information. One way to provide such information outside of a formal course is to offer optional viewing of videos, perhaps in the evening. Suggested videos are listed under the "Course materials" section of this course guide.

Course preparation

Budget

Cost issues will affect all course planning decisions and thus need to be determined early. If the decision is made to charge participants, the fee should be as low as possible while still recouping costs. Offering continuing education credits provides added incentive for participants to pay for the programme. If hospitals are charged for sending a team, consideration can be given to allowing the chief executive to come at no charge in order to further encourage high-level participation.

If course costs are a substantial problem, consideration can be given to adjusting the selection of participants and the course schedule so participants can return home at the end of the day; however, a "residential" course, with participants remaining overnight, is preferable, as the interaction and networking among facilitators and participants "after hours" is quite valuable.

Organizing committee

It is recommended that a committee be organized to oversee course planning, implementation, and follow-up activities. Members should include those who will be involved in follow-up. The national breastfeeding or infant and young child feeding coordinator or person responsible for BFHI activities can serve as chair or facilitator.

Committee responsibilities include selection of course presenters, participants, and course site, and the planning of the schedule, protocol (ceremonies or social events), opportunities for media coverage, evaluation and follow-on activities. The committee may appoint an overall course coordinator and see that secretarial and other support services are provided. The committee should assign chairpersons and report writers for various sessions or portions of the course.

Chairpersons are responsible for serving as "master of ceremonies", coordinating one or several session(s). They introduce the speaker(s), keep the session(s) progressing on schedule, and distribute and collect the evaluation forms.

Selection of presenters and other resource persons

Presenters for the sessions should be identified by the organizing committee. They should have appropriate credentials to be credible and convincing to the high-level participants envisioned for this course. There can be a mix of national and international faculty. It is helpful to include one or more presenters who have already taught, facilitated or attended a previous course.

The presenters can be a mix of speakers from among the facilitators who will attend the entire course and, in a few cases, outside resource persons who are scheduled just for a particular session. It is essential that the presenters be knowledgeable about specific subject areas. For example:

- **Session 1** will utilize the expertise of someone with access to the data regarding the local breastfeeding situation, such as the national breastfeeding or infant and young child feeding coordinator, a policy-maker or researcher (someone involved in a KAP study, for example). This person may present part of the session in collaboration with the facilitator.

- **Sessions 2 and 4** require a presenter with a strong scientific/medical background (either a course facilitator or outside resource person) who can discuss the research implications of the material. The presenter for session 4 should be familiar with the studies featured in the session (summaries are provided) and will need sufficient time to prepare. If the course is being given for settings with high HIV prevalence and the alternative Session 4 is being used, the presenter should also have expertise on HIV and infant feeding.

- **Session 3** provides an opportunity for the national breastfeeding or infant and young child feeding coordinator or the WHO or UNICEF representative to describe the BFHI assessment process and to give a national status report.

- **Session 5** should be led by a facilitator familiar with the issues involved in converting and managing "Baby-friendly" health facilities. If the alternative Session 5 for settings with high HIV prevalence is being used, the presenter should have expertise and, if possible, experience on implementing BFHI in these types of settings.

- **Session 6** should utilize an individual knowledgeable about cost and savings involved in breastfeeding promotion at the health facility level.

- **Sessions 7 and 8** should be led by a facilitator familiar with the teams attending the course and the settings from which they come and knowledgeable about program planning. The national breastfeeding or infant and young child feeding coordinator or another official who could also be assigned to follow up with the teams on implementation of their plans would be a good choice.

In the sessions requiring small group work, there should be some extra facilitators, depending upon the size of the small groups (approximately one for every five participants). Small group facilitators should have some experience with implementing the BFHI, programme planning, and working with groups.

The team of presenters needs to be arranged as far ahead as possible and their assignments made clear. Presenters should be thoroughly familiar with the curriculum guide and understand how their session(s) fit into the course as a whole.

Pre-course planning activities/session for speakers

It is essential that course sponsors and organizers meet or correspond very actively several months prior to the course. The organizing committee will need to assign teaching responsibilities and distribute session plans to faculty/facilitators several weeks before the course. Faculty will need plenty of time to become familiar with the materials and to obtain or prepare overheads or documents that describe the local situation.

Just prior to the course, a two-day session for faculty/facilitators can be held to make the final preparations needed. The agenda can be discussed and finalized, and speakers can review their responsibilities and individual session arrangements. A session-by-session discussion and/or practice session will familiarize all the faculty with the entire course so each member can see how his or her piece fits into the whole. This "walk through" will help ensure all speakers are prepared, assist in final selection of audio-visual aids and materials for audience appropriateness, and allow presenters to coordinate sessions and avoid duplication.

Selection of participants

Participants should be key decision-makers responsible for hospitals or other health facilities serving mothers and infants. The large majority of participants should be responsible for hospitals that are not yet involved in the BFHI or are unsure of the importance of supporting breastfeeding. A few can be in the "committed" category or already "Baby-friendly" to provide good models for others to follow.

Examples are:

- hospital administrator or director;
- head of key department of a large hospital;
- hospital manager;
- provincial or district medical officer (responsible for managing one or more health facilities);
- policy-maker with responsibility for health facility policies or administration at the national or regional level.

The committee should decide whether to involve participants from one type of facility, such as regional hospitals or large teaching hospitals, or whether to have a mix of representatives from public and private hospitals, large and small institutions, maternities and other maternal/child health facilities. Including representatives from different types of health facilities may contribute to livelier discussions. Budget constraints and judgments of which participants are most likely to effect change should help guide selection.

Course organizers may wish to invite several representatives from the same health facility so they can work on plans together. Experience has shown that change happens more quickly when a team of people are working towards the same goals. On the other hand, more institutions can be reached if only one representative attends from each facility.

Another decision concerns whether participants will all be from one region of the country or from the country as a whole. One advantage of inviting participants from one region is that the interaction during the course can encourage networking among the participants and their institutions in support of breastfeeding. Again, budget considerations will probably influence these decisions, as well as how many courses of this type are planned.

Groups of 15-20 people are ideal for promoting discussion during the sessions, although some countries may find it more cost-efficient to invite more participants.

Pre-course communication with participants

A high-level person within the health system, such as the minister of health, should issue **letters of invitation** in order to ensure attendance of key administrators and policy-makers who have influence and authority.

A **questionnaire** may be sent with the letter of invitation requesting the participant's name, mailing address, phone, place of work, title/job position, responsibilities, whether working in or associated with a BFHI hospital, most important challenges/problems faced in making their health facility "Baby-friendly" or supporting breastfeeding, and what is expected from the course (see Annex B for a sample questionnaire).

Participants should be requested to bring to the course **data related to infant feeding** in their local area or region. This could include rates of exclusive breastfeeding, rates of any breastfeeding, average age infants begin receiving other liquids and food (and types of food), rates of diarrhoeal disease, and KAP studies of mothers, families, and health professionals related to breastfeeding practices. This information will be helpful during discussions on the national situation (Session 1), and for use during the sessions on hospital self-appraisal (Session 7) and development of action plans (Session 8).

Consider the possibility of distributing **reading material** prior to the course, such as:

- WHO/UNICEF. Protecting, Promoting and Supporting Breast-feeding: The Special Role of Maternity Services. A Joint WHO/UNICEF Statement. Geneva, World Health Organization, 1989.

- *International Code of Marketing of Breast-milk Substitutes*. Geneva, World Health Organization, 1981.

- WHO/UNICEF. *Baby-friendly Hospital Initiative, Section 1 – 1.2 Hospital Level Implementation and 1.3 The Global Criteria for BFHI,* In: Baby-friendly Hospital Initiative: revised, updated and expanded for integrated care. Geneva, World Health Organization, 2009.

Emphasize in the cover letter that participants should bring the reading material with them to the course, as it will be referred to during discussions.

Course site

Site selection is important to the success of the course. The course facility needs to be attractive to senior level participants with a decision-making capacity, and yet within the budget. If possible, it should be outside the main city, so that participants can concentrate on the course without being distracted by other responsibilities. Travel time and cost of transportation are other important considerations.

The availability of support services and communication systems, such as copy machine, computer and printer, telephones, and fax greatly facilitate organizing and conducting of the course. Nevertheless, if some elements are missing, organizers should do their best to adapt to local conditions.

Appropriate audio-visual equipment and room conditions should be available for presentations (source of electricity, projectors, screens, room-darkening shades or curtains).

A number of smaller breakout rooms or areas for small group work are necessary for sessions 5 and 8. They should be easily accessible to the larger room so facilitators and participants do not waste time going from one site to the other.

Course materials

If possible, a copy of this full course guide should be provided for each facilitator who has overall responsibility for the course. All presenters need a copy of the relevant course sessions, as well as the PowerPoint file or transparencies to be used for their presentation.

The **Session Plans** and **handouts** for each of them are presented in this document, following the Course Guide. **PowerPoint files with slides and transparencies** for each of the sessions except Session 7 (which has none) can be accessed through links on the course website.

Handouts need to be duplicated for each participant. The handouts can be put in binders for each participant along with the course schedule, lists of participants and presenters, and other relevant documents. At the start of each session, presenters should refer to the documents in the participant binder that pertain to that particular session. Alternatively, handouts can be distributed at the beginning of each session, although this has been found to consume valuable time (worksheets or group work instructions should be passed out when they are needed). A condensed version of the slides is included as a handout and should be copied for participants. This handout allows participants to concentrate on the session while also taking notes.

The **PowerPoint slides** can be used in settings where a laptop computer and the appropriate projector are available. The sets include slides with text, bar graphs and other data presentations and, when appropriate, photos. All the slides are in colour. Some of the slide sets include photos, which are all listed in Annex C. Slides presenting local data or local photos may, of course, be substituted or added. Presenters should sort through the presentations provided and feel free to adjust them by adding or deleting slides and substituting their own data or photos as desired.

The presenter may decide to use **overhead transparencies** when a laptop computer and the required projector to show the PowerPoint slides are not available or for sessions for which there are many locally made overheads and it is difficult to switch back and forth between the two media. The **PowerPoint transparency files** present the "slides" in black and white format suitable for printing and making into transparencies. These files do not include the coloured photo slides, as they do not reproduce well in black and white. Transparencies and slides have identical numbers so that either medium can be used.

The following booklets are considered core resources for the course. There is usually a charge for these documents. If budget permits, it would be best to have a copy for each participant.

- World Health Organization and UNICEF. Protecting, Promoting and Supporting Breast-feeding: The Special Role of Maternity Services. A Joint WHO/UNICEF Statement. Geneva, World Health Organization, 1989.
- *International Code of Marketing of Breast-milk Substitutes*. Geneva, World Health Organization, 1981. http://www.who.int/nutrition/publications/infantfeeding/code_english.pdf

Both are available from:

World Health Organization
WHO - Press
CH-1211 Geneva 27
Switzerland
Tel : +41 22 791 24 76
Fax : +41 22 791 48 57
Email to place orders: bookorders@who.int
For questions about publications: publications@who.int

A poster of the "Ten Steps" that can be displayed in the classroom is helpful. Contact the UNICEF or BFHI office for a copy.

A slide set or video on "Baby-friendly" for the country or region where the course is being given is recommended for Session 3, if available.

The video/DVD "Delivery Self Attachment" (Dr. L. Righard's study, 6 minutes, 1992) is recommended for Session 4. It is available from:

Geddes Productions
PO BOX 41761
Los Angeles CA 90041-0761
USA
Voice: +1 323 344-8045
Fax: +1 323 257-7209

orders@geddesproduction.com
http://www.geddesproduction.com/breast-feeding-delivery-selfattachment.html

The following are other optional videos currently available. Locally produced videos can also be used to reflect the national experience.

"Breast is Best: About Mother's Milk, Breast-feeding and Early Contact with the Newborn" by Gro Nylander (1994), 35 minutes. Available in a number of languages from:

Video Vital A/S
Skovveien 33
Pb. 5058, Majorstua
0301 Oslo, Norway
Tel.: +47 22- 55-45-88
Fax: +47 22-56-19-91
E-mail: health-info@videovital.no or mediabasement@videovital.no
http://www.videovital.no/english/videovitaleng.htm

"Hand Expressing and Cup Feeding" by Nursing Mothers' Association of Australia (1994), 30 minutes. Available from:

ABA Waverley Group,
PO Box 3006, Syndal
VIC 3149, Australia.
Tel.: +613 9803 9239 - Jenny
http://www.breastfeeding.asn.au/products/groupprojs.html#v1

Publications that provide additional background information can be purchased if funds are available. Presenters/facilitators may wish to use them in session preparation. They could also be made available to participants as a core library. The following are suggested as general resources:

Lawrence RA and Lawrence RM. *Breastfeeding: A Guide for the Medical Profession, Sixth Edition* St. Louis, MO: Elsevier/C.V. Mosby, Inc., 2005.

Savage-King F (1992) *Helping Mothers to Breastfeed, Revised Edition* Nairobi, Kenya: African Medical and Research Foundation, 1992 (this document is available in a number of languages).

The educational supplies and equipment that will likely be needed for the course are noted in the following checklist.

Prepare for participants ahead of time:

- binders, folders or special bags with schedule and handouts inserted;
- notebooks or paper;
- name tags and place cards (stand up cardboard);
- registration forms;
- necessary paperwork for "out of pocket" money, if applicable;
- evaluation forms;
- lists of names and contact information for presenters, facilitators, and participants.

Have available during the course:

- copier, paper;
- computer and printer, paper;
- overhead projector, extra bulbs;

- laptop computer and LCD (data video) projector for showing PowerPoint presentations, extra bulbs;
- projection stand or table;
- video player, monitor, videos in correct format;
- extension cord(s);
- projection screen;
- flip charts, flip chart stands, markers (ideally one for each small group);
- chalk and erasers if using a blackboard;
- overhead transparencies and markers (if used for reporting group work);
- stapler, staples, paper clips, tape;
- scissors, hole puncher;
- pencils, pencil sharpener, pens;
- books and other documents.

Initial course activities

Registration: Distribution of name tags, folders containing course schedule, documents and handouts.

Questionnaire distribution: The questionnaire described under "Pre-course communication with participants" can be distributed and collected at the beginning of the course if it was not sent out earlier. It is best, however, to ask that it be returned earlier, as participants often arrive just before the course starts and have little time to complete forms.

Introductions: Introduction of speakers/facilitators and participants (they should be name).

Opening ceremonies: Keep as simple and short as possible (optional).

Evaluation and reporting

Responsibility for distribution and collection of evaluation forms and compilation of data needs to be assigned. Sample **evaluation forms** that can be used during the course are provided in Annex B. They include:

Session evaluation forms to be completed by participants and speakers. These forms may be particularly useful the first few times the course is given.

An overall course evaluation form for the end of the course. An alternative to using the final evaluation form is to schedule a brief discussion period for feedback following the last course session.

A **debriefing/evaluation meeting** for course organizers and facilitators can be held after the course is over. If additional courses of this type will be held in the future, organizers can learn from this experience in planning for the next one.

Course sponsors and the organizing committee should decide prior to the course what type of **report** is needed (its purpose and content), and should assign responsibility for report preparation and distribution. This way, those who are responsible can take notes as needed.

Follow-up

Successful implementation of action plans is usually greater if participants know they will need to submit progress reports at a later date and whether technical and financial support is possible. As budget permits, follow-up activities may be carried out following the course by either the national breastfeeding or infant and young child feeding coordinator or the BFHI coordinator. At an

appropriate period after completing the course, participants can be sent letters/forms requesting progress reports and statistical data. Lessons learned can be applied to future courses for administrators and policy makers.

It will be necessary at the end of the course to announce exactly what type of monitoring/follow-up will be conducted and when, and what support will be available.

This course can play an important role in continuing the effort to assist maternity facilities to implement the "Ten steps to successful breastfeeding". Dialogue and problem-solving among colleagues provides the motivation for initiating change. Lasting policy change leading to practices that support breastfeeding is an outcome well worth the effort.

Annex A: Sample agendas for the Decision-makers Course

Sample agenda 1: Two-day version

(*note:* this two-day version of the agenda is the preferred version, if it is possible for all participants (top-level decision-makers, policy-makers and hospital managers) to attend a full two-day event. It allows for adequate time to explore the key topics related to implementing or revitalizing BFHI that are important for decision-makers, and provides enough time for useful exercises (such as those related to "becoming Baby-friendly") and for developing full action plans).

Session #	Timing	Activity	Presenter
Day 1			
	15 minutes	Introduction	
1	45 minutes	The national infant feeding situation	
2	1 hour	Benefits of breastfeeding	
	30 minutes	*Break*	
3	1 hour	The Baby-friendly Hospital Initiative	
	1 hour	*Lunch*	
4 or 4-HIV	1 ½ hours	The scientific basis for the "Ten steps to successful breastfeeding" (generic or HIV version)	
	30 minutes	*Break*	
5 or 5-HIV	1 ½ hours	Becoming Baby-friendly (generic or HIV version) — Introduction and working groups	
5 or 5-HIV	30 minutes	Becoming Baby-friendly (generic or HIV version) — Reports from working groups	
		Dinner	
		Optional evening session: video and slide show	
Day 2			
6	1 to 1 ¾ hours	Costs and savings	
7	30 minutes	Appraising policies and practices — Introduction and working groups	
	15 minutes	*Break*	
8	1 to 1½ hours	Developing action plans — Working groups (health facility teams)	
	1 hour	*Lunch*	
8	1 hour	Results from self-appraisals and action planning — Team reports and discussion	
	1 hour	Wrap up discussion and feedback (may include discussion of regional coordination on BFHI or special issues related to revitalizing BFHI in the context of HIV and recommendations)	

Sample agenda 2: One-and-a-half-day version

(*note:* this day-and-a-half version of the course has been adapted so that the first day would be for all the top-level decision-makers and hospital managers. The morning of the second day could be provided to all participants or, if the top-level decision-makers are "to busy" to stay, it could be attended just by the hospital managers tasked in developing BFHI action plans).

Session #	Timing	Activity	Presenter
Day 1			
	15 minutes	Introduction	
2	1 hour	Benefits of breastfeeding	
1	45 minutes	The national infant feeding situation	
	30 minutes	*Break*	
3	1 hour	The Baby-friendly Hospital Initiative	
	1 hour	*Lunch*	
4 or 4-HIV	1 hour	The scientific basis for the "Ten steps to successful breastfeeding" (generic or HIV version)	
5 or 5-HIV	30 minutes	Becoming Baby-friendly (generic or HIV version) — Introduction and working groups	
	15 minutes	*Break*	
5 or 5-HIV	30 minutes	Becoming Baby-friendly (generic or HIV version) — Reports from working groups	
6	1 hour	Costs and savings	
		Dinner	
		Optional evening session: video and slide show	
Day 2			
7	30 minutes	Appraising policies and practices — Introduction and working groups	
	15 minutes	*Break*	
8	1 ¼ hours	Developing action plans — Working groups (health facility teams)	
8	1 hour	Results from self appraisals and action planning — Team reports and discussion	
	15 minutes	Wrap up discussion and feedback	

Sample agenda 3: One-day version

(*note:* this one-day version of the course has been adapted to include only a ½ day orientation for busy top-level decision-makers, along with hospital managers, and an additional afternoon session for hospital managers tasked in developing BFHI action plans. If this shortest version of the course is selected, it will be necessary for course planners to streamline each of the Sessions, choosing the content and PowerPoint slides of most relevance for their audience. If desired, this one-day version of the course can also be used with all participants staying for the entire day).

Session #	Timing	Activity	Presenter
	15 minutes	Introduction	
2	30 minutes	Benefits of breastfeeding	
1	30 minutes	The national infant feeding situation	
3	30 minutes	The Baby-friendly Hospital Initiative	
	30 minutes	*Break*	
4 or 4-HIV	45 minutes	The scientific basis for the “Ten steps to successful breastfeeding” (generic or HIV version)	
6	45 minutes	Costs and savings	
	30 minutes	Discussion concerning key strategies for action plans	
	1 hour	*Lunch*	
7	30 minutes	Appraising policies and practices — Introduction and working groups	
5 or 5-HIV	30 minutes	Becoming Baby-friendly (generic or HIV version) — Introduction and working groups	
5 or 5-HIV	30 minutes	Becoming Baby-friendly (generic or HIV version) — Reports from working groups	
8	1 ¼ hours	Developing action plans — Working groups (health facility teams) – *with coffee/tea available*	
8	45 minutes	Results from self appraisals and action planning — Team reports and discussion	
	15 minutes	Wrap up discussion and feedback	

Annex B:

Strengthening and sustaining the Baby-friendly Hospital Initiative: A course for decision-makers

Pre-course questionnaire

Name: ____

Mailing Address: ______________________________________

____

____

Telephone: ______________________ Fax: ________________________

E-mail address: _______________________________________

Title/Position: ____

Institution: ____

Key responsibilities: ___________________________________

____

____

Date: ____________________

Please answer these questions before the course begins:

1. What is the status of your health facility, concerning "Baby-friendly" designation? (Please check one of the following:)

   [ ] Has not been involved at all with the "Baby-friendly Hospital Initiative"

   [ ] Has not yet decided whether to become "Baby-friendly"

   [ ] Has received a "Certificate of Commitment" to work to become "Baby-friendly"

   [ ] Has been officially designated as "Baby-friendly"

   [ ] I'm not associated with a health facility (please skip to Question 5)

2. Please list and describe any positive changes that have been made at your health facility to support breastfeeding.

3. What are the most important difficulties/challenges your facility still faces in supporting breastfeeding?

   Please list and describe at least 3 difficulties.

4. How could this course be most useful in helping you address these difficulties/challenges and in assisting your facility(ies) to fully support breastfeeding?

5. Please list any (other) expectations you have of this course.

Date: ______________________

Place: ______________________

Discipline of respondent: __________________

Strengthening and sustaining the Baby-friendly Hospital Initiative: A course for decision-makers

Participant's form for evaluating course sessions

Session Title:____

1. The **time allotted** to the session was:

   [ ] Too short [ ] About right [ ] Too long

2. **Relevance of the content** in assisting participants in making their health facilities "baby friendly":

   [ ] Extremely relevant [ ] Somewhat relevant [ ] Not very relevant [ ] Not at all relevant

   Suggestions for improving the relevance of the session:

3. The **quality of the teaching** was:

   [ ] Very high [ ] Somewhat high [ ] Somewhat low [ ] Very low

   Suggestions for improving the quality of the teaching:

4. Other comments and suggestions for improving the session:

Date: ______________________

Place: ______________________

Discipline of
respondent: __________________

Strengthening and sustaining the Baby-friendly Hospital Initiative: A course for decision-makers

Participant's form for evaluating course sessions

Session Title:____

1. The **time allotted** to the session was:

   [ ] Too short [ ] About right [ ] Too long

2. **Relevance of the content** in assisting participants in making their health facilities "baby friendly":

   [ ] Extremely relevant [ ] Somewhat relevant [ ] Not very relevant [ ] Not at all relevant

   Suggestions for improving the relevance of the session:

3. The **quality of the teaching** was:

   [ ] Very high [ ] Somewhat high [ ] Somewhat low [ ] Very low

   Suggestions for improving the quality of the teaching:

4. Other comments and suggestions for improving the session:

5. The **teaching methods** used in the session were:

   [ ] Appropriate [ ] Need adjustment

   Suggestions for adjusting/improving the teaching methods:

6. The **interest level of the participants** in the session was:

   [ ] Very high [ ] Somewhat high [ ] Somewhat low [ ] Very low

   Suggestions for increasing the interest level:

7. The success of the session (in your opinion) **in motivating and convincing the participants of the need for change**:

   [ ] Very high [ ] Somewhat high [ ] Somewhat low [ ] Very low

   Suggestions for improving the success of the session in motivating and convincing participants of the need for change:

8. Suggestions for improving the session before the next time the course is given:

Strengthening and sustaining the Baby-friendly Hospital Initiative: A course for decision-makers

End of course evaluation questionnaire

1. Please indicate any actions you plan to take related to the "Baby-friendly Hospital Initiative" on completion of this course:

2. Please list any changes you plan to make to improve how your health facility or organization supports breastfeeding:

3. How useful, in general, was this course in helping you with the difficulties/challenges your facility or organization faces in supporting breastfeeding:

   [ ] Very useful [ ] Somewhat useful [ ] Not very useful [ ] Not at all useful

   Please describe:

4. Please indicate your opinion concerning the length/duration of the course:

   [ ] Too short [ ] About right [ ] Too long

   What adjustments in the duration of the course would you suggest, if any?

5. What did you like best about the course?

6. What did you like least about the course?

7. What suggestions do you have for improving the course in the future?

Annex C:

Course for decision-makers photo slide inventory

Photographs to supplement session 2 (optional):

2a Breast milk protects against infection. The older, thinner child on the left, who was weaned from the breast early and given human milk substitutes, has been in the hospital several times and is malnourished. The younger sibling, who has been fully breastfed, is healthy and growing normally (Philippines).

2b Breast milk is a dynamic fluid that changes to meet the infant's needs (illustrates the changing appearance of breast milk over time).

2c Foremilk differs from hindmilk, which has a higher fat content.

2d This baby, fed human milk substitutes, has been hospitalized for severe diarrhoea.

2e Allergies are less common in exclusively breastfed babies. This child, whose family had a strong history of allergy, was given formula twice in the hospital nursery; she developed atopic dermatitis in spite of being fully breastfed.

2f Breastfeeding helps mother and baby to bond (new parents gazing at newborn at breast).

2g Mother breastfeeding baby (benefits for the mother).

2h Smiling mother and well-nourished, happy infant (illustrates optimal growth and development).

Photographs to supplement session 4 (optional):

4a Baby holding the booklet, *Protecting, promoting and supporting breast-feeding,* Thailand (can be used as an introduction to the session).

4b Health professionals consulting a written policy during “on the job” training, USA (Step 1).

4c Health professionals attending a classroom session, Philippines (Step 2).

4d Group discussion during training, Jordan (Step 2).

4e Group antenatal class, Indonesia (Step 3).

4f Antenatal breastfeeding counselling, USA (Step 3).

4g Early initiation of breastfeeding, with nurse helping (Step 4).

4h, i, j Three photos illustrating how a baby will find the mother’s nipple and begin to suck on his own, if time is allowed for this process (Step 4).

4k Show how to breastfeed, nurse helping, USA (Step 5).

4l Show how to breastfeed, nurse helping, China (Step 5).

4m Hand expression into a cup (Step 5).

4n No food or drink other than breast-milk -- bottles of water, and formula (Step 6).

4o Give no food or drink, with nurse giving bottle (Step 6).

4p Rooming-in, Thailand (Step 7).

4q Rooming-in, Philippines (Step 7).

4r Feed on demand, China (Step 8).

4s Feed on demand, Thailand (Step 8).

4t No artificial teats/nipples – sample teats (Step 9).

4u No pacifiers, dummies, or soothers – sample pacifiers (Step 9).

4v Cup-feeding expressed breast milk (Step 9).

4w Mother support, home visit, USA (Step 10).

4x Mother support group, health center, Thailand (Step 10).

4y Mother support group, Ghana (Step 10)

4z Community support, “Breastfeeding motivators”, Swaziland (Step 10).

Session 1:
The national infant feeding situation

Objectives

At the conclusion of this session participants will be able to:

- Describe and apply WHO's infant and young child feeding recommendations.
- Describe the terms used for breastfeeding and complementary feeding.
- Describe the infant and young child feeding situation in their countries, including breastfeeding and complementary feeding patterns, and trends over time.

Duration

45 minutes

Teaching methods

Presentation by national breastfeeding or infant and young child feeding coordinator or other knowledgeable official

Discussion

Preparation for session

It is important to start preparing for this session long enough in advance to allow for much of the required materials to be collected from outside sources. What exactly is needed will vary from country to country. The following are some general ideas of how to prepare for the session:

- Review breastfeeding and complementary feeding definitions and recommendations (see slides/transparencies 1.4-1.6 for overview).
- Collect national data and other relevant information on breastfeeding and complementary feeding practices and trends over time, reviewing recent national and local surveys/studies.
- Determine how patterns compare with those in neighbouring countries or elsewhere in the region.
- Contact government health officials, local researchers (e.g. at universities and nutrition institutes) WHO and UNICEF country, and regional officers for additional data.

- Consult the *WHO Global Data Bank on Infant and Young Child Feeding (IYCF)* and collect nationally representative data on breastfeeding and complementary feeding.

- Check for country information from Macro International's *Demographic and Health Surveys* (DHS), UNICEF's *State of the World's Children,* UNICEF's *Multiple Indicator Cluster Surveys* (MICS), La Leche League branches, other national or international breastfeeding non-governmental organizations (NGOs) such as WABA or IBFAN, and any other relevant sources (see Handout 1.4 for details on how to access this data).

- For data on HIV prevalence, including prevalence among pregnant women, search for statistics on the UNAIDS website (see Handout 1.4 for details on how to access this data).

- Prepare PowerPoint presentations or overheads to display the data.

Training materials

Handouts

1.1 Presentation for session 1
1.2a The *WHO Global Data Bank on Infant and Young Child Feeding*
1.2b "Requested Survey Information" for the *WHO Global Data Bank on Infant and Young Child Feeding*
1.3a Breastfeeding indicators for household surveys
1.3b Breastfeeding indicators for health facility surveys
1.4 Possible sources of infant and young child feeding data

Copies of relevant data on the country/regional infant and young child feeding situation (their number depends on how much material and data are available).

Slides/transparencies

1.1-3 Facts on infant and young child feeding
1.4 WHO's infant and young child feeding recommendations
1.5-6 Breastfeeding and complementary feeding terms and definitions
1.7 Key questions to compare the country situation with WHO infant and young child feeding recommendations
1.8 Key questions to compare health facility data with WHO recommendations

Additional slides/overheads with country-related data available from surveys, studies and research.

The website featuring this Course contains links to the slides and transparencies for this session in two Microsoft PowerPoint files. The slides (in colour) can be used with a laptop computer and LCD projector, if available. Alternatively, the transparencies (in black and white) can be printed out and copied on acetates and projected with an overhead projector. The transparencies are also reproduced as the first handout for this session, with 6 transparencies to a page.

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WHO infant and young child nutrition (progress and evaluation report; and status of implementation of the International Code of Marketing of Breast-milk Substitutes), forty -seventh World Health Assembly, provisional agenda item 19, 23 March 1994. Geneva, World Health Organization, 1994.

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Outline

Content	Trainer's Notes
	Mention that a mini-version of the presentation is reproduced in Handout 1.1 and included in the participants' folder.
1. Key facts on infant and young child feeding	
Breastfeeding facts	Show slides/transparencies 1.1 - 1.3. Briefly mention each point, emphasizing the important role that breastfeeding plays in protecting the health and nutrition of children and their mothers.
2. Current infant and young child feeding recommendations	
■ Summary and discussion of the recommendations:	Show slide/transparency 1.4
▪ Early initiation of breastfeeding (breastfeeding within one hour of birth) ▪ Exclusive breastfeeding for the first 6 months ▪ Thereafter give nutritionally adequate and safe complementary foods to all children ▪ Continue breastfeeding for up to 2 years of age or beyond	Refer to the recommendations in the *Global Strategy for Infant and Young Child Feeding,* paragraph 10, pages 7-8. Discuss the new interpretation of "Step 4" of the "Ten Steps to Successful Breastfeeding": *Place babies in skin-to-skin contact with their mothers immediately following birth for at least an hour. Encourage mothers to recognize when their babies are ready to breastfeed and offer help if needed.*
3. Breastfeeding and complementary feeding terms	
■ Definitions of the main terms used internationally to describe different ways of feeding infants and young children: ▪ Exclusive breastfeeding ▪ Partial breastfeeding ▪ Mixed feeding ▪ Bottle-feeding ▪ Artificial feeding ▪ Replacement feeding ▪ Complementary feeding	Use slides/transparencies 1.5 and 1.6 to summarize the definitions of the different terms. Be familiar with the rationale for selecting these definitions for use at the global level.
■ Other terms commonly used locally	

Content	Trainer's Notes
4. National infant and young child feeding patterns ■ Data related to breastfeeding and complementary feeding	
Review national data comparing the country situation with the WHO infant and young child feeding recommendations, including, if available, information on the following **core indicators**: ▪ Early initiation of breastfeeding ▪ Exclusive breastfeeding under 6 months ▪ Continued breastfeeding at 1 year ▪ Introduction of solid, semi-solid and soft foods ▪ Minimum dietary diversity ▪ Minimum meal frequency	Show slide/transparency 1.7 summarizing key questions that can be asked to compare the country situation with WHO's infant and young child feeding recommendations. Show slides/transparencies that present country data related to breastfeeding initiation, exclusivity and duration and complementary feeding practices. If possible, show trends over time. If practices do not meet the WHO recommendations, discuss some of the factors that may contribute to this. Some of these data can be obtained from the *WHO Global Data Bank on Infant and Young Child Feeding*. Refer participants to handout 1.2 (a-b), "*WHO Global Data Bank on Infant and Young Child Feeding*" and briefly explain that this is a global database containing data on prevalence and duration of breastfeeding and on complementary feeding worldwide. Mention that the Expert Committee (refer to WHO (2001) reference) recommends exclusive breastfeeding for 6 months, with introduction of complementary feeds and continued breastfeeding thereafter. This recommendation applies to all populations. WHO has developed indicators for breastfeeding at the household level to guide data collection worldwide. Refer participants to handout 1.3a that lists these key indicators Mention that the Expert Committee (refer to WHO (2001) reference) recommends exclusive breastfeeding for 6 months, with introduction of complementary feeds and continued breastfeeding thereafter. This recommendation applies to all populations. WHO has developed indicators for breastfeeding at the household level to guide data collection worldwide. Refer participants to handout 1.3a that lists these key indicators.

Content	Trainer's Notes
Indicators in relation to HIV-exposed infants: ▪ Exclusively breastfeeding at 3 months of age ▪ Exclusive replacement feeding at 3 months of age ▪ Mixed feeding at 3 months of age	
■ Data related to infant feeding practices following delivery in maternity services. Review health facility data that compare infant feeding practices with WHO recommendations:	Show slide/transparency 1.8 summarizing key questions. Mention that WHO has developed indicators for breastfeeding in maternity services to guide data collection worldwide. Refer participants to handout 1.3b that lists these key indicators.
▪ **Breastfeeding initiation:** Percentage of babies who start breastfeeding within 1 hour of birth ▪ **Rooming-in:** Percentage of babies who "room-in" on a 24-hour basis with their mothers after delivery ▪ **Exclusive breastfeeding:** Percentage of babies who are exclusively breastfed from birth to discharge in maternity wards or hospitals ▪ **Bottle-feeding:** Percentage of babies getting any feeds from bottles between birth and discharge (include babies delivered by caesarean-section and babies in special care units)	Show slides/transparencies that present country or health facility data related to infant feeding practices following delivery in maternity services. If information is available from Baby-friendly Hospital Initiative assessments or other sources, summarize the results. Present this information and any other important data related to the implementation of the "Ten steps to successful breastfeeding".
■ Discussion	Ask participants to contribute information from their own settings. They might be asked to suggest what they believe are the reasons for certain types of data (e.g. the local beliefs and practices that lead to a low level of exclusive breastfeeding). Respond to any other questions participants may have related to the session.

Handout 1.1

Presentation for session 1: The national infant feeding situation

Facts on infant and young child feeding

- About 2 million child deaths could be prevented every year through optimal breastfeeding.
- Exclusively breastfed infants have at least 2½ times fewer illness episodes than infants fed breast-milk substitutes.
- Infants are as much as 25 times more likely to die from diarrhoea in the first 6 months of life if not exclusively breastfed.
- Among children under one year, those who are not breastfed are 3 times more likely to die of respiratory infection than those who are exclusively breastfed.

From: Jones et al., 2003,; Chandra, 1979; Feachem, 1984; and Victora, 1987.

Transparency 1.1

Facts on infant and young child feeding

- Infants exclusively breastfed for 4 or more months have half the mean number of acute otitis media episodes of those not breastfed at all.
- In low-income communities, the cost of cow's milk or powdered milk, plus bottles, teats, and fuel for boiling water, can consume 25 to 50% of a family's income.
- Breastfeeding contributes to natural birth spacing, providing 30% more protection against pregnancy than all the organized family planning programmes in the developing world.

From: Duncan et al, 1993; UNICEF/WHO/UNESCO/UNFPAA, 1993; and Kleinman, 1987.

Transparency 1.2

Facts on infant and young child feeding

- The peak period of malnutrition is between 6 and 28 months of age.
- Malnutrition contributes to about half of under-five mortality & a third of this is due to faulty feeding practices.
- Counselling on breastfeeding and complementary feeding leads to improved feeding practices, improved intakes and growth.
- Counselling on breastfeeding and complementary feeding contributes to lowering the incidence of diarrhoea.

Transparency 1.3

WHO's infant and young child feeding recommendations

- Initiate breastfeeding within one hour of birth.
- Breastfeed exclusively for the first six months of age (180 days).
- Thereafter give nutritionally adequate and safe complementary foods to all children.
- Continue breastfeeding for up to two years of age or beyond.

Adapted from the *Global Strategy*.

Transparency 1.4

Breastfeeding and complementary feeding terms and definitions

- **EXCLUSIVE BREASTFEEDING:** the infant takes only breast milk and no additional food, water, or other fluids with the exception of medicines and vitamin or mineral drops.
- **PARTIAL BREASTFEEDING or MIXED FEEDING:** the infant is given some breast feeds and some artificial feeds, either milk or cereal, or other food or water.
- **BOTTLE-FEEDING:** the infant is feeding from a bottle, regardless of its contents, including expressed breast milk.

Transparency 1.5

Breastfeeding and complementary feeding terms and definitions

- **ARTIFICIAL FEEDING:** the infant is given breast-milk substitutes and not breastfeeding at all.
- **REPLACEMENT FEEDING:** the process of feeding a child of an HIV-positive mother who is not receiving any breast milk with a diet that provides all the nutrients the child needs.
- **COMPLEMENTARY FEEDING:** the process of giving an infant food in addition to breast milk or infant formula, when either becomes insufficient to satisfy the infant's nutritional requirements.

Transparency 1.6

Key questions to compare the country situation with WHO infant and young child feeding recommendations

- Percentage of babies breastfeeding exclusively for the first six months of life (180 days)
- Percentage of babies exclusively breastfeeding by month, up to 6 months
- Percentage of babies with appropriate complementary feeding
- Median duration of breastfeeding (in months)

Transparency 1.7

Key questions to compare health facility data with WHO recommendations

- **Early initiation:** Percentage of babies who start breastfeeding within 1 hour of birth
- **Rooming-in:** Percentage of babies who “room-in” on a 24-hour basis with their mothers after delivery
- **Exclusive breastfeeding:** Percentage of babies who are exclusively breastfed from birth to discharge
- **Bottle-feeding:** Percentage of babies who are getting any feeds from bottles between birth and discharge

Transparency 1.8

Handout 1.2a

The *WHO Global Data Bank on Infant and Young Child Feeding*

The *WHO Global Data Bank on Infant and Young Child Feeding* is maintained by the Department of Nutrition for Health and Development. The Data Bank has been restructured in line with the latest breastfeeding and complementary feeding indicators and definitions, which have been developed to broaden the nomenclature describing different types of breastfeeding behaviour and to increase the coherence, reliability, and comparability of data.

The Data Bank pools information from national, regional, state, department and village level surveys studies, and reviews dealing specifically with the prevalence of breastfeeding and complementary feeding, breastfeeding practices at health facilities, policies and programmes. Every effort is made to achieve worldwide coverage, which will permit:

- monitoring of breastfeeding prevalence and complementary feeding prevalence, and analysis of trends over time;
- comparisons over time within countries, and between countries and regions;
- assessment of breastfeeding and complementary feeding trends and practices as a basis for future action;
- evaluation of the impact of breastfeeding and complementary feeding promotion programmes;
- ready access to current data for use by policy- and decision-makers, scientists, researchers, hospital administrators, health workers, and other interested parties.

For this purpose, it is necessary that global indicators and definitions for breastfeeding and complementary feeding to be disseminated worldwide and that researchers and health professionals supply the Data Bank with up-to-date data. Both conditions have to be fulfilled if the Data Bank is to achieve its full potential and thereby contribute to the health of mothers and infants everywhere.

To this end, a report is prepared every three to four years on infant and young child feeding (IYCF) trends in countries for which data are available. It is hoped that the Data Bank will help enable the competent national authorities to achieve the IYCF goals they have established, while serving to motivate all concerned parties to strengthen programmes in support breastfeeding and complementary feeding.

The Data Bank is accessible on the web at http://www.who.int/nutrition/en/.
Information can be accessed by country or region, indicators and year(s) of survey. If you would like to provide data or other information on breastfeeding, complementary feeding and infant and young child feeding practices in your country, you can use the datasheet *Household Survey Information* and the *Health Facility Survey Information* provided as Handout 1.2b

Handout 1.2b

Household Survey Information (please attached original report)

COUNTRY: ______________________________

Reference/source:

Survey characteristics				Core Indicators for Breastfeeding and Complementary Feeding											
National, regional, state or village level survey	Region and sample description (disaggregated data available: urban/rural, region/state/department/village)	Date of survey	Sex	Early initiation of breast-feeding %	Sample size	Exclusive breast-feeding under 6 months %	Sample size	Continued breast-feeding at 1 year %	Sample size	Introduction of solid, semi-solid or soft foods 6-8 months %	Sample size	Minimum dietary diversity %	Sample size	Minimum meal frequency %	Sample size

Comments:

Household Survey Information continued (please attached original report)

COUNTRY: ______________________________

Reference/source:

Survey characteristics				Core Indicators for Breastfeeding and Complementary Feeding													
National, regional, state or village level survey	Region and sample description (disaggregated data available: urban/rural, region/state/department/village)	Date of survey	Sex	Children ever breast-fed %	Sample size	Cont. breast-feeding at 2 years %	Sample size	Duration of breast-feeding (months)	Sample size	Bottle feeding 0-23 (monthts)%	Sample size	EBF at 3 months% HIV-exposed infants	Sample size	Mixed feeding at 3 months% HIV-exposed infants	Sample size	Replace-ment feeding at 3 months% HIV-exposed infants	Sample size

Comments:

Health Facility Survey Information (please attached original report)

COUNTRY:

Reference/source:

Survey characteristics				Health Facility - Breastfeeding practices											
National, regional, state or town level survey	Region and sample description	Date of survey	Sex	Breast-fed rate %	Sample size	Exclusive breatmilk-fed rate %	Sample size	Bottle-fed rate	Sample size	Timely first suckling rate %	Sample size	Rooming-in rate %	Sample size	Pacifier use rate %	Sample size

Comments:

ADDITIONAL INFORMATION

Total Fertility Rate *(women age 15–49)*:________

Median maternal age at first birth:________

Median years of schooling *(women age 15–49)*:________

Proportion of women age 15-49 with BMI<18.5:________

Proportion of women age 15-49 with BMI>30:________

Proportion of women age 15–49 with HIV/AIDS:________

No. of hospitals with maternity facilities:________

Proportion of births attended by trained health pers.:________

Caesarean section rate:________

No. of designated BFHI hospitals:________

No. of hospitals with commitment to BFHI :________

(Baby friendly Hospital Initiative)

Handout 1.3a

Breastfeeding indicators for households[1]

Exclusive breastfeeding under 6 months:
Proportion of infants 0-5 months of age who are fed exclusively on breast milk

$$\frac{\text{Infants 0-5 months of age who received only breast milk during the previous day}}{\text{Infants 0-5 months of age}}$$

Early initiation of breastfeeding:
Proportion of children born in the last 24 months who were put to the breast within one hour of birth

$$\frac{\text{Children born in the last 24 months who were put to the breast within one hour of birth}}{\text{Children born in the last 24 months}}$$

Continued breastfeeding at 1 year:
Proportion of children 12 – 15 months of age who are fed breast milk

$$\frac{\text{Children 12-15 months of age who received breast milk during the previous day}}{\text{Children 12-15 months of age}}$$

Introduction of solid, semi-solid or soft foods:
Proportion of infants 6-8 months of age who receive solid, semi-solid or soft foods

$$\frac{\text{Infants 6-8 months of age who received solid, semi-solid or soft foods during the previous day}}{\text{Infants 6-8 months of age}}$$

Minimum dietary diversity:
Proportion of children 6-23 months of age who receive foods from ≥4 food groups during the previous day

$$\frac{\text{Children 6-23 months of age who received foods from} \geq 4 \text{ food groups during the previous day}}{\text{Children 6-23 months of age}}$$

[1] USAID/AED/UCDAVIS/IFPRI/UNICEF/WHO. *Indicators for assessing infant and young child feeding practices. Part I: Definitions*. Geneva, World Health Organization, 2008. http://whqlibdoc.who.int/publications/2008/9789241596664_eng.pdf

Note: The 7 foods groups used for this indicator are:

- grains, roots and tubers
- legumes and nuts
- diary products (milk, yogurt, cheese)
- flesh foods (meat, fish, poultry and liver/organ meats)
- eggs
- vitamin-A rich fruits and vegetables
- other fruits and vegetable

Minimum meal frequency:
Proportion of breastfed and non-breastfed children 6-23 months of age who receive solid, semi-solid, or soft foods (but also including milk feeds for non-breastfed children) minimum number of times or more

The indicator will be calculated from the following two fractions:

Breastfed children 6-23 months of age who received solid, semi-solid or soft foods
the minimum number of times or more during the previous day
Breastfed children 6-23 months of age

and

Non-breastfed children 6-23 months of age who received solid, semi-solid or soft foods or milk
feeds the minimum number of times or more during the previous day
Non-breastfed children 6-23 months of age

Note: Minimum is defined as:

- 2 times for breastfed infants 6-8 months
- 3 times for breastfed children 9-23 months
- 4 times for non-breastfed children 6-23 months

Minimum acceptable diet:
Proportion of children 6-23. months of age who receive a minimum acceptable diet (apart from breast milk).

This composite indicator will be calculated from the following two fractions:

Breastfed children 6-23 months of age who had at least the minimum dietary diversity
and the minimum feeding frequency during the previous day
Breastfed children 6-23 months of age

and

Non-breastfed children 6-23 months of age who received at least 2 milk feedings and had at least the minimum dietary diversity

not including milk feeds and the minimum feeding frequency during the previous day
Non-breastfed children 6-23 months of age

Consumption of iron-rich or iron-fortified foods:
Proportion of children 6-23 months of age who receive an iron-rich food or iron-fortified food that is specially designed for infants and young children, or that is fortified in the home.

Children 6-23 months of age who received an iron-rich food

or a food that was specially designed for infants and young children and was fortified with iron,

or a food that was fortified in the home with a product that included iron during the previous day
Children 6-23 months of age

Children ever breastfed:

Proportion of children born in the last 24 months who were ever breastfed

Children born in the last 24 months who were ever breastfed
Children born in the last 24 months

Continued breastfeeding at 2 years:
Proportion of children 20–23 months of age who are fed breast milk

Children 20-23 months of age who received breast milk during the previous day
Children 20-23 months of age

Appropriate breastfeeding:
Proportion of children 0-23 months of age who are appropriately breastfed

The indicator is calculated from the following two fractions:

Infants 0-5 months of age who received only breast milk during the previous day
Infants 0-5months of age

and

Children 6-23 months of age who received breast milk, as well as solid, semi-solid or soft foods during the previous day
Children 6-23 months of age

Predominant breastfeeding under 6 months:
Proportion of infants 0 – 5 months of age who are predominantly breastfed

Infants 0-5 months of age who received breast milk
as the predominant source of nourishment during the previous day
Infants 0-5 months of age

Duration of breastfeeding:
Median duration of breastfeeding among children les than 36 months of age

The age in months when 50% of children 0-35 months did not receive breast milk during the previous day

Bottle feeding:
Proportion of children 0-23 months of age who are fed with a bottle

Children 0-23 months of age who were fed with a bottle during the previous day
Children 0-23 months of age

Milk feeding frequency for non-breastfed children:
Proportion of non-breastfed children 6-23 months of age who receive at least 2 milk feedings

Non-breastfed children 6-23 months of age
who received at least 2 milk feedings during the previous day
Non-breastfed children 0-23 months of age

Handout 1.3b

Breastfeeding indicators for health facilities[2]

	TITLE	DEFINITION	SOURCE
	MATERNITY SERVICES		
1	Exclusive breastfed by natural mother rate	Numerator: No. of infants exclusively breastfed by their natural mothers from birth to discharge Denominator: No. of infants discharged	Maternal interviews at discharge
2	Breast-milk substitutes and supplies receipt rate	Numerator: No. of mother who received breast-milk substitutes, infant feeding bottles, or teats at any time prior to discharge or during a prenatal visit to this facility Denominator: No of infants discharged	Maternal interviews at discharge
3	Bottle-fed rate	Numerator: No. of infants who received any food or drink from a bottle in the 24 hours prior to discharge Denominator: No of infants discharged	Maternal interviews at discharge
4	Rooming-in rate	Numerator: No. of infants rooming-in 24 hours a day, beginning within 1 hr of birth, not separated from mother for more than 1 hour at any time Denominator: No of infants discharged	Maternal interviews at discharge
5	Breastfed rate	Numerator: No. of infants breastfeeding in 24 hours prior to discharge Denominator: No of infants discharged	Maternal interviews at discharge
6	Timely first-suckling rate	Numerator: No. of infants who first suckled within 1 hour of birth Denominator: No of infants discharged	Maternal interviews at discharge
Opt.1	Exclusively breast-milk fed rate	Numerator: No. of infants exclusively breast-milk fed from birth to discharge Denominator: No of infants discharged	Maternal interviews at discharge
Opt.2	Pacifier use rate	Numerator: No. of infant who received pacifiers at any time prior to discharge Denominator: No of infants discharged	Maternal interviews at discharge

[2] From *Indicators for assessing health facility practices that affect breastfeeding, Report of the Joint WHO/UNICEF Informal Interagency Meeting 9-10 June 1992, WHO, Geneva, Switzerland.* Geneva, World Health Organization, 1993 (WHO/CDR/93.1, UNICEF/SM/93.1), page 30.

Handout 1.4

Possible sources of infant and young child feeding data

Data source	**How to obtain**
MEASURE DHS, Macro International. 11785 Beltsville Drive, Suite 300 Calverton, Maryland, 20705 USA.	Country reports are available on the web at http://www.measuredhs.com/countries/
UNICEF. *Multiple Indicator Cluster Survey*. New York, UNICEF.	Results from specific country surveys may be available from the UNICEF country offices. Information on the MICS, the questionnaires and manuals and specific country reports are also available on the UNICEF website: http://www.childinfo.org/
WHO. *WHO Global Data Bank on Infant and Young Child Feeding*. Geneva, World Health Organization.	Data from the WHO Global Data Bank is available at the WHO/NHD website: http://www.who.int/nutrition/en/ For more information contact: Department of Nutrition for Health and Development World Health Organization CH-1211 Geneva 27, Switzerland Tel. 41-22-791-3315 Fax: 41-22-791-4156 E-mail: nutrition@who.int
UNAIDS Secretariat, Geneva, Switzerland	Data on HIV prevalence by country can be found on the UNAIDS/WHO website: http://www.unaids.org/en/
WABA World Alliance for Breastfeeding Action	http://www.waba.org.my/
IBFAN The International Baby Food Action Network	http://www.ibfan.org/site2005/Pages/index2.php?iui=1
La Leche League International	http://www.llli.org/
National surveys and studies [please list:]	

Session 2:
Benefits of breastfeeding

Objectives

At the conclusion of this session, participants will be able to:

- List and explain at least three benefits of breastfeeding for each of the following: infant, mother, family, and hospital.
- Describe the benefits of breastfeeding in a hospital setting.
- Give at least three risks related to artificial feeding.

Duration

Session: 1 hour

Teaching methods

Small group work
Lecture and discussion
Video (optional - may also be shown during free time)

Preparation for session

- Review slides. If possible, review references listed in this section, concentrating on the references with data featured on the slides.
- Prepare slides or transparencies and handouts whenever possible that present national data, studies, and surveys. Include photo slides, if possible. Some photo slides that may be appropriate for this session are included in the "slides" PowerPoint file accompanying this course. Consider using them if not enough appropriate photo slides are available locally.

Decide whether to show a video, such as *Breast is Best* or others. If there is no time during the session itself, consider showing videos during the lunch break or in the evening.

Training materials

Summaries

Available summaries of research studies presented in Session 2

Handouts

2.1 Presentation for session 2

2.2 Infant and young child feeding: recommendations for practice

2.3 Exclusive Breastfeeding: The Only Water Source Young Infants Need (LINKAGES FAQ Sheet 5)

2.4 Health benefits of breastfeeding: a list of references. (a list of references copied, with permission, from the UNICEF UK Baby-friendly Initiative website) http://www.babyfriendly.org.uk/health.asp

Slides/Transparencies

2.1-2.28 and photo slides 2a – 2h

The website featuring this Course contains links to the slides and transparencies for this session in two Microsoft PowerPoint files. The photo slides are included in the "slides" file in the order in which they are listed in the Session Plan. The slides (in colour) can be used with a laptop computer and LCD projector, if available. Alternatively, the transparencies (in black and white) can be printed out and copied on acetates and projected with an overhead projector. The transparencies are also reproduced as the first handout for this session, with 6 transparencies to a page.

Video (optional)

One video to consider is *Breast is Best* (35 minutes). This video from Norway has many potential training uses, including a sequence showing a newborn baby crawling along his mother's abdomen and finding the nipple without assistance. It is available in a number of languages from Health Info/Video Vital A/S, P.O. Box 5058, Majorstua, N-0301, Oslo, NORWAY (Tel: [47](22) 699644, Fax: [47](22) 600789) or e-mail: health-info@videovital.no . It can also be ordered through "Baby Milk Action" at http://www.babymilkaction.org/shop/videos.html

Consider using a locally appropriate video, if one is available. Check with the BFHI authorities, the country or regional UNICEF offices, the local IBFAN organization, La Leche League, or other appropriate national or regional organizations to explore what is available.

Other Materials

Flipchart and markers

Blackboard

References

Aniansson G, Alm B, Andersson B, Hakansson A et al. A prospective coherent study on breast-feeding and otitis media in Swedish infants. *Pediat Infect Dis J, 1994,* 13: 183-188.

Beral V. Breast cancer and breastfeeding: collaborative reanalysis of individual data from 47 epidemiological studies in 30 countries, including 50302 women with breast cancer and 96973 women without the disease. *Lancet,* 2002, 360:187-95.

Betran AP, de Onis M, Lauer JA, Villar J. Ecological study of effect of breast feeding on infant mortality in Latin America. *BMJ,* 2001, 323:1-5.

Fergusson DM, Beautrais AL, Silva PA. Breastfeeding and cognitive development in the first seven years of life. *Social Science and Medicine,* 1982, 16:1705-1708. Howie PW, Forsyth JS, Ogston SA, Clark A, Florey CV. Protective effect of breastfeeding against infection. *BMJ,* 1990, 300:11-15.

Kull I, Wickman M, Lilja G, Nordvall SL, Pershagen G. Breast feeding and allergic diseases in infants - a prospective birth cohort study. *Archives of Disease in Childhood,* 2002, 87:478-481.

Lucas A, Morley R, Cole TJ, Lister G, Leeson-Payne C. Breast milk and subsequent intelligence quotient in children born preterm. *Lancet,* 1992, Feb 1, 339(8788):261-264.

Morrow-Tlucak M, Haude RH, Ernhart CB. Breastfeeding and cognitive development in the first two years of life. *Social Science and Medicine,*1988, 26:71-82.

Mortensen EL, Michaelsen KF, Sanders SA, Reinisch JM. The association between duration of breastfeeding and adult intelligence. *JAMA,* 2002, 287:2365-2371.

Popkin BM, Adair L, Akin JS, Black R, et al. Breastfeeding and diarrheal morbidity. *Pediatrics,* 1990, 86(6): 874-882.

Riva E, Agostoni C, Biasucci G, Trojan S, Luotti D, Fiori L, et al. Early breastfeeding is linked to higher intelligence quotient scores in dietary treated phenylketonuric children. *Acta Pædiatr,* 1996, 85:56-58.

Rodgers B. Feeding in infancy and later ability and attainment: a longitudinal study. *Developmental Medicine & Child Neurology,* 1978, 20:421-426.

Saadeh R, Benbouzid D. Breast-feeding and child spacing: importance of information collection to public health policy. *Bulletin of the World Health Organization*, 1990, 68(5) 625-631.

Scariati PD, Grummer-Strawn LM, Fein SB. A longitudinal analysis of infant morbidity and the extent of breastfeeding in the United States. *Pediatrics,* 1997, 99(6).von Kries R, Koletzko B, Sauerwald T et al. Breast feeding and obesity: cross sectional study. *BMJ,* 1999, 319:147-150.

Breastfeeding counselling: A training course. Geneva, World Health Organization, 1993 (WHO/CDR/93.6).

Breastfeeding and the use of water and teas. Division of Child Health and Development UPDATE No.9, Geneva, World Health Organization, November 1997. (http://www.who.int/child-adolescent-health/New_Publications/ NUTRITION/Water_Teas.pdf).

Outline

Content	Trainer's Notes
1. Introductory discussion Exploration of participants' views of the benefits of breastfeeding	List the following categories in columns on a flipchart or blackboard. • infant • mother • family • hospital Divide the participants into four groups and assign one category to each. Ask each group to take five minutes to list the benefits of breastfeeding for its assigned category. Ask each group to report on their ideas. List their responses under the various headings on the flipchart. Mention that a mini-version of the presentation is reproduced in Handout 2.1 and included in the participants' folder.
2. Benefits of breastfeeding for the infant Slide 2a shows two children from the same family. The older child was hospitalized for dehydration and malnutrition. He had stopped breastfeeding earlier than is recommended because the mother was told by a health worker that his diarrhoea had been caused by her breast milk. Since she was economically disadvantaged, she could not afford the formula, often diluted it and used contaminated water to prepare it. The child had many more diarrhoea episodes and became malnourished. The mother became pregnant and decided to breastfeed this next child. The photo was taken when the older child was hospitalized and the mother sat the younger child in the crib beside him.	Show photo slide 2a or other photo slide with a story.

Content	Trainer's Notes
■ Optimal nutrition. ▪ Breast milk provides high quality nutrients that are easily digested and efficiently used by the baby's body. Breast milk also provides all the water a baby needs. There is no need for any additional liquid. Numerous studies indicate that, for infants breastfed exclusively and on demand, the water in the breast milk exceeds water requirements. The solute levels in the urine and blood of these infants - even those living in very hot, dry climates -- were within normal ranges, indicating adequate water intake.	Show slide/transparency 2.1 and refer to handout 2.2. Show slide/transparency 2.2. Highlight the differences between the three types of milk. Show slide/transparency 2.3 and refer participants to Handout 2.3 (LINKAGES Infant Feeding Handout).
▪ Breast milk is a dynamic fluid that changes to meet the infant's needs. Milk composition is influenced by the *gestational age* of the infant (preterm milk is different from full-term milk), *stage of lactation* (colostrum differs from transitional and mature milk, which continues to change as time goes by), and *time frame of the feed* (foremilk differs from hindmilk, which has a higher fat content).	Show slide/transparency 2.4. Highlight the dynamic properties of breast milk. Show photo slide 2b to illustrate how milk composition changes as the infant matures. Show photo slide 2c to show the difference between foremilk and hindmilk.
▪ Colostrum has special properties and is very important to the infant for a variety of developmental, digestive, and protective factors.	Show slide/transparency 2.5. Highlight the main points.
▪ Breast milk is normally the only food that infants need for the first 6 months of life. Safe and appropriate complementary foods should be given from the sixth month of life while breastfeeding continues.	Refer to Handout 2.3.
▪ Breast milk continues to be an important source of energy and high quality nutrients through the second year of life and beyond.	Show slide/transparency 2.6.
■ Protective effect of breastfeeding on infant morbidity.	Show slide/transparency 2.7.

Content	Trainer's Notes
■ Increased immunity. Breast milk is a living fluid that protects the baby against infection. During the first year of a baby's life, because the immune system is not fully developed, the baby depends on mother's milk to fight infections.	
■ Reduced risk of diarrhoea. ▪ A study from the Philippines showed that artificially fed babies were up to 17 times more at risk of getting diarrhoea than exclusively breastfed infants. Partially breastfed babies were more likely to have diarrhoea than exclusively breastfed babies, but less likely than babies who received no breast milk *(Popkin).*	Optional: Show photo slide 2d, which shows a baby fed breast-milk substitutes who has been hospitalized for severe diarrhoea. Show slide/transparency 2.8. Stress the importance of continued breastfeeding during diarrhoeal episodes because of its nutritional value and the fact that it ensures a more speedy recovery from illness.
▪ A study in Dundee, Scotland found that breastfed infants had much less diarrhoea. For example, between 0 and 13 weeks of age, almost 20% of bottle-fed infants had diarrhoea compared with only 3.6% of the breastfed infants *(Howie et al.).*	Show slide/transparency 2.9.
▪ A study of 1743 mother infant pairs in the United States found a protective effect against diarrhoeal disease if infants were breastfed compared to infants who were not breastfed. The risk diminished the more breast milk the infant drank (a dose response) *(Scariati et al.).*	Show slide/transparency 2.10.
■ Reduced risk of respiratory infection. ▪ Another study in Dundee, Scotland found that breastfed infants had much less respiratory illness. For example, between 0 and 13 weeks of age, almost 39% of the bottle-fed infants had respiratory illness compared to only 23% of the breastfed infants *(Howie et al.).*	Show slide/transparency 2.11.

Content	Trainer's Notes
■ Reduced risk of otitis media. ▪ A study in Sweden found that breastfed infants had less otitis media than artificially fed infants. For example, at one to three months of age, 6% of the weaned infants had otitis media, compared to only 1% of the breastfed infants *(Aniansson et al.).*	Show slide/transparency 2.12.
▪ A study of 1743 mother infant pairs in the United States found a protective effect against otitis media if infants were breastfed compared to infants who were not breastfed. The risk diminished the more breast milk the infant drank (a dose response) *(Scariati et al.).*	Show slide/transparency 2.13.
■ Protective effects of breastfeeding on infant mortality.	Show slide/transparency 2.14.
■ Diarrhoeal disease and respiratory infections. ▪ In a study on the effects of breastfeeding on infant mortality in Latin America the authors conclude that artificially-fed infants 0-3 months of age were over 14 times more likely to die of diarrhoeal disease and 4 times more likely to die of acute respiratory infections than exclusively breastfed infants. Artificially-fed infants 4-11 months of age were almost 2 times more likely to die of both diarrhoeal disease and acute respiratory infection than partially breastfed infants *(Betran et al.).*	Show slide/transparency 2.15 and 2.16.
■ Breastfeeding reduces the risk of chronic disease.	Show slide/transparency 2.17.
■ Lower risk of allergies. ▪ It is generally agreed that allergies are less common in completely breastfed babies. A recent study in Sweden in which a birth cohort of 4089 infants was followed prospectively found that exclusive and partial breastfeeding reduced the risk of allergic disorders.	Show slide/transparency 2.18. Show photo slide 2e.

Content	Trainer's Notes
Children exclusively breastfed during four months or more exhibited less asthma (7.7% vs. 12%), less atopic dermatitis (24% vs. 27%) and less allergic rhinitis (6.5% vs. 9%) *(Kull et al.)*.	
■ Lower risk of obesity. ▪ A study in Germany found that among 9357 children aged 5 and 6 there was an over 5 times difference in the prevalence of obesity among those children never breastfed compared to those breastfed for over one year. There was a dose effect with the longer an infant had been breastfed the lower prevalence of obesity at the age of 5 and 6 *(von Kries et al.)*.	Show slide/transparency 2.19.
■ Breastfeeding has psychosocial and developmental benefits.	Slide/transparency 2.20.
▪ Breastfeeding helps mother and baby to bond. Close contact right after delivery promotes development of a loving relationship between mother and baby. Babies cry less and mothers respond better to their babies' needs.	Show photo slides 2f.
▪ The effects of breastfeeding and breast milk on infant and child development and IQ has been a subject of much interest in the scientific field and the findings over decades of research have found consistently better developmental outcomes and higher IQs if breastfed *(Ferguson et al. and other studies)*.	Show slide/transparency 2.21.
▪ Most recent long term study in Copenhagen found that duration of breastfeeding was associated with significantly higher IQ scores at 27.2 years. This study also found a positive dose effect *(Mortensen et al.)*.	Show slide/transparency 2.22.

Content	Trainer's Notes
3. Benefits of breastfeeding for the mother	Optional: Show slide 2g.
■ Protection of mother's health. ▪ The oxytocin released during breastfeeding helps the uterus to return to its previous size and helps to reduce postpartum bleeding.	Show slide/transparency 2.23.
▪ Breastfeeding reduces the risk of breast and ovarian cancer in mothers. A reanalysis of data from 47 epidemiological studies in 30 countries found that the relative risk of breast cancer decreased by 4.3% for every year of breastfeeding *(Beral).*	Show slide/transparency 2.24.
■ Delaying new pregnancies. ▪ During the first six months after birth, if a woman is amenorrhoeic and fully breastfeeding her infant, she has about 98% protection against another pregnancy.	
▪ The longer the duration of breastfeeding, the longer the duration of postpartum amenorrhoea, which leads to longer birth intervals *(Saadeh and Benbouzid).*	Show slide/transparency 2.25.
■ Dangers of artificial feeding: ▪ Interference with bonding ▪ More diarrhoea and respiratory infections ▪ Persistent diarrhoea ▪ Malnutrition - Vitamin A deficiency ▪ More allergy and milk intolerance ▪ Increased risk of some chronic diseases ▪ Increased risk of overweight ▪ Lower scores on intelligence tests (for low-birth-weight babies) ▪ Too frequent pregnancies for the mother ▪ Increased risk of anaemia, ovarian and breast cancer for the mother	Show slide/transparency 2.26. Emphasize the many risks associated with using feeding bottles, water, formula and pacifiers both in the hospital and later when the mother returns home. Stress the fact that the hospital has the responsibility to communicate both the benefits of breastfeeding and the risks of artificial feeding to all mothers.

Content	Trainer's Notes
4. Benefits of breastfeeding for the family ■ Better health and nutrition. ■ Breastfeeding benefits the whole family, emotionally and nutritionally. ■ Economic benefits. ■ Breastfeeding costs less than artificial feeding. Money spent on buying infant formula can be used to buy nutritious food for mother and family.	Show slide/transparency 2.27.
■ Health care. Breastfeeding reduces health-care costs, such as medical consultations, medicines, lab tests, hospitalization, etc.	Mention that data related to the economic benefits of breastfeeding will be covered in Session 6, Costs and savings.
5. Benefits of breastfeeding for the hospital ■ Breastfeeding creates an emotionally warmer and calmer atmosphere. Infants cry less, are calmer; mothers can more easily respond to their babies' needs. ■ There is no need for nurseries when there is rooming-in, which means more space for patients and hospital staff. Special care rooms may still be needed for very sick babies. ■ Rooming-in reduces neonatal infections. Exclusively breastfed infants have fewer infections. ■ Less staff time is needed. Mothers are directly responsible for the care of their babies. ■ Rooming-in and breastfeeding support increases hospital prestige and creates an image of a facility doing its best for mothers and babies. ■ There are fewer abandoned children. Mothers who breastfeed are less likely to abuse or abandon their babies. ■ Breastfeeding is the safest feeding method during emergencies.	Show slide/transparency 2.28.

Content	Trainer's Notes
6. Concluding discussion	Optional: Show photo slide 2h – contented mother and baby. Refer participants to their folder and Handout 2.4 Benefits of Breastfeeding. This handout, which comes from the UNICEF UK Baby Friendly Initiative website, provides further information on scientific studies showing the benefits of breastfeeding. Ask participants for any questions or comments.
7. Video (optional)	Consider showing the video "Breast is Best" if available, and/or other good videos, if time permits. If there isn't time during the session, consider showings during lunch breaks or in the evening.

Summaries of research studies presented during Session 2

Slide/transparency:	*Study:*
2.8	Popkin BM, Adair L, Akin JS, Black R, Briscoe J, Flieger W. Breast-feeding and diarrheal morbidity**.** *Pediatrics,* 1990, Dec, 86(6):874-82.
2.9 and 2.11	Howie PW, Forsyth JS, Ogston SA, Clark A, Florey CD. Protective effect of breast feeding against infection**.** *BMJ,* 1990, Jan 6, 300(6716):11-6.
2.10 and 2.13	Scariati PD, Grummer-Strawn LM, Fein SB. A longitudinal analysis of infant morbidity and the extent of breastfeeding in the United States. *Pediatrics,* 1997, Jun, 99(6):E5.
2.12	Aniansson G, Alm B, Andersson B, Hakansson A, Larsson P, Nylen O, Peterson H, Rigner P, Svanborg M, Sabharwal H, et al. A prospective cohort study on breast-feeding and otitis media in Swedish infants. *Pediatr Infect Dis J,* 1994 Mar 13(3):183-8.
2.15 and 2.16	Betran AP, de Onis M, Lauer JA, Villar J. Ecological study of effect of breast feeding on infant mortality in Latin America. *BMJ,* 2001, Aug 11, 323(7308):303-6.
2.18	Kull I, Wickman M, Lilja G, Nordvall SL, Pershagen G. Breastfeeding and allergic diseases in infants – a prospective birth cohort study. *Archives of Disease in Childhood,* 2002, 87:478-481.
2.19	von Kries R, Koletzko B, Sauerwald T, von Mutius E, Barnert D, Grunert V, von Voss H. Breast feeding and obesity: cross sectional study**.** *BMJ,* 1999, Jul 17, 319(7203):147-50.
2.21	Lucas A, Morley R, Cole TJ, Lister G, Leeson-Payne C. Breast milk and subsequent intelligence quotient in children born preterm. *Lancet,* 1992, Feb 1, 339(8788):261-4.
2.21	Fergusson DM, Beautrais AL, Silva PA. Breast-feeding and cognitive development in the first seven years of life. *Social Science and Medicin*e, 1982, 16(19):1705-8.
2.21	Morrow-Tlucak M, Haude RH, Ernhart CB. Breastfeeding and cognitive development in the first 2 years of life**.** *Social Science and Medicine*, 1988, 26(6):635-9.
2.21	Riva E, Agostoni C, Biasucci G, Trojan S, Luotti D, Fiori L, Giovannini M. Early breastfeeding is linked to higher intelligence quotient scores in dietary treated phenylketonuric children. *Acta Paediatr*, 1996, Jan, 85(1):56-8.
2.22	Mortensen EL, Michaelsen KF, Sanders SA, Reinisch JM. The association between duration of breastfeeding and adult intelligence. *JAMA,* 2002, May 8, 287(18):2365-71.

2.24 Beral V, Bull D, Doll R, Peto R, Reeves G (Collaborative Group on Hormonal Factors in Breast Cancer). Breast cancer and breastfeeding: collaborative reanalysis of individual data from 47 epidemiological studies in 30 countries, including 50 302 women with breast cancer and 96 973 women without the disease. *Lancet,* 2002, 360:187-95.

2.25 Saadeh R, Benbouzid D. Breast-feeding and child-spacing: importance of information collection for public health policy. *Bulletin of the World Health Organization,* 1990, 68(5):625-31.

Breastfeeding and diarrhoeal morbidity

Refers to Slide 2.8

Reference. Popkin BM, Adair L, Akin JS, Black R, Briscoe J, Flieger W. Breast-feeding and diarrheal morbidity**.** *Pediatrics,* 1990, Dec, 86(6):874-82.

Methods. This study used a unique longitudinal survey of more than 3000 mother-infant pairs observed from pregnancy through infancy. The sample is representative of infants from the Cebu region of the Philippines. The sequencing of breastfeeding and diarrhoeal morbidity events was carefully examined in a longitudinal analysis, which allowed for the examination of age-specific effects of feeding patterns. Because the work controlled for a wide range of environmental causes of diarrhoea, the results can be generalized to other populations with some confidence.

Findings. The addition to the breast-milk diet of even water, teas, and other nonnutritive liquids doubled or tripled the likelihood of diarrhoea. Supplementation of breastfeeding with additional nutritive foods or liquids further increased significantly the risk of diarrhoea; most benefits of breastfeeding alone or in combination with nutritive foods/liquids became small during the second half of infancy. Benefits of breastfeeding were slightly greater in urban environments.

Protective effect of breastfeeding against infection

Refers to Slide 2.9 and 2.11

Reference. Howie PW, Forsyth JS, Ogston SA, Clark A, Florey CD. Protective effect of breast feeding against infection**.** *BMJ,* 1990, Jan 6, 300(6716):11-6.

Objective. To assess the relations between breastfeeding and infant illness in the first two years of life with particular reference to gastrointestinal disease.

Design. Prospective observational study of mothers and babies followed up for 24 months after birth.

Setting. Community setting in Dundee.

Methods. 750 pairs of mothers and infants, 76 of whom were excluded because the babies were preterm (less than 38 weeks), low birth weight (less than 2500 g), or treated in special care for more than 48 hours. Of the remaining cohort of 674, 618 were followed up for two years. Detailed observations of infant feeding and illness were made at two weeks, and one, two, three, four, five, six, nine, 12, 15, 18, 21, and 24 months by health visitors. The main outcome measure was the prevalence of gastrointestinal disease in infants during follow up.

Findings. After confounding variables were corrected for babies who were breastfed for 13 weeks or more (227) had significantly less gastrointestinal illness than those who were bottle fed from birth (267) at ages 0-13 weeks (p less than 0.01; 95% confidence interval for reduction in incidence 6.6% to 16.8%), 14-26 weeks (p less than 0.01), 27-39 weeks (p less than 0.05), and 40-52 weeks (p less than 0.05). This reduction in illness was found whether or not supplements were introduced before 13 weeks, was maintained beyond the period of breastfeeding itself, and was accompanied by a reduction in the rate of hospital admission. By contrast, babies who were breastfed for less than 13 weeks (180) had rates of gastrointestinal illness similar to those observed in bottle fed babies. Smaller reductions in the rates of respiratory illness were observed at ages 0-13 and 40-52 weeks (p less than 0.05) in babies who were breastfed for more than 13 weeks. There was no consistent protective effect of breastfeeding against ear, eye, mouth, or skin infections, infantile colic, eczema, or nappy rash.

Conclusions. Breastfeeding during the first 13 weeks of life confers protection against gastrointestinal illness that persists beyond the period of breastfeeding itself.

A longitudinal analysis of infant morbidity and the extent of breastfeeding in the United States

Refers to Slide 2.10 and 2.13

Reference. Scariati PD, Grummer-Strawn LM, Fein SB. A longitudinal analysis of infant morbidity and the extent of breastfeeding in the United States. *Pediatrics,* 1997, Jun, 99(6):E5.

Background. Studies on the health benefits of breastfeeding in developed countries have shown conflicting results. These studies often fail to account for confounding, reverse causality, and dose-response effects. We addressed these issues in analyzing longitudinal data to determine if breastfeeding protects US infants from developing diarrhoea and ear infections.

Methods. Mothers participating in a mail panel provided information on their infants at ages 2, 3, 4, 5, 6, and 7 months. Infants were classified as exclusively breastfed; high, middle, or low mixed breast- and formula-fed; or exclusively formula-fed. Diarrhoea and ear infection diagnoses were based on mothers' reports. Infant age and gender; other liquid and solid intake; maternal education, occupation, and smoking; household size; family income; and day care use were adjusted for in the full models.

Findings. The risk of developing either diarrhoea or ear infection increased as the amount of breast milk an infant received decreased. In the full models, the risk for diarrhoea remained significant only in infants who received no breast milk compared with those who received only breast milk (odds ratio = 1.8); the risk for ear infection remained significant in the low mixed feeding group (odds ratio = 1.6) and among infants receiving no breast milk compared with those who received only breast milk (odds ratio = 1.7).

Conclusions. Breastfeeding protects US infants against the development of diarrhoea and ear infection. Breastfeeding does not have to be exclusive to confer this benefit. In fact, protection is afforded in a dose-response manner.

A prospective cohort study on breastfeeding and otitis media in Swedish infants.

Refers to Slide 2.12

Reference. Aniansson G, Alm B, Andersson B, Hakansson A, Larsson P, Nylen O, Peterson H, Rigner P, Svanborg M, Sabharwal H, et al. A prospective cohort study on breast-feeding and otitis media in Swedish infants. *Pediatr Infect Dis J,* 1994 Mar. 13(3):183-8.

Methods. This study analyzed the effect of breastfeeding on the frequency of acute otitis media. The protocol was designed to examine each child at 2, 6, and 10 months of age. At each visit nasopharyngeal cultures were obtained, the feeding pattern was recorded and the acute otitis media (AOM) episodes were documented. The analysis was based on 400 children from whom complete information was obtained. They represented 83% of the newborns in the study areas.

Findings. By 1 year of age 85 (21%) children had experienced 111 AOM episodes; 63 (16%) had 1 and 22 (6%) had 2 or more episodes. The AOM frequency was significantly lower in the breastfed than in the non-breastfed children in each age group ($P < 0.05$). The first AOM episode occurred significantly earlier in children who were weaned before 6 months of age than in the remaining groups. The frequency of nasopharyngeal cultures positive for Haemophilus influenzae, Moraxella catarrhalis and Streptococcus pneumoniae was significantly higher in children with AOM. At 4 to 7 and 8 to 12 months of age, the AOM frequency was significantly higher in children with day-care contact and siblings ($P < 0.05$ and < 0.01, respectively). The frequency of upper respiratory tract infections was increased in children with AOM but significantly reduced in the breastfed group.

Ecological study of effect of breastfeeding on infant mortality in Latin America

Refers to Slide 2.15 and 2.16

Reference. Betran AP, de Onis M, Lauer JA, Villar J. Ecological study of effect of breast feeding on infant mortality in Latin America. *BMJ,* 2001, Aug 11, 323(7308):303-6.

Objective. To estimate the effect of exclusive breastfeeding and partial breastfeeding on infant mortality from diarrhoeal disease and acute respiratory infections in Latin America.

Design. Attributable fraction analysis of national data on infant mortality and breastfeeding.

Setting. Latin America and the Caribbean.

Main outcome measures. Mortality from diarrhoeal disease and acute respiratory infections and nationally representative breastfeeding rates.

Findings. 55% of infant deaths from diarrhoeal disease and acute respiratory infections in Latin America are preventable by exclusive breastfeeding among infants aged 0-3 months and partial breastfeeding throughout the remainder of infancy. Among infants aged 0-3 months, 66% of deaths from these causes are preventable by exclusive breastfeeding; among infants aged 4-11 months, 32% of such deaths are preventable by partial breastfeeding. 13.9% of infant deaths from all causes are preventable by these breastfeeding patterns. The annual number of preventable deaths is about 52 000 for the region.

Conclusions: Exclusive breastfeeding of infants aged 0-3 months and partial breastfeeding throughout the remainder of infancy could substantially reduce infant mortality in Latin America. Interventions to promote breastfeeding should target younger infants.

Breastfeeding and allergic diseases in infants - a prospective birth cohort study

Refers to Slide 2.18

Reference: Kull I, Wickman M, Lilja G, Nordvall SL, Pershagen G. Breastfeeding and allergic diseases in infants – a prospective birth cohort study. *Archives of Disease in Childhood* 2002, 87:478-481.

Aims: To investigate the effect of breastfeeding on allergic disease in infants up to 2 years of age.

Methods: A birth cohort of 4089 infants was followed prospectively in Stockholm, Sweden. Information about various exposures was obtained by parental questionnaires when the infants were 2 months old, and about allergic symptoms and feeding at 1 and 2 years of age. Duration of exclusive and partial breastfeeding was assessed separately. Symptom related definitions of various allergic diseases were used. Odds ratios (OR) and 95% confidence intervals (CI) were estimated in a multiple logistic regression model. Adjustments were made for potential confounders.

Results: Children exclusively breastfed during four months or more exhibited less asthma (7.7% v 12%, OR(adj) = 0.7, 95% CI 0.5 to 0.8), less atopic dermatitis (24% v 27%, OR(adj) = 0.8, 95% CI 0.7 to 1.0), and less suspected allergic rhinitis (6.5% v 9%, OR(adj) = 0.7, 95% CI 0.5 to 1.0) by 2 years of age. There was a significant risk reduction for asthma related to partial breastfeeding during six months or more (OR(adj) = 0.7, 95% CI 0.5 to 0.9). Three or more of five possible allergic disorders—asthma, suspected allergic rhinitis, atopic dermatitis, food allergy related symptoms, and suspected allergic respiratory symptoms after exposure to pets or pollen—were found in 6.5% of the children. Exclusive breastfeeding prevented children from having multiple allergic disease (OR(adj) = 0.7, 95% CI 0.5 to 0.9) during the first two years of life.

Conclusion: Exclusive breastfeeding seems to have a preventive effect on the early development of allergic disease—that is, asthma, atopic dermatitis, and suspected allergic rhinitis, up to 2 years of age. This protective effect was also evident for multiple allergic disease.

Breastfeeding and obesity: Cross sectional study

Refers to Slide 2.19

Reference. von Kries R, Koletzko B, Sauerwald T, von Mutius E, Barnert D, Grunert V, von Voss H. Breast feeding and obesity: cross sectional study. *BMJ,* 1999, Jul 17, 319(7203):147-50.

Objective. To assess the impact of breastfeeding on the risk of obesity and risk of being overweight in children at the time of entry to school.

Design. Cross sectional survey

Setting. Bavaria, southern Germany.

Methods. Routine data were collected on the height and weight of 134 577 children participating in the obligatory health examination at the time of school entry in Bavaria. In a sub sample of 13 345 children, early feeding, diet, and lifestyle factors were assessed using responses to a questionnaire completed by parents.

Subjects. 9357 children aged 5 and 6 who had German nationality.

Main outcome measures. Being overweight was defined as having a body mass index above the 90th centile and obesity was defined as body mass index above the 97th centile of all enrolled German children. Exclusive breastfeeding was defined as the child being fed no food other than breast milk.

Findings. The prevalence of obesity in children who had never been breastfed was 4.5% as compared with 2.8% in breastfed children. A clear dose-response effect was identified for the duration of breastfeeding on the prevalence of obesity: the prevalence was 3.8% for 2 months of exclusive breastfeeding, 2.3% for 3-5 months, 1.7% for 6-12 months, and 0.8% for more than 12 months. Similar relations were found with the prevalence of being overweight. The protective effect of breastfeeding was not attributable to differences in social class or lifestyle. After adjusting for potential confounding factors, breastfeeding remained a significant protective factor against the development of obesity (odds ratio 0.75, 95% CI 0.57 to 0.98) and being overweight (0.79, 0.68 to 0.93).

Conclusions. In industrialised countries promoting prolonged breastfeeding may help decrease the prevalence of obesity in childhood. Since obese children have a high risk of becoming obese adults, such preventive measures may eventually result in a reduction in the prevalence of cardiovascular diseases and other diseases related to obesity.

Breast milk and subsequent intelligence quotient in children born preterm

Refers to Slide 2.21

Reference. Lucas A, Morley R, Cole TJ, Lister G, Leeson-Payne C. Breast milk and subsequent intelligence quotient in children born preterm. *Lancet,* 1992, Feb 1, 339(8788):261-4.

Summary. There is considerable controversy over whether nutrition in early life has a long-term influence on neurodevelopment. We have shown previously that, in preterm infants, mother's choice to provide breast milk was associated with higher developmental scores at 18 months. We now report data on intelligence quotient (IQ) in the same children seen at 7 1/2-8 years.

Methods. IQ was assessed in 300 children with an abbreviated version of the Weschler Intelligence Scale for Children (revised Anglicised).

Findings. Children who had consumed mother's milk in the early weeks of life had a significantly higher IQ at 7 1/2-8 years than did those who received no maternal milk. An 8.3 point advantage (over half a standard deviation) in IQ remained even after adjustment for differences between groups in mother's education and social class (p less than 0.0001). This advantage was associated with being fed mother's milk by tube rather than with the process of breastfeeding. There was a dose-response relation between the proportion of mother's milk in the diet and subsequent IQ. Children whose mothers chose to provide milk but failed to do so had the same IQ as those whose mothers elected not to provide breast milk.

Conclusions. Although these results could be explained by differences between groups in parenting skills or genetic potential (even after adjustment for social and educational factors), our data point to a beneficial effect of human milk on neurodevelopment.

Breastfeeding and cognitive development in the first seven years of life

Refers to Slide 2.21

Reference. Fergusson DM, Beautrais AL, Silva PA. Breast-feeding and cognitive development in the first seven years of life. *Soc Sci Med*, 1982, 16(19):1705-8.

Methods. The relationship between breastfeeding practices and childhood intelligence and language development at ages 3, 5, and 7 years was examined in a birth cohort of New Zealand children.

Findings. The results showed that even when a number of control factors including maternal intelligence, maternal education, maternal training in child rearing, childhood experiences, family socio-economic status, birth weight and gestational age were taken into account, there was a tendency for breastfed children to have slightly higher test scores than bottle-fed infants. On average, breastfed children scored approximately two points higher on scales with a standard deviation of 10 than bottle-fed infants when all control factors were taken into account.

Conclusions. It was concluded that breastfeeding may be associated with very small improvements in intelligence and language development or, alternatively, that the differences may have been due to the effects of other confounding factors not entered into the analysis.

Breastfeeding and cognitive development in the first 2 years of life

Refers to Slide 2.21

Reference. Morrow-Tlucak M, Haude RH, Ernhart CB. Breastfeeding and cognitive development in the first 2 years of life. *Soc Sci Med*, 1988, 26(6):635-9.

Method. The relationship between breastfeeding and cognitive development in the first 2 years of life was examined in a cohort of children being followed in a study of risk factors in development.

Findings. A significant difference between bottle-fed children, children breastfed less than or equal to 4 months, and those breastfed greater than 4 months was found on the Mental Development Index of the Bayley Scales at ages 1 and 2 years, favouring the breastfed children. At age 6 months, the direction of the relationship was the same but did not reach significance. Supplementary regression analyses examining the strength of the relationship between duration of breastfeeding and cognitive development similarly showed a small but significant relationship between duration of breastfeeding and scores on the Bayley at 1 and 2 years. Alternative explanations for the results are discussed.

Early breastfeeding is linked to higher intelligence quotient scores in dietary treated phenylketonuric children

Refers to Slide 2.21

Reference. Riva E, Agostoni C, Biasucci G, Trojan S, Luotti D, Fiori L, Giovannini M. Early breastfeeding is linked to higher intelligence quotient scores in dietary treated phenylketonuric children. *Acta Paediatr*, 1996, Jan, 85(1):56-8.

Background. Strict control of phenylalanine intake is the main dietary intervention for phenylketonuric children. Whether other dietary-related factors improve the clinical outcome for treated phenylketonuric children in neurodevelopmental terms, however, remains unexplored.

Methods. We retrospectively compared the intelligence quotient (IQ) score of 26 school-age phenylketonuric children who were either breastfed or formula fed for 20-40 days prior to dietary intervention.

Findings. Children who had been breastfed as infants scored significantly better (IQ advantage of 14.0 points, $p = 0.01$) than children who had been formula fed. A 12.9 point advantage persisted also after adjusting for social and maternal education status ($p = 0.02$). In this sample of early treated term infants with phenylketonuria there was no associated between IQ scores and the age at treatment onset and plasma phenylalanine levels during treatment.

Conclusion. We conclude that breastfeeding in the prediagnostic stage may help treated infants and children with phenylketonuria to improve neurodevelopmental performance.

The association between duration of breastfeeding and adult intelligence

Refers to Slide 2.22

Reference. Mortensen EL, Michaelsen KF, Sanders SA, Reinisch JM. The association between duration of breastfeeding and adult intelligence. *JAMA,* 2002, May 8, 287(18):2365-71.

Content. A number of studies suggest a positive association between breastfeeding and cognitive development in early and middle childhood. However, the only previous study that investigated the relationship between breastfeeding and intelligence in adults had several methodological shortcomings.

Objective. To determine the association between duration of infant breastfeeding and intelligence in young adulthood.

Design, setting and participants. Prospective longitudinal birth cohort study conducted in a sample of 973 men and women and a sample of 2280 men, all of whom were born in Copenhagen, Denmark, between October 1959 and December 1961. The samples were divided into 5 categories based on duration of breastfeeding, as assessed by physician interview with mothers at a 1-year examination.

Main outcome measures. Intelligence, assessed using the Wechsler Adult Intelligence Scale (WAIS) at a mean age of 27.2 years in the mixed-sex sample and the Borge Priens Prove (BPP) test at a mean age of 18.7 years in the all-male sample. Thirteen potential confounders were included as covariates: parental social status and education; single mother status; mother's height, age, and weight gain during pregnancy and cigarette consumption during the third trimester; number of pregnancies; estimated gestational age; birth weight; birth length; and indexes of pregnancy and delivery complications.

Findings. Duration of breastfeeding was associated with significantly higher scores on the Verbal, Performance, and Full Scale WAIS IQs. With regression adjustment for potential confounding factors, the mean Full Scale WAIS IQs were 99.4, 101.7, 102.3, 106.0, and 104.0 for breastfeeding durations of less than 1 month, 2 to 3 months, 4 to 6 months, 7 to 9 months, and more than 9 months, respectively (P =.003 for overall F test). The corresponding mean scores on the BPP were 38.0, 39.2, 39.9, 40.1, and 40.1 (P =.01 for overall F test).

Conclusion. Independent of a wide range of possible confounding factors, a significant positive association between duration of breastfeeding and intelligence was observed in 2 independent samples of young adults, assessed with 2 different intelligence tests.

Breast cancer and breastfeeding: collaborative reanalysis of individual data from 47 epidemiological studies in 30 countries

Refers to Slide 2.24

Reference. Beral V, Bull D, Doll R, Peto R, Reeves G (Collaborative Group on Hormonal Factors in Breast Cancer). Breast cancer and breastfeeding: collaborative reanalysis of individual data from 47 epidemiological studies in 30 countries, including 50 302 women with breast cancer and 96 973 women without the disease. *Lancet,* 2002, 360: 187-95.

Background. Although childbearing is known to protect against breast cancer, whether or not breastfeeding contributes to this protective effect is unclear.

Methods. Individual data from 47 epidemiological studies in 30 countries than included information on breastfeeding patterns and other aspects of childbearing were collected, checked and analysed centrally, for 50,302 women with invasive breast cancer and 96,973 controls. Estimates of the relative risk for breast cancer associated with breastfeeding in parous women were obtained after stratification by fine divisions of age, parity, and women's ages when their first child was born, as well as by study and menopausal status.

Findings. Women with breast cancer had, on average, fewer births than did controls (2.2 vs 2.6) Furthermore, fewer parous women with cancer than parous controls had ever breastfed (71% vs 79%), and their average lifetime duration of breastfeeding was shorter (9.8 vs 15.6 months). The relative risk of breast cancer decreased by 4.3% (95% CI 2.9-5.8; p<0.0001) for every 12 months of breastfeeding in addition to a decrease of 7.0% (5.0-9.0; p<0.0001) for each birth. The size of the decline in the relative risk of breast cancer associated with breastfeeding did not differ significantly for women in developed and developing countries, and did not vary significantly by age, menopausal status, ethnic origin, and number of births a woman had, her age when her first child was born, or any of nine other personal characteristics examines. It is estimated that the cumulative incidence of breast cancer in developed countries would be reduced by more than half, from 6.3 to 2.7 per 100 women by age 70, if women had the average number of births and lifetime duration of breastfeeding that had been prevalent in developing countries until recently. Breastfeeding could account for almost two-thirds of this estimated reduction in breast cancer incidence.

Interpretation. The longer women breastfeed the more they are protected against breast cancer. The lack of or short lifetime duration of breastfeeding typical of women in developed countries makes a major contribution to the high incidence of breast cancer in these countries.

Breastfeeding and child-spacing:
Importance of information collection for public health policy

Refers to Slide 2.25

Reference. Saadeh R, Benbouzid D. Breast-feeding and child-spacing: importance of information collection for public health policy. *Bulletin of the World Health Organization,* 1990, 68(5):625-631.

Summary. The presence of lactational amenorrhoea cannot be fully relied upon to protect the individual mother against becoming pregnant. Nevertheless, the use of breastfeeding as a birth-spacing mechanism has important implications for global health policy. This article identifies the information that should be collected and examined as a basis for developing guidelines on how to reduce the dual protection afforded by postpartum lactational amenorrhoea and other family planning methods, and discusses when such methods should be introduced.

Handout 2.1

Presentation for session 2: Benefits of breastfeeding

Benefits of breastfeeding for the infant

- Provides superior nutrition for optimum growth.
- Provides adequate water for hydration.
- Protects against infection and allergies.
- Promotes bonding and development.

Transparency 2.1

Summary of differences between milks

	Human milk	Animal milks	Infant formula
Protein	correct amount, easy to digest	too much, difficult to digest	partly corrected
Fat	enough essential fatty acids, lipase to digest	lacks essential fatty acids, no lipase	no lipase
Water	enough	extra needed	may need extra
Anti-infective properties	present	absent	absent

Adapted from: Breastfeeding counselling: A training course. Geneva, World Health Organization, 1993 (WHO/CDR/93.6).

Transparency 2.2

No water necessary

Country	Temperature °C	Relative Humidity %	Urine osmolarity (mOsm/l)
Argentina	20-39	60-80	105-199
India	27-42	10-60	66-1234
Jamaica	24-28	62-90	103-468
Peru	24-30	45-96	30-544

(Normal osmolarity: 50-1400 mOsm/l)

Adapted from: *Breastfeeding and the use of water and teas.* Geneva, World Health Organization, 1997.

Transparency 2.3

Breast milk composition differences (dynamic)

- Gestational age at birth (preterm and full term)
- Stage of lactation (colustrum and mature milk)
- During a feed (foremilk and hindmilk)

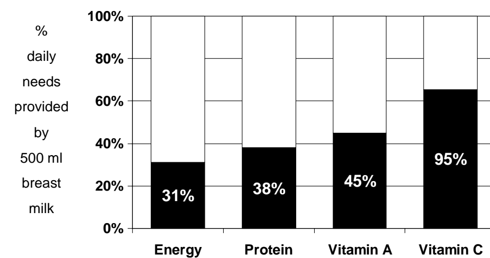
Transparency 2.4

Colostrum

Property	Importance
Antibody-rich	protects against infection and allergy
Many white cells	protects against infection
Purgative	clears meconium; helps prevent jaundice
Growth factors	helps intestine mature; prevents allergy, intolerance
Vitamin-A rich	reduces severity of some infection (such as measles and diarrhoea); prevents vitamin A-related eye diseases

Transparency 2.5

Breast milk in second year of life



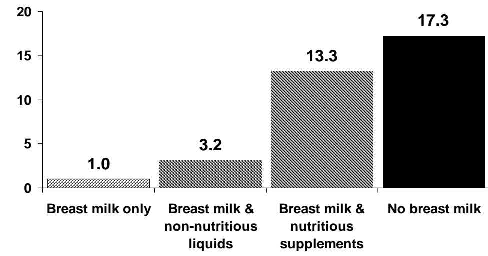
From: Breastfeeding counselling: A training course. Geneva, World Health Organization, 1993 (WHO/CDR/93.6).

Transparency 2.6

Protective effect of breastfeeding on infant morbidity

Transparency 2.7

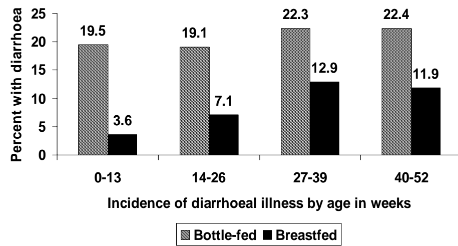
Risk of diarrhoea by feeding method for infants aged 0-2 months, Philippines



Adapted from: Popkin BM, Adair L, Akin JS, Black R, et al. Breastfeeding and diarrheal morbidity. *Pediatrics,* 1990, 86(6): 874-882.

Transparency 2.8

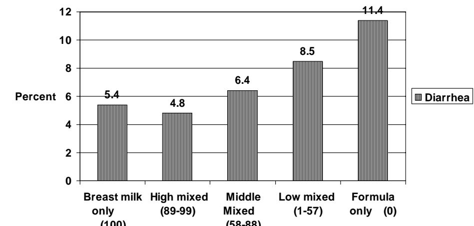
Percentage of babies bottle-fed and breastfed for the first 13 weeks that had diarrhoeal illness at various weeks of age during the first year, Scotland



Adapted from: Howie PW, Forsyth JS, Ogston SA, Clark A, Florey CV. Protective effect of breastfeeding against infection. *Br Med J,* 1990, 300: 11-15.

Transparency 2.9

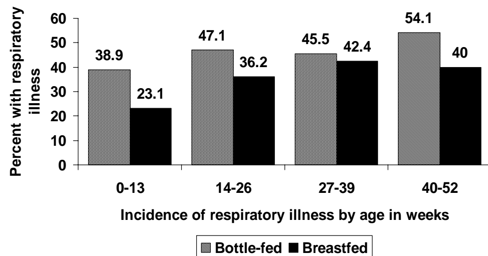
Percentage of infants 2-7 months of age reported as experiencing diarrhoea, by feeding category in the preceding month in the U.S.



Adapted from: Scariati PD, Grummer-Strawn LM, Fein SB. A longitudinal analysis of infant morbidity and the extent of breastfeeding in the United States. *Pediatrics,* 1997, 99(6).

Transparency 2.10

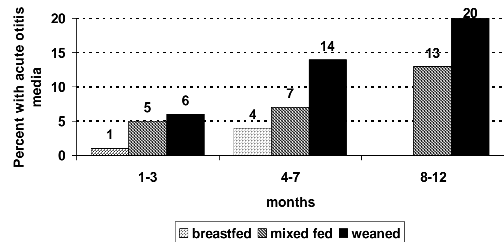
Percentage of babies bottle-fed and breastfed for the first 13 weeks that had respiratory illness at various weeks of age during the first year, Scotland



Adapted from: Howie PW, Forsyth JS, Ogston SA, Clark A, Florey CV. Protective effect of breastfeeding against infection. *Br Med J,* 1990, 300: 11-15.

Transparency 2.11

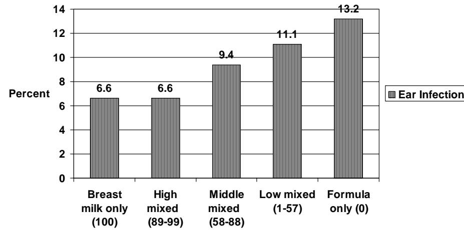
Frequency of acute otitis media in relation to feeding pattern and age, Sweden



Adapted from: Aniansson G, Alm B, Andersson B, Hakansson A et al. A prospective coherent study on breast-feeding and otitis media in Swedish infants. *Pediat Infect Dis J, 1994,* 13: 183-188.

Transparency 2.12

Percentage of infants 2-7 months of age reported as experiencing ear infections, by feeding category in the preceding month in the U.S.



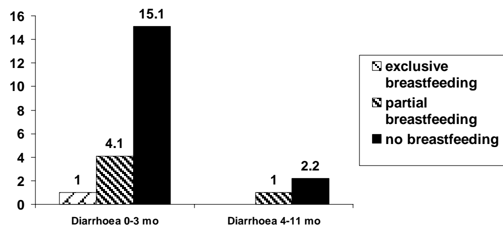
Adapted from: Scariati PD, Grummer-Strawn LM, and Fein SB. A longitudinal analysis of infant morbidity and the extent of breastfeeding in the United States. *Pediatrics,* 1997, 99(6).

Transparency 2.13

Protective effect of breastfeeding on infant mortality

Transparency 2.14

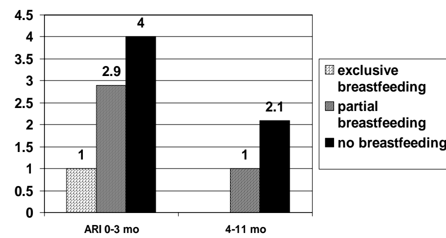
Relative risks of death from diarrhoeal disease by age and breastfeeding category in Latin America



Adapted from: Betran AP, de Onis M, Lauer JA, Villar J. Ecological study of effect of breast feeding on infant mortality in Latin America. *BMJ,* 2001, 323: 1-5.

Transparency 2.15

Relative risks of death from acute respiratory infections by age and breastfeeding category in Latin America



Adapted from: Betran AP, de Onis M, Lauer JA, Villar J. Ecological study of effect of breast feeding on infant mortality in Latin America. *BMJ,* 2001, 323: 1-5.

Transparency 2.16

Breastfeeding reduces the risk of chronic disease

Transparency 2.17

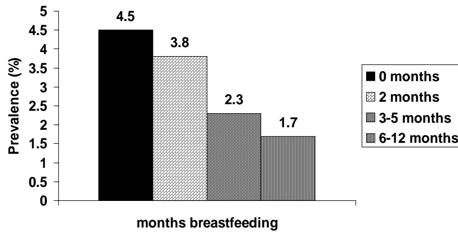
Breastfeeding decreases the risk of allergic disorders – a prospective birth cohort study

Type of feeding	Asthma	Atopic dermatitis	Allergic rhinitis
Children exclusively breastfed 4 months or more	7.7%	24%	6.5%
Children breastfed for a shorter period	12%	27%	9%

Adapted from Kull I. et al. Breastfeeding and allergic diseases in infants - a prospective birth cohort study. *Archives of Disease in Childhood* 2002: 87:478-481.

Transparency 2.18

Breastfeeding decreases the prevalence of obesity in childhood at age five and six years, Germany



Adapted from: von Kries R, Koletzko B, Sauerwald T et al. Breast feeding and obesity: cross sectional study. *BMJ*, 1999, 319:147-150.

Transparency 2.19

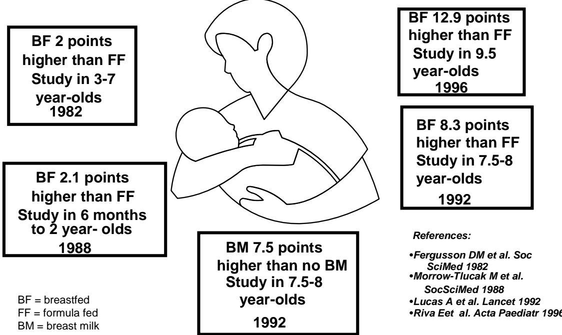
Breastfeeding has psychosocial and developmental benefits

Transparency 2.20

Intelligence quotient by type of feeding

BF 2 points higher than FF Study in 3-7 year-olds 1982

BF 2.1 points higher than FF Study in 6 months to 2 year- olds 1988



BM 7.5 points higher than no BM Study in 7.5-8 year-olds 1992

BF 12.9 points higher than FF Study in 9.5 year-olds 1996

BF 8.3 points higher than FF Study in 7.5-8 year-olds 1992

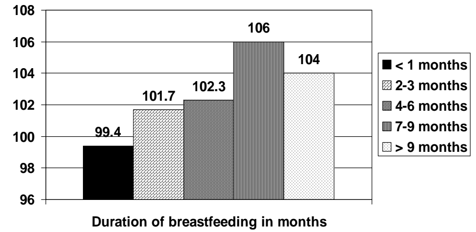
References:

- *Fergusson DM et al. Soc SciMed 1982*
- *Morrow-Tlucak M et al. SocSciMed 1988*
- *Lucas A et al. Lancet 1992*
- *Riva Eet al. Acta Paediatr 1996*

BF = breastfed
FF = formula fed
BM = breast milk

Transparency 2.21

Duration of breastfeeding associated with higher IQ scores in young adults, Denmark



Adapted from: Mortensen EL, Michaelsen KF, Sanders SA, Reinisch JM. The association between duration of breastfeeding and adult intelligence. *JAMA*, 2002, 287: 2365-2371.

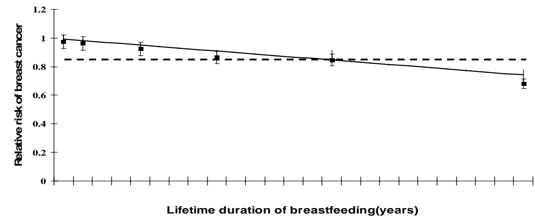
Transparency 2.22

Benefits of breastfeeding for the mother

- Protects mother's health
  - helps reduces risk of uterine bleeding and helps the uterus to return to its previous size
  - reduces risk of breast and ovarian cancer
- Helps delay a new pregnancy
- Helps a mother return to pre-pregnancy weight

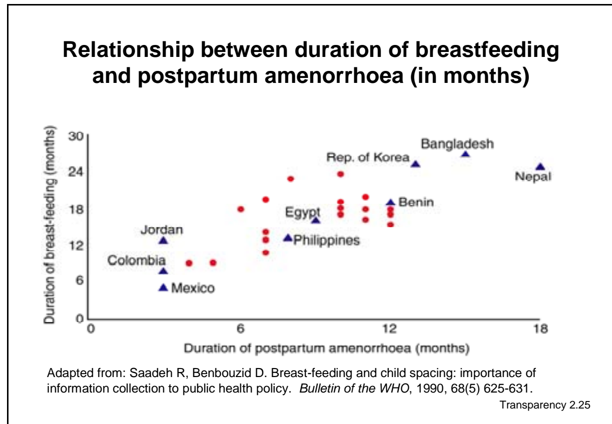
Transparency 2.23

Breast cancer and breastfeeding: Analysis of data from 47 epidemiological studies in 30 countries



Adapted from: Beral V et al. (Collaborative group on hormonal factors in breast cancer). Breast cancer and breastfeeding: collaborative reanalysis of individual data from 47 epidemiological studies in 30 countries… *Lancet* 2002; 360: 187-95.

Transparency 2.24



Risks of artificial feeding

- Interferes with bonding
- More diarrhoea and respiratory infections
- Persistent diarrhoea
- Malnutrition Vitamin A deficiency
- More likely to die
- More allergy and milk intolerance
- Increased risk of some chronic diseases
- Overweight
- Lower scores on intelligence tests

Mother

- May become pregnant sooner
- Increased risk of anaemia, ovarian and breast cancer

Adapted from: Breastfeeding counselling: A training course. Geneva, World Health Organization, 1993 (WHO/CDR/93.6).

Slide 2.26

Benefits of breastfeeding for the family

- Better health, nutrition, and well-being
- Economic benefits
  - breastfeeding costs less than artificial feeding
  - breastfeeding results in lower medical care costs

Transparency 2.27

Benefits of breastfeeding for the hospital

- Warmer and calmer emotional environment
- No nurseries, more hospital space
- Fewer neonatal infections
- Less staff time needed
- Improved hospital image and prestige
- Fewer abandoned children
- Safer in emergencies

Transparency 2.28

Handout 2.2

Infant and young child feeding: recommendations for practice[1]

The Expert Consultation recommends exclusive breastfeeding for 6 months, with introduction of complementary foods and continued breastfeeding thereafter. This recommendation applies to populations. The Expert Consultation recognizes that some mothers will be unable to, or chose not to, follow this recommendation. These mothers should also be supported to optimize their infants' nutrition.

The proportion of infants exclusively breastfed at 6 months can be maximized if potential problems are addressed:

- The nutritional status of pregnant and lactating mothers.
- Micronutrient status of infants living in areas with high prevalence of deficiencies such as iron, zinc, and vitamin A.
- The routine primary health care of individual infants, including assessment of growth and of clinical signs of micronutrient deficiencies.

The Expert Consultation also recognizes the need for complementary feeding at 6 months of age and recommends the introduction of nutritionally adequate, safe, and appropriate complementary foods, in conjunction with continued breastfeeding.

The Expert Consultation recognizes that exclusive breastfeeding to 6 months is still infrequent. However, it also notes that there have been substantial increases over time in several countries, particularly where lactation support is available. A prerequisite to the implementation of these recommendations is the provision of adequate social and nutritional support to lactating women.

[1] From *The optimal duration of exclusive breastfeeding, Report of an expert consultation, Geneva, Switzerland 28-30 March 2001,* Department of Nutrition for Health and Development and Department of Child and Adolescent Health and Development, Geneva, World Health Organization, 2001, page 2 (WHO/NHD/01.09, WHO/FCH/CAH/01.24). (http://www.who.int/nutrition/publications/optimal_duration_of_exc_bfeeding_report_eng.pdf).

Handout 2.3

Exclusive breastfeeding:
The only water source young infants need

FAQ Sheet 5 Frequently Asked Questions (FAQ) October 2002

Healthy newborns enter the world well hydrated and remain so if breastfed exclusively, day and night, even in the hottest, driest climates. Nevertheless, the practice of giving infants water during the first six months—the recommended period for exclusive breastfeeding—persists in many parts of the world, with dire nutritional and health consequences. This FAQ discusses these consequences and the role of breastfeeding in meeting an infant's water requirements.

Q *Why is exclusive breastfeeding recommended for the first six months?*

International guidelines recommend exclusive breastfeeding for the first six months based on scientific evidence of the benefits for infant survival, growth, and development. Breast milk provides all the energy and nutrients that an infant needs during the first six months. Exclusive breastfeeding reduces infant deaths caused by common childhood illnesses such as diarrhea and pneumonia, hastens recovery during illness, and helps space births.

Q *Is early supplementation with water a common practice? And if so, why?*

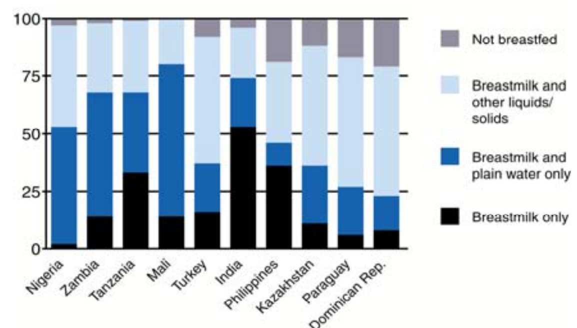
The practice of giving water and other liquids such as teas, sugar water, and juices to breastfed infants in the first months is widespread throughout the world, as illustrated in Figure 1. This practice often begins in the first month of life. Research conducted in the outskirts of Lima, Peru showed that 83 percent of infants received water and teas in the first month. Studies in several communities of the Gambia, the Philippines, Egypt, and Guatemala reported that over 60 percent of newborns were given sugar water and/or teas.

The reasons given for water supplementation of infants vary across cultures. Some of the most common reasons are:

- necessary for life
- quenches thirst
- relieves pain (from colic or earache)
- prevents and treats colds and constipation
- soothes fretfulness.

Cultural and religious beliefs also influence water supplementation in early infancy. Proverbs passed down from generation to generation advise mothers to give babies water. Water may be viewed as the source of life—a spiritual and physiological necessity. Some cultures regard the act of offering water to the newborn as a way of welcoming the child into the world.

Figure 1. Feeding Practics Among Young Infants



Source: Demographic and Health Surveys, 1990-1995.
Based on 24 hour recall for respondents' children under 4 months of age at time of survey

The advice of health care providers also influences the use of water in many communities and hospitals. For example, a study in a Ghanaian city found that 93 percent of midwives thought that water should be given to all infants beginning on the first day of life. In Egypt many nurses advised mothers to give sugar water after delivery.

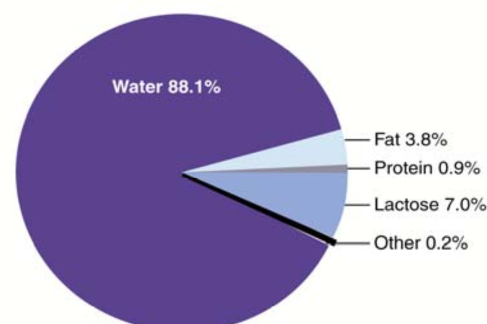
Q *How do breastfed babies get enough water?*

Depending on temperature, humidity, and the infant's weight and level of activity, the average daily fluid requirements for healthy infants ranges from 80–100 ml/kg in the first week of life to 140–160 ml/kg between 3–6 months. These amounts are available from breast milk alone if breastfeeding is exclusive and unrestricted (on-demand day and night) for two reasons:

Breast milk is 88 percent water. The water content of breast milk consumed by an exclusively breastfed baby meets the water requirements for infants and provides a considerable margin of safety. Even though a newborn gets little water in the thick yellowish first milk (colostrum), no additional water is necessary because a baby is born with extra water. Milk with higher water content usually "comes in" by the third or fourth day. Figure 2 shows the principal components of breast milk.

Breast milk is low in solutes. One of the major functions of water is to flush out, through the urine, excess solutes. Dissolved substances (for example, sodium, potassium, nitrogen, and chloride) are referred to as solutes. The kidneys—though immature up to the age of approximately three months—are able to concentrate excess solutes in the urine to maintain a healthy, balanced body chemistry. Because breast milk is low in solutes, the infant does not need as much water as an older child or adult.

Figure 2. Composition of Breastmilk



Source: Lawrence R. *Breastfeeing: A guide for the medical profession.* 4th ed. St. Louis:Mosby-Year Book, Inc. 1994.

Q ***What about infants in hot, dry climates?***

Water in breast milk exceeds the infant's water requirements in normal conditions and is adequate for breastfed infants in hot, dry climates. Studies indicate that healthy, exclusively breastfed infants in the first six months of life do not require additional fluids even in countries with extremely high temperatures and low humidity. Solute levels in the urine and blood of exclusively breastfed babies living in these conditions were within normal ranges, indicating adequate water intakes.

Q ***Can giving water to an infant before six months be harmful?***

Offering water before the age of six months can pose significant health hazards.

Water supplementation increases the risk of malnutrition. Displacing breast milk with a fluid of little or no nutritional value can have a negative impact on an infant's nutritional status, survival, growth, and development.

Consumption of even small amounts of water or other liquids can fill an infant's stomach and reduce the baby's appetite for nutrient-rich breast milk. Studies show that water supplementation before the age of six months can reduce breast milk intake by up to 11 percent. Glucose water supplementation in the first week of life has been associated with greater weight loss and longer hospital stays.

Water supplementation increases the risk of illness. Water and feeding implements are vehicles for the introduction of pathogens. Infants are at greater risk of exposure to diarrhea-causing organisms, especially in environments with poor hygiene and sanitation. In the least developed countries, two in five people lack access to safe drinking water. Breast milk ensures an infant's access to an adequate and readily available supply of clean water.

Research in the Philippines confirms the benefits of exclusive breastfeeding and the harmful effect of early supplementation with non-nutritive liquids on diarrheal disease. Depending on age, an infant was two to three times more likely to experience diarrhea if water, teas, and herbal preparations were fed in addition to breast milk than if the infant was exclusively breastfed.

Q Should water be given to breastfed infants who have diarrhea?

In the case of mild diarrhea, increased frequency of breastfeeding is recommended. When an infant has moderate to severe diarrhea, caregivers should immediately seek the advice of health workers and continue to breastfeed, as recommended in the Integrated Management of Childhood Illness (IMCI) guidelines. Infants that appear dehydrated may require Oral Rehydration Therapy (ORT), which should only be given upon advice of a health worker.[2]

Q How can programs address the common practice of water supplementation?

To address the widespread practice of water supplementation in early infancy, program managers should understand the cultural reasons for this practice, analyze existing data, conduct household trials of improved practices, and develop effective communication strategies for targeted audiences. Health care providers and community volunteers need to be informed that breast milk meets the water requirements of an exclusively breastfed baby for the first six months. They may also require training on how to communicate messages and negotiate behavior change. Examples of messages developed in breastfeeding promotion programs that address local beliefs and attitudes about the water needs of infants are shown in the box.

Providing accurate information, tailoring messages to address the beliefs and concerns of different audiences, and negotiating with mothers to try out a new behavior can help establish exclusive breastfeeding as a new community norm.

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[2]Oral Rehydration Solution (ORS), used in ORT, helps replace water and electrolytes lost during episodes of diarrhea. Super ORS, with a carbohydrate base of rice or cereal for better absorption, has been developed to improve treatment.

Communicating the Message "Don't Give Water"

The following messages have been used in programs to convince mothers, their families, and health workers that exclusively breastfed infants do not need to be given water in the first six months. The most effective ways of communicating the messages depend on the audience and the practices, beliefs, concerns, and constraints to good practices in a particular setting.

Make clear the meaning of exclusive breastfeeding

- **Exclusive breastfeeding means giving only breast milk. This means no water, liquids, teas, herbal preparations, or foods through the first six months of life. (It is important to name the drinks and foods commonly given in the first six months. One program found that women did not think the advice "do not give water" applied to herbal teas or other fluids).**

Take ideas often associated with water and apply them to colostrum

- **Colostrum is the welcoming food for newborns. It is also the first immunization, protecting a baby from illness.**
- **Colostrum cleans the newborn's stomach. Sugar water is not needed.**

Explain why exclusively breastfed babies do not need water

- **Breast milk is 88 percent water.**
- **Every time a mother breastfeeds, she gives her baby water through her breast milk.**
- **Breast milk has everything a baby needs to quench thirst and satisfy hunger. It is the best possible food and drink that can be offered a baby so the baby will grow to be strong and healthy.**

Point out the risks of giving water

- **Giving water to babies can be harmful and cause diarrhea and illness. Breast milk is clean and pure and protects against disease.**
- **An infant's stomach is small. When the baby drinks water, there is less room left for the nourishing breast milk that is necessary for the infant to grow strong and healthy.**

Link good breastfeeding practices to adequate fluid intake

- **When a mother thinks her baby is thirsty, she should breastfeed immediately. This will give the baby all the water that is needed.**
- **The more often a woman breastfeeds, the more breast milk is produced, which means more water for the baby.**

Q ***What are the water needs of children after six months of age?***

Guidelines for water intake after six months are less clear than for the first half of infancy. At six months complementary foods—foods given in addition to breast milk to meet an infant's increased nutrient requirements—should be introduced. The types of foods a child consumes will affect the child's water needs. For the most part, the water requirements of infants 6–11 months can be met through breast milk. Additional water can be provided through fruits or fruit juices, vegetables, or small amounts of *boiled* water offered after a meal.

Caution should be taken to ensure that water and other liquids do not replace breast milk. Water can also replace or dilute the nutrient content of energy-dense complementary foods. Gruels, soups, broths, and other watery foods given to infants usually fall below the recommended energy density for complementary foods (0.6 kcal/g). Reducing the amount of water added to these foods could improve the nutritional status of children in this age group.

Related LINKAGES Publications

- Facts for Feeding: Birth, Initiation of Breastfeeding, and the First Seven Days after Birth, 2002.
- Facts for Feeding: Breastmilk: A Critical Source of Vitamin A for Infants and Young Children, 2000.
- Facts for Feeding: Recommended Practices to Improve Infant Nutrition during the First Six Months, 2001.
- Quantifying the Benefits of Breastfeeding: A Summary of the Evidence, 2002.
- Recommended Feeding and Dietary Practices to Improve Infant and Maternal Nutrition, 2001.

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Armelini PA, Gonzalez CF. Breastfeeding and fluid intake in a hot climate. *Clin Pediatr* 1979; 18: 424–5.

Brown K, et al. (1989). Infant-feeding practices and their relationship with diarrheal and other diseases in Huascar (Lima), Peru. *Pediatrics* 1989 Jan;83(1):31–40.

Glover J and Sandilands M. Supplementation of breastfeeding infants and weight loss in hospital. *J Hum Lact* 1990 Dec;6(4):163–6.

Goldberg NM, Adams E. Supplementary water for breast-fed babies in a hot and dry climate – not really a necessity.*Arch Dis Child* 1983; 58:73–74.

Hosssain M et al. Prelacteal infant feeding practices in rural Egypt. *J Trop Pediatr* 1992 Dec; 38(6):317–22.

Popkin BM et al. Breast-feeding and diarrheal morbidity. *Pediatrics* 1990 Dec;86(6):874–82.

Sachdev HPS et al. Water supplementation in exclusively breastfed infants during summer in the tropics. *Lancet* 1991 April; 337:929–33.

Victora C et al. Infant feeding and deaths due to diarrhea: A case-control study. *Am J Epidemiol* 1989 May;129(5):1032–41.

World Health Organization. Breastfeeding and the use of water and teas. Division of Child Health and Development Update, No. 9 (reissued Nov. 1997).

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Handout 2.4

UNICEF UK BABY FRIENDLY INITIATIVE: Health benefits of breastfeeding

There has been significant reliable evidence produced over recent years to show that breastfeeding has important advantages for both infant and mother, even in the industrialised countries of the world.

Below is a selected list of recently-published studies describing differences in health outcome associated with method of infant feeding. The studies have all adjusted for social and economic variables. All were conducted in an industrialised setting.

We also provide a list of additional health issues with which breastfeeding has been associated by some researchers. Many of these require further investigation to clarify any protective effect of breastfeeding and are included here for the interest and information of readers.

To receive updates by e-mail from the Baby Friendly Initiative on research into breastfeeding click here. http://www.babyfriendly.org.uk/subscribe/

This page was last updated on 3 March 2004

Artificially-fed babies are at greater risk of:

- gastro-intestinal infections
- respiratory infections
- necrotising enterocolitis
- urinary tract infections
- ear infections
- allergic disease (eczema, asthma and wheezing)
- insulin-dependent diabetes mellitus

and breastfed babies may have better:

- neurological development

Other studies of health and breastfeeding:

- cardiovascular disease in later life
- childhood cancer
- breastfeeding, bed sharing and cot death
- breastfeeding and HIV transmission
- breastfeeding and dental health

Women who breastfed are at lower risk of:

- breast cancer
- ovarian cancer
- hip fractures and bone density

Other potential protective effects of breastfeeding (more research needed) for the infant:

- multiple sclerosis
- acute appendicitis
- tonsillectomy

for the mother:

- rheumatoid arthritis

Source: http://www.babyfriendly.org.uk/

Gastro-intestinal infections

Howie PW et al. (1990). Protective effect of breastfeeding against infection. *BMJ* 300: 11-16. [Abstract]
674 infants were investigated for the relationship between infant feeding and infectious illness. The incidence of gastro-intestinal illness in infants who were exclusively breastfed for 13 weeks or more was 2.9% (after adjusting for confounders). Those who were partially breastfed had an incidence of 15.7% and those who were exclusively artificially fed 16.7%. Therefore bottle-fed infants were at five times the risk of developing gastro-intestinal illness. Interestingly, the study also noted that breastfeeding exclusively for 13 weeks or more was associated with significant protection beyond the period of breastfeeding itself. However, no significant reduction in the incidence of otitis media was found.

Respiratory infections

Wilson AC et al. (1998). Relation of infant diet to childhood health: seven year follow up cohort of children in Dundee infant feeding study. *BMJ*316: 21-25. [Abstract]
This study followed infants from the above cohort into childhood. Subjcts were studied at 7 years of age. After adjustment for significant confounding variables, the estimated probability of ever having respiratory illness was 17% [95% CI: 15.9%-18.1%] for those children exclusively breastfed for at least 15 weeks, 31% [26.8%-35.2%] for those partially breastfed and 32% [30.7%-33.7%] for those who were artificially fed. This means that the bottle-fed infants were at almost twice the risk of developing respiratory illness at any time during the first 7 years of life. This study also found solid feeding before 15 weeks was associated with an increased probability of wheeze during childhood (21.0% [19.9% to 22.1%] v 9.7% [8.6% to 10.8%]) as well as increased percentage body fat and weight in childhood. Systolic blood pressure was raised significantly in children who were exclusively bottle fed compared with children who received breast milk (mean 94.2 (93.5 to 94.9) mm Hg v 90.7 (89.9 to 91.7) mm Hg).

Oddy WH et al (2003). Breast feeding and respiratory morbidity in infancy: a birth cohort study. Archives of Disease in Childhood. 88:224-228 [Abstract]
This study of 2602 children in Australia has found that hospital, doctor, or clinic visits and hospital admissions for respiratory illness and infection in the first year of life are significantly lower among babies who are predominantly breastfed. Stopping predominant breastfeeding before six months and stopping breastfeeding before eight months was associated with a significantly increased risk of wheezing lower respiratory illnesses. Upper respiratory tract infections were significantly more common if predominant breastfeeding was stopped before 2 months or if partial breastfeeding was stopped before 6 months.

Galton Bachrach VR et al (2003). Breastfeeding and the risk of hospitalisation for respiratory disease in infancy. A meta-analysis. Arch Pediatr Adolesc Med 157:237-243 [Abstract]
This meta-analysis of studies from developed countries concludes that the risk of severe respiratory tract illness resulting in hospitalisation is more than tripled among infants who are not breastfed, compared with those who are exclusively breastfed for 4 months (relative risk = 0.28; 95% CI 0.14 - 0.54).

See also:
Wright AL et al. (1989) Breast feeding and lower respiratory tract illness in the first year of life. *BMJ* 299: 946-9.

Necrotising Enterocolitis (NEC)

Lucas A & Cole TJ (1990). Breast milk and neonatal necrotising enterocolitis. *Lancet* 336: 1519-1522. [Abstract]
926 preterm infants were studied, 51 of whom developed NEC. Exclusively formula fed infants were 6 to 10 times more likely to develop NEC than those who received breast milk. Although NEC is rare in babies over 30 weeks gestation, it was 20 times more common if the baby had received no breast milk.

Urinary tract infection

Pisacane A, Graziano L & Zona G (1992). Breastfeeding and urinary tract infection. *J Pediatr* 120: 87-89. [Abstract]
128 hospitalised infants with urinary tract infection were compared with 128 hospitalised control infants. All infants were less than 6 months old. The infants were matched for age, gender, social class, birth order and maternal smoking habits, Infants who were exclusively bottle fed at the time of admission to the hospital were more than five times as likely to have urinary tract infections compared to those who were breastfed.

Ear infections

Duncan B et al. (1993). Exclusive breast feeding for at least 4 months protects against otitis media. *Pediatrics* 5: 867-872. [Abstract]
1013 infants were studied during the first year of life to assess the relationship between infant feeding and acute and recurrent otitis media. 467 infants had at least one episode and 169 had recurrent otitis media. Infants exclusively breastfed for at least 4 months had 50% fewer episodes of otitis media and those partially breastfed had 40% fewer episodes.

Aniansson G et al. (1994). A prospective cohort study on breast feeding and otitis media in Swedish infants. *Pediatr Infect Dis J* 13: 183-188 [Abstract]
. 400 infants were studied at 2, 6, 10 and 12 months of age. Breastfed babies had significantly lower incidence of acute otitis media at every stage.

See also:
Paradise JL, Elster BA, Tan L (1994) Evidence in infants with cleft palate that breast milk protects against otitis media. *Pediatrics* 94: 853-60.

Niemelä M et al (2000) Pacifier as a risk factor for acute otitis media: a randomized, controlled trial of parental counseling. *Pediatrics* 106: 483-488.

Allergic disease (eczema, asthma and wheezing)

Saarinen UM, Kajosaari M (1995). Breastfeeding as prophylaxis against atopic disease: prospective follow-up study until 17 years old. *Lancet* 346: 1065-1069. [Abstract]
150 children were studied up to the age of 17 years to determine the effect on atopic disease of breastfeeding. The subjects were divided into three groups: prolonged (>6 months) intermediate (1-6 months) and short or no (<1 month) breastfeeding. They were followed up at 1, 3, 5, 10 and 17 years. The prevalence of manifest atopy throughout follow-up was highest in the group who had little or no breastfeeding. Breastfeeding for longer than 1 month without other milk supplements was associated with a significant reduction in the incidence of food allergy at 3 years of age, and also respiratory allergy at 17 years of age. Six months of breastfeeding was associated with significantly less eczema during the first 3 years and less substantial atopy in adolescence.

Lucas A et al. (1990). Early diet of preterm infants and development of allergic or atopic disease: Randomised prospective study. *BMJ* 300: 837-840. [Abstract]
Preterm infants were randomly allocated to receive preterm formula or banked human milk, alone or as supplements to the mother's own milk. The use of human milk was associated with a significantly-reduced incidence of allergic disease, particularly eczema at 18 months in those with a family history of atopic disease. In those without a family history there was no effect.

Oddy WH et al. (1999) Association between breastfeeding and asthma in 6 year old children: findings of a prospective birth cohort study. *BMJ* 319: 815-819. [Abstract]
An Australian study followed 2187 children from birth to age 6 years and found that the introduction of milk other than breastmilk before 4 months of age was a significant risk factor for asthma (odds ratio 1.25; 95% CI 1.02-1.52) after adjustment for confounders. It was also a risk factor for wheeze three or more times since 1 year of age (1.41; 1.14-1.76), wheeze in the past year (1.31; 1.05 to 1.64), sleep disturbance due to wheeze within the past year (1.42; 1.07-1.89) and positive skin prick test reaction to at least one common aeroallergen (1.30; 1.04-1.61).

Oddy WH et al (2002). Maternal asthma, infant feeding, and the risk of asthma in childhood. *J Allergy Clin Immunol* 110: 65-7. [Abstract]

Children aged 6 years were more likely to be asthma sufferers if they had not been exclusively breastfed for at least 4 months, regardless of their mother's asthma status (odds ratio, 1.35; 95% CI 1.00-1.82).

See also:

Kull I et al (2002). Breast feeding and allergic diseases in infants--a prospective birth cohort study. *Arch Dis Child* 87: 478-481.
Wilson AC et al. (1998). Relation of infant diet to childhood health: seven year follow up cohort of children in Dundee infant feeding study. *BMJ* 316: 21-25.(summarised above).
Wright AL et al (1995) Relationship of infant feeding to recurrent wheezing at age 6 years. *Arch Pediatr Adolesc Med* 149: 758-63.

Insulin-dependent diabetes mellitus

Gerstein HC (1994). Cows' milk exposure and type 1 diabetes mellitus. *Diabetes Care* 17: 13-19. [Abstract]
This analysis pooled results from 19 studies of the relationship between infant feeding and insulin dependent diabetes mellitus (IDDM) selected to minimise bias. It concluded that early onset IDDM patients were more likely than healthy controls to have been breastfed for less than 3 months. In separate analyses it also found the IDDM patients were more likely to have been exposed to cows' milk protein before 4 months of age. It estimated that up to 30% of type 1 diabetes cases could be prevented by removing cows' milk products from the diet of 90% of the population in the first 3 months.

Karjalainen J et al. (1992). A bovine albumin peptide as a possible trigger of insulin-dependent diabetes mellitus. *New Engl J Med* 327: 302-307. [Abstract]
This study found that newly diagnosed diabetic children had a much higher level of IgG anti-BSA (bovine serum albumin) than controls. This antibody to a cows' milk protein, BSA, has some structural homology with the pancreatic islet b-cell surface antigen p69. The authors speculated that anti-BSA antibodies attack b-cells in genetically-predisposed children.

Virtanen SM et al. (1991). Infant feeding in children <7 years of age with newly diagnosed IDDM. *Diabetes Care* 14: 415-417. [Abstract]
This case-control study involving nearly 700 diabetic children found that the risk of insulin dependent diabetes was doubled in children who were exclusively breastfed for less than 2 months and doubled among those introduced to dairy products at less than 2 months of age. The risk was lowest in those exclusively breastfed for longest. In multivariate analyses, the introduction of cows' milk products was the most important risk factor. This suggests, along with the previous study, that formula feeding in infancy plays a part in the pathogenesis of juvenile onset diabetes mellitus.

See also:
Paronen J et al (2000) Effect of cow's milk exposure and maternal type 1 diabetes on cellular and humoral immunization to dietary insulin in infants at genetic risk for type 1 diabetes. Finnish Trial to Reduce IDDM in the Genetically at Risk Study Group. *Diabetes* 49: 1657-65.
Young TK et al (2002). Type 2 Diabetes Mellitus in Children: Prenatal and Early Infancy Risk Factors Among Native Canadians. *Arch Pediatr Adolesc Med* 156: 651-655.
Mayer EJ et al (1988) Reduced risk of IDDM among breast-fed children. The Colorado IDDM Registry. *Diabetes* 37: 1625-32

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Other studies of interest (requiring further substantiation) on health benefits for the infant:
Pisacane A et al (1994) Breast feeding and multiple sclerosis. *BMJ* 308: 1411-2.
Pisacane A et al (1995) Breast feeding and acute appendicitis. *BMJ* 310: 836-7.
Pisacane, A et al. (1996) Breast feeding and tonsillectomy. *BMJ* 312: 746-747.

Neurological development

Anderson JW et al (1999) Breastfeeding and cognitive development: a meta-analysis. *Am J Clin Nutr* 70: 525-35. [Abstract]
A meta-analysis of observed differences from 20 studies in cognitive development between breast-fed and formula-fed children, which found - after adjustment for appropriate key cofactors - that breastfeeding was associated with significantly higher scores for cognitive development and that the developmental benefits of breastfeeding increased with duration of feeding. After adjustment for covariates, the increment in cognitive function was 3.16 (95% CI: 2.35, 3.98) points. Significantly higher levels of cognitive function were seen in breastfed than in formula-fed children at 6-23 months of age and these differences were stable across successive ages. Low-birth-weight infants showed larger differences (5.18 points; 95% CI: 3.59, 6.77) than did normal-birth-weight infants (2.66 points; 95% CI: 2.15, 3.17).

Lucas A et al. (1992). Breastmilk and subsequent intelligence quotient in children born preterm. *Lancet* 339: 261-264. [Abstract]
300 children who had been born preterm were studied at the age of 7-8 years. After controlling for social class, maternal education, birth weight, gestational age, birth rank, infant sex and maternal age it was discovered that those children who had been fed breast milk in the early weeks of life had an 8.3 point advantage in intelligence quotient (I.Q.) over those who had received artificial milk. This advantage was associated with being fed mother's milk by tube rather than with the process of breastfeeding. There was a dose-response relation between the proportion of breast milk in the diet and subsequent I.Q. Children whose mothers chose to provide breast milk but failed to do so had the same I.Q. as those whose mothers elected to feed artificially.

Morrow-Tlucak M, Haude RH & Ernhart CB (1988). Breastfeeding and cognitive development in the first two years of life. *Soc Sci Med* 26: 71-82. [Abstract]
This study measured cognitive development in children at the age of 2 years. It adjusted for ethnic group, smoking, alcohol consumption, maternal intelligence quotient and attitude. Using the Bayley scale, it showed that those breastfed for four months or less had a 3.7 point advantage over those artificially fed. Those fed for over four months were at a 9.1 point advantage. As with the above study, this study shows a dose response relationship between the duration of breastfeeding and the subsequent I.Q.

Vestergaard M et al (1999) Duration of breastfeeding and developmental milestones during the latter half of infancy. *Acta Paediatr* 88: 1327-32. [Abstract]
Aiming to reduce the role of environmental influence, this study examined infants before 1 year of age. Motor skills and early language development were evaluated at 8 months of age in 1656 healthy, singleton, term infants, with a birth weight of at least 2500g. The proportion of infants who mastered the specific milestones increased consistently with increasing duration of breastfeeding. The relative risk for the highest versus the lowest breastfeeding category was 1.3 (95% CI: 1.0-1.6) for crawling, 1.2 (95% CI: 1.1-1.3) for pincer grip and 1.5 (95% CI: 1.3-1.8) for polysyllable babbling. Little change was found after adjustment for confounding.

Mortensen EL et al (2002). The association between duration of breastfeeding and adult intelligence. *JAMA* 287: 2365-71. [Abstract]
Babies who are breastfed for longest grow up to have significantly increased intelligence as adults according to this study among two samples of Danish adults born between 1959 and 1961.

See also:
Uauy and Peirano (1999) Breast is best: human milk is the optimal food for brain development. *Am J Clin Nutr* 70: 433-434.
Fewtrell MS et al (2002). Double-blind, randomized trial of long-chain polyunsaturated fatty acid supplementation in formula fed to preterm infants. *Pediatrics* 110: 73-82.

Breast cancer

Collaborative Group on Hormonal Factors in Breast Cancer (2002). Breast cancer and breastfeeding: collaborative reanalysis of individual data from 47 epidemiological studies in 30 countries, including 50 302 women with breast cancer and 96 973 women without the disease. *Lancet* 360: 187-95. [Abstract]
A review of 47 breast cancer studies that included information on breastfeeding patterns found that the longer women breastfeed, the more they are protected against breast cancer. The relative risk of breast cancer decreased by 4·3% (95% CI 2·9-5·8; p<0·0001) for every 12 months of breastfeeding. The relative risk remained after controlling for developed versus developing country location, women's age, menopausal status, ethnic origin, parity, her age when her first child was born, or any of nine other personal characteristics examined.
The study group estimate that the cumulative incidence of breast cancer in developed countries would be reduced by more than half (from 6·3 to 2·7 per 100 women by age 70) if women had the average number of births and lifetime duration of breastfeeding that had been prevalent in developing countries until recently. Breastfeeding could account for almost two-thirds of this estimated reduction in breast cancer incidence.

United Kingdom National Case-Control Study Group (1993). Breast feeding and risk of breast cancer in young women. *BMJ* 307: 17-20. [Abstract]
This study of women living in 11 UK health districts matched 755 cases with 675 controls. It showed that the risk of developing breast cancer before the age of 36 was negatively correlated with both the duration of breastfeeding and number of babies breastfed. Adjustment was made for use of oral contraceptives, nulliparity, age at first birth, family history and age at menarche. Cases and controls were similar in respect of marital status, age at leaving school and alcohol consumption.

Newcomb PA et al. (1994). Lactation and a reduced risk of premenopausal breast cancer. *New Engl J Med* 330: 81-87. [Abstract]
This multi-centre trial in the USA included more than 14000 pre- and post-menopausal women. It concluded that breast cancer risk was 22% lower among pre-menopausal women who had ever breastfed than among those who had not. Total duration of lactation was also associated with a reduction in the risk of breast cancer among the pre-menopausal women. The authors of the study estimated that if all women with children breastfed for a total of 4-12 months, breast cancer among pre-menopausal women could be reduced by 11%. In addition, they suggested that if women with children breastfed for a lifetime total of 24 months or longer, the incidence of this form of breast cancer might be reduced by almost 25%.

See also:
Furberg H et al (1999). Lactation and breast cancer risk. *Int J Epidemiol* 28: 396-402.
Layde PM et al (1989) The independent associations of parity, age at first full term pregnancy, and duration of breastfeeding with the risk of breast cancer. Cancer and Steroid Hormone Study Group. *J Clin Epidemiol* 42: 963-73.
Michels KB et al (1996) Prospective assessment of breastfeeding and breast cancer incidence among 89,887 women. *Lancet* 347: 431-6 (this study found no reduced risk).

Ovarian cancer

Rosenblatt KA et al. (1993). Lactation and the risk of epithelial ovarian cancer - The WHO Collaborative Study of Neoplasia and Steroid Contraceptives. *Int J Epidemiol* 22: 499-503 [Abstract]
This multinational study showed a 20-25% decrease in the risk of ovarian cancer among women who lactated for at least 2 months per pregnancy, compared to those who had not. Little or no further decrease in risk was seen with increasing duration of lactation.

See also:
Gwinn ML et al (1990) Pregnancy, breast feeding, and oral contraceptives and the risk of epithelial ovarian cancer. *J Clin Epidemiol* 43: 559-68.

Hip fractures and bone density

Cumming RG & Klineberg RJ (1993). Breastfeeding and other reproductive factors and the risk of hip fractures in elderly women. *Int J Epidemiol* 22: 684-691.
In this study of 311 cases of hip fracture in women over the age of 65 years, it was found that parous women who had not breastfed had twice the risk of hip fracture as nulliparous women and those who had breastfed (after controlling for confounders).

Polatti F et al (1999). Bone mineral changes during and after lactation. *Obstet Gynecol* 94: 52-6.
Among 308 women who breastfed fully for 6 months, bone mineral density decreased during this time, but had increased by 18 months to a level higher than baseline.

See also:
Melton LJ 3d et al (1993) Influence of breastfeeding and other reproductive factors on bone mass later in life. *Osteoporos Int* 3: 76-83.
Sowers M et al (1993) Changes in bone density with lactation. *JAMA* 269: 3130-5.
Kalkwarf HJ, Specker BL (1995) Bone mineral loss during lactation and recovery after weaning. *Obstet Gynecol* 86: 26-32.
Sowers M et al (1995) A prospective study of bone density and pregnancy after an extended period of lactation with bone loss. *Obstet Gynecol* 85: 285-9.
Kalkwarf HJ (1999) Hormonal and dietary regulation of changes in bone density during lactation and after weaning in women. *J Mammary Gland Biol Neoplasia* 4: 319-29.

Other studies of interest (requiring further substantiation) on health benefits for the mother:
Brun JG, Nilssen S, Kvale G (1995) Breast feeding, other reproductive factors and rheumatoid arthritis. A prospective study. *Br J Rheumatol* 34: 542-6.

Risk factors for cardiovascular disease

Toscke AM et al. (2001) Overweight and obesity in 6- to 14-year-old Czech children in 1991: Protective effect of breast-feeding. *J Pediatr* 141: 764-9.
Data were collected in 1991 on 33768 children aged 6 to 14 years in the Czech Republic. Children who had ever been breastfed were less likely to be obese or overweight than those who had never been breastfed. After controlling for parental education, parental obesity, maternal smoking, high birth weight, watching television, number of siblings and physical activity, the adjusted odds ratio for breastfeeding were 0.80 for being overweight (95% CI, 0.71 to 0.90) and 0.80 for being obese (95% CI, 0.66 to 0.96).

von Kries R et al. (1999) Breastfeeding and obesity: cross sectional study. *BMJ* 319: 147-150.
In a study of 9357 German five and six year old children, those who had never been breastfed were more likely to be overweight or obese than those who had been breastfed. A dose response effect was identified - 4.5% of children who had never been breastfed were obese compared with 2.3% of children breastfed for 3-5 months, 1.7% of children breastfed for 6-12 months and 0.8% of children breastfed for more than 12 months. After adjusting for potential confounding factors, breastfeeding remained a significant protective factor against the development of obesity (odds ratio 0.75, 95% CI 0.57 to 0.98) and being overweight (0.79, 0.68 to 0.93). The study authors note that obese children have a high risk of becoming obese adults and suggest that increased breastfeeding duration may eventually result in a reduction in the prevalence of cardiovascular diseases and other diseases related to obesity.

Ravelli AC et al (2000) Infant feeding and adult glucose tolerance, lipid profile, blood pressure, and obesity. *Arch Dis Child* 82: 248-52.
Of 625 subjects aged 48-53 years born around the time of a severe period of famine in Amsterdam (1944-45), those were bottle fed at hospital discharge had greater risk factors for cardiovascular disease than those who were exclusively breast fed. They had a higher mean 120 minute plasma glucose concentration after a standard oral glucose tolerance test, a higher plasma low density lipoprotein (LDL) cholesterol concentration, a lower high density lipoprotein (HDL) cholesterol concentration, and a higher LDL/HDL ratio. Systolic blood pressure and body mass index were not affected by the method of infant feeding.

Armstrong J et al (2002). Breastfeeding and lowering the risk of childhood obesity. *Lancet* 359: 2003-04.
A study of 32200 Scottish children aged 39-42 months found that the prevalence of obesity was significantly lower among those who had been breastfed, after adjusting for socioeconomic status, birthweight and gender (odds ratio 0.70, 95% CI 0.61-0.80).

See also:
Gillman MW et al (2001). Risk of overweight among adolescents who were breastfed as infants. *JAMA* 285: 2461-7.
Hediger ML et al (2001). Association between infant breastfeeding and overweight in young children. *JAMA* 285: 2453-60.
Wilson AC et al. (1998). Relation of infant diet to childhood health: seven year follow up cohort of children in Dundee infant feeding study. *BMJ* 316: 21-25. (summarised above)
Marmot MG et al (1980) Effect of breast-feeding on plasma cholesterol and weight in young adults. *J Epidemiol Community Health* 34: 164-7.
Stettler N et al (2002). Infant weight gain and childhood overweight status in a multicenter, cohort study. *Pediatrics* 109: 194-9.

Childhood cancers

Shu XO et al (1999) Breast-feeding and risk of childhood acute leukemia. *J Natl Cancer Inst* 91: 1765-72.
Information regarding breastfeeding was obtained through telephone interviews with mothers of 1744 children with acute lymphoblastic leukaemia (ALL) and 1879 matched control subjects, aged 1-14 years, and of 456 children with acute myeloid leukaemia (AML) and 539 matched control subjects, aged 1-17 years. Ever having breastfed was found to be associated with a 21% reduction in risk of childhood acute leukaemia (odds ratio [OR] for all types combined = 0.79; 95% confidence interval [CI] = 0.70-0.91). The inverse associations were stronger with longer duration of breastfeeding. The authors acknowledge the need for further investigation.

Mathur GP et al (1993) Breastfeeding and childhood cancer. *Indian Pediatr* 30: 651-7.
Total duration of breastfeeding and of exclusive breastfeeding was studied and compared in 99 childhood cancer cases and 90 controls. The difference between the average duration of breastfeeding in cases and controls was significant for all cancers ($p<0.05$) and for lymphoma ($p<0.01$). When average duration of exclusive breastfeeding was compared, the difference was highly significant for all cancers ($p<0.001$) and for lymphoma ($p<0.001$). Cases and controls were not different with respect to their age, sex, birth year, birth order, age and educational status of mothers, smoking of fathers and socioeconomic status but a positive family history of cancer was present in 4 cases compared with only 1 control.

See also:
Davis MK (1998) Review of the evidence for an association between infant feeding and childhood cancer. *Int J Cancer Suppl* 11: 29-33.

Breastfeeding, bed-sharing and cot death (SIDS)

Research has found associations between breastfeeding and reduced risk of Sudden Infant Death Syndrome (SIDS or cot death) as well as between bed-sharing and successful breastfeeding. Babies sharing a bed with their mother are at greater risk of cot death if a parent smokes, but there is no increased risk for non-smokers.

Blair PS et al (1999) Babies sleeping with parents: case-control study of factors influencing the risk of sudden infant death syndrome. *BMJ*319: 1457-62.
A three year, case-control study of 325 babies who died and 1300 control infants concluded that there is no association between infants sharing the parental bed and an increased risk of sudden infant death syndrome among parents who do not smoke or infants older than 14 weeks.
There was an increased risk for infants who shared the bed for the whole sleep or were taken to and found in the parental bed (9.78, 95% CI: 4.02 - 23.83), but which was not significant for infants of parents who did not smoke or for older infants (>14 weeks). This risk also became non-significant after adjustment for recent maternal alcohol consumption (>2 units), use of duvets (>4 togs), parental

tiredness (infant slept 4 hours for longest sleep in previous 24 hours), and overcrowded housing conditions (>2 people per room of the house). Infants who slept in a separate room from their parents were at greater risk (10.49; 4.26 - 25.81), as were infants who co-slept with a parent on a sofa (48.99; 5.04 - 475.60).

See also:
Klonoff-Cohen H, Edelstein SL (1995) Bed sharing and the sudden infant death syndrome. *BMJ* 311: 1269-72.

Ford RP et al (1993) Breastfeeding and the risk of sudden infant death syndrome. *Int J Epidemiol* 22: 885-90.
The New Zealand Cot Death Study reviewed data on 356 infant deaths classified as SIDS and 1529 control infants over 3 years. Cases stopped breastfeeding sooner than controls: by 13 weeks, 67% controls were breastfed versus 49% cases. A reduced risk for SIDS in breastfed infants persisted during the first 6 months after controlling for confounding demographic, maternal and infant factors. Infants exclusively breastfed at discharge from hospital (OR = 0.52, 95% CI: 0.35-0.71) and during the last 2 days (OR = 0.65, 95% CI: 0.46-0.91) had a significantly lower risk of SIDS than infants not breastfed.

Klonoff-Cohen HS et al (1995) The effect of passive smoking and tobacco exposure through breast milk on sudden infant death syndrome. *JAMA* 273: 795-8.
A total of 200 parents of infants who died of SIDS between 1989 and 1992 were compared with 200 control parents who delivered healthy infants. There was an increased risk of SIDS associated with passive smoking (OR = 3.50 [95% CI, 1.81 to 6.75]). Breast-feeding was protective for SIDS among nonsmokers (OR = 0.37) but not smokers (OR = 1.38), after adjusting for potential confounders.

See also:
Alm B et al (2002). Breast feeding and the sudden infant death syndrome in Scandinavia, 1992-95. *Arch Dis Child* 86: 400-402.
Gilbert RE et al (1995) Bottle feeding and the sudden infant death syndrome. *BMJ* 310: 88-90. (bottle feeding found not to be associated with increased risk)
McVea KLSP et al (2000) The role of breastfeeding in sudden infant death syndrome. *J Hum Lact* 16: 13-20.

Hooker E, Ball HL, Kelly PJ (2001). Sleeping like a baby: attitudes and experiences of bedsharing in northeast England. *Med Anthropol* 19: 203-222.
An anthropological investigation in the north-east of England found that 65% of parents practiced co-sleeping with their infants, finding it a convenient care strategy. Breastfeeding was significantly associated with co-sleeping.

McKenna JJ, Mosko SS, Richard CA (1997). Bedsharing promotes breastfeeding. *Pediatrics*100: 214-9.
The effect of mother-infant bed-sharing on nocturnal breastfeeding behaviour was studied in 20 routinely bedsharing and 15 routinely solitary sleeping mother-infant pairs when the infants were 3 to 4 months old. All pairs were healthy and exclusively breastfeeding at night. The most important finding was that routinely bed-sharing infants breastfed approximately three times longer during the night than infants who routinely slept separately: this reflected a two-fold increase in the number of breastfeeding episodes and 39% longer episodes. The authors suggest that, by increasing breastfeeding, bedsharing might be protective against SIDS, at least in some contexts.

See also:
Mosko S, Richard C, McKenna J (1997). Infant arousals during mother-infant bed sharing: implications for infant sleep and sudden infant death syndrome research. *Pediatrics* 100: 841-9.
Ball HL, Hooker E, Kelly PJ (1999). Where will the baby sleep? Attitudes and practices of new and experienced parents regarding co-sleeping with their newborn infants. *American Anthropologist* 101: 143-51.
UNICEF UK Baby Friendly Initiative's Sample policy on bed sharing.

HIV-1 transmission

The HIV virus can be transmitted through breastfeeding. Unfortunately, most research has failed to define exclusive breastfeeding properly, with many studies comparing risk of infection between formula fed babies and babies receiving *any* breast milk. The first study to compare properly-defined exclusive breastfeeding with mixed feeding and artificial feeding found no significant difference in HIV infection between breastfed and artificially-fed babies.

Coutsoudis A et al. (1999) Influence of infant-feeding patterns on early mother-to-child transmission of HIV-1 in Durban, South Africa: a prospective cohort study. *Lancet* 354: 471-476.
Babies born to 549 HIV-1-infected South African women were assessed at 3 months of age. After adjustment for potential confounders, exclusive breastfeeding carried a significantly lower risk of HIV-1 transmission than mixed feeding (hazard ratio 0.52 [95% CI 0.28-0.98]) and a similar risk to no breastfeeding (0.85 [0.51-1.42]). The authors call for further research but point out that exclusively breastfed babies had a (non-significant) lower probability of infection than those never breastfed and suggest that this may be due to virus acquired during delivery being neutralised by immune factors in breast milk. They propose that mixed feeding carries the highest risk due to the beneficial immune factors in breast milk being counteracted by damage to the infant's gut and disruption of immune barriers caused by contaminants in mixed feeds.

There is an editorial on this subject in the same issue of the Lancet (Newell M-L (1999) Infant feeding and HIV-1 transmission. *Lancet* 354: 442-3) and correspondence in a subsequent issue (Infant feeding patterns and HIV-1 transmission. *Lancet* 354: 1901-1904).

Coutsoudis A et al. (2001) Method of feeding and transmission of HIV-1 from mothers to children by 15 months of age: prospective cohort study from Durban, South Africa. *AIDS* 15: 379-87.
Babies of HIV-infected mothers who were breastfed exclusively for three months or more were found to be at no greater risk of HIV infection during the first six months than those never breastfed. 551 HIV-infected mothers and their babies were included in the study. Exclusive breastfeeding, defined as a time dependent variable, carried a significantly lower risk of HIV infection than mixed feeding (hazard ratio 0.56, 95% CI 0.32-0.98, p=0.04) and a similar risk to no breastfeeding (HR 1.19, 95% CI 0.63-2.22, p=0.59). The authors suggest that other foods and fluids introduced to the gut of mixed-fed babies damage the bowel and facilitate the entry into the body tissues of the HIV present in these mothers' breast milk. This is supported by the finding that, if mothers continued to breastfeed along with other foods once the period of exclusive breastfeeding had ended, new HIV infections began to occur. The investigators call for further research.

See also:
Coutsoudis A et al (2002). Free formula milk for infants of HIV-infected women: blessing or curse? *Health Policy and Planning* 17: 154-160.
Nicoll A, Newell ML, Peckham C, Luo C, Savage F (2000) Infant feeding and HIV-1 infection. *AIDS* 14: Suppl 3: S57-74.
Latham MC, Preble EA (2000) Appropriate feeding methods for infants of HIV infected mothers in sub-Saharan Africa. *BMJ* 320: 1656-1660.
Information on single bottle pasteurisers

Dental health

Labbok MH, Hendershot GE (1987) Does breastfeeding protect against malocclusion? An analysis of the 1981 Child Health Supplement to the National Health Interview Survey. *Am J Prev Med* 3: 227-32.
Data on 9698 children aged between 3 and 17 years were analysed retrospectively to assess the association between breastfeeding and dental malocclusion. After controlling for confounding factors, increased duration of breastfeeding was associated with a decline in the prevalence of malocclusion.

Palmer B (1998) The influence of breastfeeding on the development of the oral cavity: a commentary. *J Hum Lact* 14:93-8.
An investigation of 600 skulls preserved from ancient cultures in US museums found that nearly all had perfect occlusions (correct alignment of teeth, allowing a proper bite). As the skulls were from people living before the advent of artificial feeding, they would all have been breastfed. The author notes that good occlusion and well formed dental arches were much less common among his own dental patients and among a sample of modern skulls studied.

See also:
Paunio P, Rautava P & Sillanpaa M. (1993) The Finnish Family Competency Study: the effects of living conditions on sucking habits in 3-year old Finnish children and the association between these habits and dental occlusion. *Acta Odontol Scand* 51: 23-29.
Ogaard B, Larsson E & Lindsten R (1994) The effect of sucking habits, cohort, sex, intercanine arch widths and breast or bottle feeding on posterior crossbite in Norwegian and Swedish 3-year old children. *Amer J Ortho & Dentofac Orthopedics* 106: 161-66.
Valaitis R et al. (2000) A systematic review of the relationship between breastfeeding and early childhood caries. *Can J Public Health* 91: 411-7.

Reviews of the benefits of breastfeeding

American Academy Work Group on Breastfeeding (1997). Policy Statement on Breastfeeding and the use of human milk. *Pediatrics* 100: 1035-9.

Heinig M J & Dewey K G (1997). Health effects of breastfeeding for mothers: a critical review. *Nutrition Research Reviews* 10: 35-56.

Heinig M J & Dewey K G (1996). Health advantages of breastfeeding for infants: a critical review. *Nutrition Research Reviews* 9: 89-110.

Standing Committee on Nutrition of the British Paediatric Association (1994). Is breastfeeding beneficial in the UK? *Arch Dis Child* 71: 376-380.

Session 3: The Baby-friendly Hospital Initiative

Objectives

At the conclusion of this session, participants will be able to:

- Describe the history and implementation of the WHO/UNICEF Baby-friendly Hospital Initiative (BFHI) and relevant experience of participants in their institutions and country.
- Describe the guidelines health facilities should follow related to the International Code of Marketing of Breast-milk Substitutes.
- Describe the WHO/UNICEF Global Criteria and the Self-appraisal Tool.
- Describe the BFHI assessment and designation process.
- Discuss the importance of monitoring and reassessing adherence to the “10 steps”.
- Discuss the health facility decision-maker's role in supporting the BFHI.
- Discuss key aspects of the Global Strategy for IYCF and BFHI’s role within it.

Duration

Total: 1 hour

Teaching methods

Presentation
Discussion
Video or slide show (optional)

Preparation for session

- Work with the national breastfeeding coordinator and committee and/or WHO and UNICEF country and regional offices to prepare up-to-date information on the status of BFHI nationally, including transparencies if possible.
- Collect examples of completed self-appraisal tools to gain a general understanding of the BFHI status of health facilities in the country. Make sure that the information on particular hospitals is kept confidential.

- Review the Global Criteria, self-appraisal tool, and assessment and reassessment processes, in preparation for a brief presentation during the session. A copy of the revised Global Criteria and self appraisal tool is attached as Handouts 3.4 and 3.5. Information and links for downloading the revised BFHI course and assessment documents are available at the UNICEF website, http://www.unicef.org/nutrition/index_24850.html?q=printme.

- Review the WHO/UNICEF document, *Global Strategy for Infant and Young Child Feeding.* Geneva, Switzerland, 2003. (http://www.who.int/nutrition/publications/infantfeeding/en/index.html; http://www.who.int/child-adolescent-health/NUTRITION/global_strategy.htm). Read in particular sections 30, 31 and 34, pages 13-19, which focus on the importance of continuing to support the *Baby-friendly Hospital Initiative* and implementation of the *Ten Steps to Successful Breastfeeding*, as well as monitoring and reassessing facilities that are already designated and expanding the Initiative to include clinics, health centres, and paediatric hospitals.

Training materials

Handouts

3.1 Presentation for session 3
3.2 Breastfeeding: An issue on the world's agenda
3.3 The International Code of Marketing of Breast-milk Substitutes: summary of main points
3.4 *Baby-friendly Hospital Initiative, Section 1 Background and Implementation, Section 1.2: Hospital Level Implementation, and Section 1.3: The Global Criteria for the BFHI*, WHO and UNICEF, 2008. (http://www.unicef.org/nutrition/index_24850.html?q=printme).
3.5 *Baby-friendly Hospital Initiative, Section 4 Hospital Self-Appraisal and Monitoring, 4.1: The Hospital Self-Appraisal Tool*, WHO and UNICEF, 2008, (http://www.unicef.org/nutrition/index_24850.html?q=printme)
3.6 WHO/UNICEF breastfeeding and young child feeding courses
3.7 The Baby-friendly Hospital Initiative: Guidelines and Tools for Monitoring and Reassessment

Slides/Transparencies

3.1 Goals of the Baby-friendly Hospital Initiative
3.2-3 Ten steps to successful breastfeeding
3.4-5 Key dates in the history of breastfeeding and BFHI
3.6-12 The International Code: Summary and role of Baby-friendly hospitals
3.13 The route to Baby-friendly designation
3.14-15 Differences between monitoring and reassessment
3.16-17 The role of the hospital administrator in BFHI
3.18-21 The Global Strategy for IYCF and the further strengthening of BFHI

The website featuring this Course contains links to the slides and transparencies for this session in two Microsoft PowerPoint files. The slides (in colour) can be used with a laptop computer and LCD projector, if available. Alternatively, the transparencies (in black and white) can be printed out and copied on acetates and projected with an overhead projector. The transparencies are also reproduced as the first handout for this session, with 6 transparencies to a page.

Additional materials to be distributed

The following documents, which can be purchased from the World Health Organization, Geneva or the appropriate WHO regional office, should be distributed to all participants:

- *Protecting, Promoting and Supporting Breastfeeding: The Special Role of Maternity Services. A Joint WHO/UNICEF Statement.* World Health Organization, Geneva, 1989.
- *The International Code of Marketing of Breast-milk Substitutes*. World Health Organization, Geneva, 1981.

Suggested additional audio-visual programmes

- Slide set or video on "Baby-friendly" in the country or region where the course is being given (optional, if available).

References

Global Strategy for Infant and Young Child Feeding. Geneva, World Health Organization, 2003. (http://www.who.int/nutrition/publications/infantfeeding/en/index.html; http://www.who.int/child-adolescent-health/NUTRITION/global_strategy.htm).

Global strategy for infant and young child feeding: The optimal duration of exclusive breastfeeding. Fifty-fourth World Health Assembly, Provisional agenda item 13.1, A54/INF.DOC./4. Geneva, World Health Organization, 1 May 2001. (http://www.who.int/gb/EB_WHA/PDF/WHA54/ea54id4.pdf).

Horton S, Sanghvi T, Phillips M, Fiedler J, Perez-Escamilla. Breastfeeding promotion and priority setting in health. *Health Policy and Planning,* 1996, 11(2):156-168.

International Baby Food Action Network. *Protecting infant health: A health workers' guide to the international code of marketing of breast-milk substitutes.* 7th ed. Penang, Malaysia, IBFAN, 1993.

International code of marketing of breast-milk substitutes. Geneva, World Health Organization, 1981.

Kramer MS, Kakuma R. *The optimal duration of exclusive breastfeeding A systematic review.* Geneva, World Health Organization, 2002 (WHO/NHD/01.08; WHO/FCH/CAH/01.23).

New data on the prevention of mother-to-child transmission of HIV and their policy implications. Conclusions and recommendations. WHO technical consultation on behalf of the UNFPA/UNICEF/WHO/UNAIDS Inter-Agency Task Team on Mother-to-Child Transmission of HIV. Geneva, 11-13 October 2000. Geneva, World Health Organization, 2001 (WHO/RHR/01.28).

Protecting, promoting and supporting breastfeeding: The special role of maternity services. A joint WHO/UNICEF statement. Geneva, World Health Organization, 1989.

Report of the expert consultation on the optimal duration of exclusive breastfeeding, Geneva, Switzerland, 28-30 March 2001. Geneva, World Health Organization, 2001 (WHO/NHD/01.09; WHO/FCH/CAH/01.24).

Resolution WHA 39.28: Infant and Young Child Feeding. Geneva, World Health Organization, 1992.

Resolution WHA 47.5: Infant and Young Child Nutrition. Geneva, World Health Organization, 1994.

Saadeh R et al., eds. *Breastfeeding: the technical basis and recommendations for action.* Geneva, World Health Organization, 1993 (WHO/NUT/MCH/93.1).

The Baby-friendly Hospital Initiative: Revised, Updated and Expanded for Integrated Care, Section 1: Background and Implementation; Section 2: Strengthening and sustaining BFHI: A course for decision-makers; Section 3:Breastfeeding Promotion and Support in a Baby-friendly Hospital; a 20-hour course; Section 4:Hospital Self-Appraisal and Monitoring; Section 5: External Assessment and Reassessment, New York, New York, UNICEF, and Geneva, WHO, 2008. (http://www.unicef.org/nutrition/index_24850.html?q=printme).

The International Code of Marketing of Breast-milk Substitutes: Frequently Asked Questions, Geneva, World Health Organization, 2006. (http://www.who.int/child-adolescent-health/publications/NUTRTION/ISBN_92_4_159429_2.htm).

Additional information from regional/country offices, national breastfeeding committees, local Wellstart Associates, IBFAN groups, or other sources.

Outline

Content	Trainer's Notes
1. The Baby-friendly Hospital Initiative (BFHI) - Description and key dates ■ BFHI is a global movement, spearheaded by WHO and UNICEF that aims to give every baby the best start in life by creating a health care environment where breastfeeding is the norm.	Mention that a mini-version of the presentation is reproduced in Handout 3.1 and included in the participants' folder.
■ BFHI has two main goals: ▪ To transform hospitals and maternity facilities through implementation of the "Ten Steps". ▪ To end the practice of distribution of free and low-cost supplies of breast-milk substitutes to maternity wards and hospitals.	Show slide/transparency 3.1.
■ The joint WHO/UNICEF statement on breastfeeding and maternity services has become the centrepiece for the BFHI. Maternity wards and hospitals applying the principles described in the joint statement are being designated Baby-friendly to call public attention to their support for sound infant feeding practices.	Refer participants to the Joint Statement, which they have received as a handout for the course. Describe briefly the information included in the booklet.
■ The "Ten steps to successful breastfeeding" are a convenient yardstick to measure the standards of maternity services.	Show slides/transparencies 3.2 and 3.3. Mention that the Ten Steps are listed in the Joint Statement.
■ Brief background, reviewing steps in the history and development of the BFHI and related events: **1979** - Joint WHO/UNICEF Meeting on Infant and Young Child Feeding (Geneva) **1981** - Adoption of the International Code of Marketing of Breast-milk Substitutes **1989** - Protecting, Promoting and Supporting Breastfeeding: The Special Role of Maternity Services. A Joint WHO/UNICEF Statement	Show slides/transparencies 3.4 and 3.5. Refer participants to Handout 3.2 "Breastfeeding - An issue on the world's agenda", which describes this history in more detail. Mention that the Innocenti Declaration included four targets – the appointment of a national breastfeeding coordinator and establishment of a multisectoral national breastfeeding committee, ensuring that every facility providing maternity services fully practices all "Ten Steps" set out in the Joint WHO/UNICEF Statement, taking action to give effect to the principles and aim of the International Code of Marketing of Breast-Milk Substitutes, and enacting imaginative legislation protecting the breastfeeding rights of working

Content	Trainer's Notes
Convention on the Rights of the Child **1990** - Innocenti Declaration - World Summit for Children **1991** - Launching of the Baby-friendly Hospital Initiative **2000** - WHO Expert Consultation on HIV and Infant Feeding **2001 -** WHO Consultation on the optimal duration of exclusive breastfeeding (about 6 months) **2002 -** Endorsement of the Global Strategy for Infant and Young Child Feeding by World Health Assembly **2005 -** Innocenti Declaration 2005 **2007 -** Revision of the BFHI documents	women and establishing means for its enforcement. Enforcement of the Code and implementation of the "Ten Steps" were key to the BFHI, launched two years later. In 2005 a follow-up Declaration stressed the importance of revitalizing BFHI, expanding it, and identifying sufficient resources for its continuation. As part of the effort to revitalize BFHI and expand it, the BFHI documents were revised in 2007, with updated information and new modules related to HIV and infant feeding and mother-friendly care. This session will explore the key components of the Code of Marketing and Baby-friendly Hospital Initiative and the role hospital administrators can play in supporting both the Code and BFHI. In many settings with high HIV prevalence there is a need to address issues related to HIV within the Baby-friendly Initiative. These issues are addressed in this course in Sessions 4 and 5. The launching of the Global Strategy for Infant and Young Child Feeding will be reviewed at the end of the session, exploring how it reinforces the importance of both the Code and the "Ten Steps" of BFHI.
2. International Code of Marketing of Breast-milk Substitutes – summary and the role of Baby-friendly hospitals	Note: This overview on "The Code" can come here or later in the session (following the discussion of monitoring and reassessment or at the end) if it will be given by a different presenter. Show slide/transparency 3.6.
■ **Aim** - The aim of the Code is to contribute to the provision of safe and adequate nutrition for infants, by the protection and promotion of breastfeeding, and by ensuring the proper use of breast-milk substitutes, when these are necessary, on the basis of adequate information and through appropriate marketing and distribution. ■ **Scope** - The Code applies to the marketing, and practices related thereto, of the following products: breast-milk substitutes, including infant formula; other milk products, foods and beverages,	Show slides/transparencies 3.7 and 3.8. Refer participants to the *International Code of Marketing of Breast-milk Substitutes*

Content	Trainer's Notes
including bottle-fed complementary foods, when marketed or otherwise represented to be suitable, with or without modification, for use as a partial or total replacement of breast milk; feeding bottles and teats. It also applies to their quality and availability, and to information concerning their use. ■ WHO and UNICEF are striving to put an end to the distribution of free and low-cost supplies of products within the scope of the International Code anywhere in the health care system.	
■ Main points in the International Code include: ▪ No advertising of breast-milk substitutes and other products to the public. ▪ No donations of breast-milk substitutes and supplies to maternity hospitals. ▪ No free samples to mothers. ▪ No promotion in the health services. ▪ No company personnel to advise mothers. ▪ No gifts or personal samples to health workers. ▪ No use of space, equipment or educational materials sponsored or produced by companies when teaching mothers about infant feeding. ▪ No pictures of infants or other pictures idealizing artificial feeding on the labels of the products. ▪ Information to health workers should be scientific and factual. ▪ Information on artificial feeding, including that on labels, should explain the benefits of breastfeeding and the costs and dangers associated with artificial feeding.	Show slides/transparencies 3.9 and 3.10. Refer participants to handout 3.3, "The International Code of Marketing of Breast-milk Substitutes: Summary of main points" which presents the main provisions of the International Code and their rationale.

<table>
<tr><th>Content</th><th>Trainer’s Notes</th></tr>
<tr><td>Unsuitable products, such as sweetened condensed milk, should not be promoted for babies.</td><td></td></tr>
<tr><td>■ Cessation of free and low-cost supplies is an essential element for achieving baby-friendly status. Baby-friendly hospitals and their administrators and staff have an important role to play in upholding the Code:
Free or low-cost supplies of breast-milk substitutes should not be accepted in health care facilities.
Breast-milk substitutes should be purchased by the health care facility in the same way as other foods and medicines, for at least wholesale price.
Promotional material for infant foods or drinks other than breast milk should not be permitted in the facility.
Pregnant women should not receive materials that promote artificial feeding.
Feeding with breast-milk substitutes should be demonstrated by health workers only, and only to pregnant women, mothers, or family members who need to use them.
Breast-milk substitutes in the health facility should be kept out of the sight of pregnant women and mothers.
The health facility should not allow sample gift packs with breast-milk substitutes or related supplies that interfere with breastfeeding to be distributed to pregnant women or mothers.
Financial or material inducements to promote products within the scope of the Code should not be accepted by health workers or their families.
Manufacturers and distributors of products within the scope of the Code should disclose to the institution any contributions made to health workers such as fellowships, study tours, research grants, conferences, or the like. Similar disclosures should be</td><td>Show slides/transparencies 3.11 and 3.12 and review the guidelines listed.

Mention that samples include all products that might interfere with the successful initiation and establishment of breastfeeding, such as feeding bottles, teats, pacifiers, infant formula and other kinds of formula such as preterm formula.</td></tr>
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Content	Trainer's Notes
made by the recipient.	
■ Discussion of current marketing tactics of formula companies in the participants' health facilities and how to deal with them.	Ask the participants what kind of marketing tactics formula companies are currently using in their hospitals and what suggestions they have for dealing with them.
3. WHO/UNICEF Global Criteria for BFHI ■ Description of how the Global Criteria used in the BFHI assessment process were developed: ▪ Challenge of finding objective methods for measuring each of the Ten Steps. Importance of questioning mothers and observing hospital practices. ▪ The Global Criteria were used to develop both the Self-appraisal Tool and tools for the external assessment process. ▪ The Global Criteria, self-appraisal tool, course and assessment tools were revised in 2007. They now include criteria and modules related to mother-friendly childbirth practices and HIV and infant feeding. ▪ Importance of using the Global Criteria versus nationally developed criteria.	Refer participants to handout 3.4 *Baby-friendly Hospital Initiative, Section 1 Background and Implementation,* WHO and UNICEF, revised 2008, which includes a copy of the Global Criteria. Ask the participants to look at the criteria and discuss a few of them.
4. Use of the WHO/UNICEF Hospital Self-appraisal Tool ■ The Hospital Self-appraisal Tool can be used by a health facility to take a quick initial look at where it is in the process of creating an institutional environment supportive of breastfeeding. It includes simple "yes" or "no" answers and does not require interviews with mothers or staff. Hospitals and health facilities can apply it themselves without an external assessor. ■ If most answers to the self-appraisal tool are "yes" and at least 75% of the mothers who delivered in the last year exclusive breastfed from birth to discharge or, if not, it was because of acceptable medical reasons, the hospital may wish to consider taking further steps towards being	Ask participants to take a brief look at the Self-Appraisal Tool which is included in Handout 3.5, "*Baby-friendly Hospital Initiative, Section 4: Hospital Self-Appraisal and Monitoring*." Indicate that the questions were developed to provide an initial determination (through self-appraisal) of how well the hospital meets the criteria for each of the Ten Steps. It also includes questions on The Code of Marketing, mother-friendly care, and HIV and infant feeding. Pass out an extra copy of the self-appraisal tool (Handout 3.5) to each health facility team. Ask the participants to get together with others from their health facility and fill out the self-appraisal tool before the first session in the morning (unless they filled it in before coming to the course and/or brought it with them). Each group will analyze its results and share them during the session on "Appraising policies and practices" (Session 7).

<table>
<tr><th>Content</th><th>Trainer's Notes</th></tr>
<tr><td>assessed by an external team and, if it passes, being designated as baby-friendly.

■ A hospital with many "no" answers to the self-appraisal questions or with low exclusive breastfeeding may wish to develop a plan of action for making changes which will lead to more successful support of breastfeeding. When improvements have been made the hospital can conduct another self-appraisal and ask for an external assessment, if ready.</td><td>Note: If it will flow better, Session 7 on "Appraising policies and practices" can be given following Session 3, giving the participants a chance to assess how their own facilities are doing on implementing the Ten Steps before Sessions 4 and 5.</td></tr>
<tr><td>5. Hospital assessment and designation

■ The process generally includes the following steps:

▪ Request by hospital for external assessment.

▪ Assessment, usually requiring a team of 2-4 trained assessors for 1 to 2 days depending on the size of the hospital.

▪ Informal report and feedback of general results to hospital representatives, including achievements and steps still needing further work.

▪ Report of results and recommendations to the national BFHI coordination group that makes the final decisions concerning status of hospitals.

▪ Designation of hospital as baby-friendly or award of a Certificate of Commitment.

▪ If hospital still needs to make changes, collaboration with national BFHI coordination group to determine technical support needed.</td><td>Show slide/transparency 3.13 "The Route to Baby- friendly Designation" and discuss the process. (If the process is somewhat different in your country, adapt accordingly.)

Emphasize that all Ten Steps need to be fulfilled (not 8 out of 10, for example) and that no free or low-cost supplies of products within the scope of the International Code are allowed. The criteria on mother-friendly care also need to be met, after facilities have had a chance to train their staff on this component. If the national authority decided that the HIV criteria should be included in the Initiative, these criteria should be met as well.

Discuss the fact that the "Certificate of Commitment" is issued to a hospital that, upon official assessment, is not yet found to be fully complying with the standard, i.e. the Global Criteria. This means that the hospital is committed within a specific period of time to draw up a plan of action and make the required changes so as to become truly baby-friendly.</td></tr>
<tr><td>6. BFHI training

■ Most hospitals will need to arrange for further training of its staff as part of the process of becoming baby-friendly. At least 20 hours of training on breastfeeding</td><td></td></tr>
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Content	Trainer's Notes
promotion and support is usually needed, including a minimum of three hours of supervised clinical experience.	
■ UNICEF, WHO and other groups have developed training materials which can be used for training staff. These courses are listed on a one-page summary.	Refer participants to Handout 3.6 "WHO/UNICEF Breastfeeding Courses." Mention that the materials for training maternity services staff have been revised and that the updated "20-hour course", "Section 3: Breastfeeding Promotion and Support in a Baby-Friendly Hospital, is available on the UNICEF website, http://www.unicef.org/nutrition/index_24850.html?q=printme Mention any support for training that may be available from the regional or country UNICEF offices or through the national authority for IYCF or BFHI coordination group.
7. Monitoring and reassessment ■ Once a hospital has been designed Baby-friendly it is important to maintain the hospital's support for successful breastfeeding. ■ Monitoring and/or reassessing the hospital's adherence to the Ten Steps can help administrators and staff members determine how they are doing and where further work may be needed to maintain standards. ■ Monitoring can either be instituted by the hospital itself or can be arranged by the national BFHI coordination group. ■ Reassessment is usually an external process, much like the original assessment, but often not as extensive.	
■ There are several key differences between monitoring and reassessment.	Show slides/transparencies 3.14 and 3.15.
■ The BFHI guidelines and tools for monitoring and reassessing baby-friendly hospitals were revised in early 2007 and are available as part of the updated BFHI documents. ■ Guidelines and tools for monitoring are	Pass out Handout 3.7, a description of WHO/UNICEF's monitoring and reassessment guidelines and tools, and briefly go over the contents and how the tools can be used.

Content	Trainer's Notes
included in BFHI Section 4, Hospital Self-Appraisal and Monitoring, Section 4.2. Guidelines and a tool for reassessment are included in BFHI Section 5: External Assessment and Reassessment, Section 5.3.	
8. The role of the hospital administrator in BFHI ■ Become familiar with the BFHI process. ■ Decide where responsibility for BFHI lies within the hospital structure. This can be a coordinating committee, working group, multidisciplinary-team, etc. ■ Establish the process within the hospital for working with the identified responsible body. ■ Work with key hospital staff to fill in the self-appraisal tool using the Global Criteria and interpret results. ■ Support staff in decisions taken to achieve 'baby-friendliness'. ■ Facilitate any BFHI-related training that may be needed. ■ Collaborate with the national BFHI coordination group and ask for an external assessment team when the hospital is ready for assessment. ■ Encourage staff to sustain adherence to the Ten Steps, arranging for refresher training and periodic monitoring and reassessment.	Show slides/transparencies 3.16 and 3.17. Mention that in situations where there is high HIV prevalence, hospital administrators need to consider additional issues, as they implement BFHI. These issues will be explored in Sessions 4 and 5.

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9. The Global Strategy for Infant and Young Child Feeding

The Global Strategy for Infant and Young Child Feeding aims to revitalize efforts to promote, protect and support appropriate infant and young child feeding.

- It builds upon past initiatives, in particular the Innocenti Declaration and the Baby-friendly Hospital Initiative and addresses the needs of all children including those living in difficult circumstances, such as infants of mothers living with HIV, low-birth-weight infants and infants in emergency situations.

Its aim is "to improve – through optimal feeding – the nutritional status, growth and development, health, and thus the survival of infants and young children".

</td><td>Show slide/transparency 3.18.</td></tr>
<tr><td>

- The strategy reaffirms the relevance and urgency of the operational targets of the Innocenti Declaration, including the implementation of the "Ten steps to successful breastfeeding" in all maternity services and giving effect to the principles and aim of the International Code, which formed the basis for BFHI.
- The strategy has five additional operational targets, asking that all governments:
  - Develop, implement, monitor and evaluate a comprehensive policy on IYCF.
  - Ensure that the health and other relevant sectors protect, promote and support exclusive breastfeeding for six months and continued breastfeeding up to two years of age or beyond, while providing women access to the support they require.
  - Promote timely, adequate, safe and appropriate complementary feeding with continued breastfeeding.
  - Provide guidance on feeding infants and young children in exceptionally difficult circumstances.

</td><td>Show slide/transparency 3.19.</td></tr>
</table>

Content	Trainer's Notes
▪ Consider what new legislation or other suitable measures may be required, as part of a comprehensive policy on infant and young child feeding, to give effect to the principles and aim of the International Code of Marketing of Breast-milk Substitutes and to subsequent relevant Health Assembly resolutions. (see full wording of targets in *Global Strategy*)	
■ The Global Strategy stresses "that hospital routines and procedures (should) remain fully supportive of the successful initiation and establishment of breastfeeding through implementation of the Baby-friendly Hospital Initiative, monitoring and reassessing already designated facilities, and expanding the Initiative to include clinics, health centres and paediatric hospitals." ■ It also urges that support be given for feeding infants and young children in exceptionally difficult circumstances, with one aspect of this being to adapt the BFHI by taking account of HIV/AIDS and by ensuring that those responsible for emergency preparedness are well trained to support appropriate feeding practices consistent with the Initiative's universal principles.	Show slides/transparencies 3.20 and 3.21.
10. Overview of global and regional BFHI progress	Show current information on the number of baby-friendly hospitals in the world and/or region, if available.

<table>
<tr><th>Content</th><th>Trainer’s Notes</th></tr>
<tr><td>11. Current status of the national BFHI
■ Description of the current status of the national BFHI, including, for example:
▪ Number of hospitals committed to becoming baby-friendly (having certificates of commitment, if used in the country).
▪ Number of hospitals designated baby-friendly.
▪ Any monitoring or reassessment process in place.
■ Brief description of the country’s future plans for BFHI.</td><td>Ask either a national BFHI representative or a knowledgeable WHO or UNICEF representative working in the country to describe the current status of the Initiative.

Ask the same presenter to describe future plans for the Initiative. Ask participants for any questions, comments, or suggestions. Allow adequate time for discussion.

Mention, again, that in situations where there is high HIV prevalence, hospitals implementing BFHI need to consider additional issues which fill be explored in Sessions 4 and 5.</td></tr>
<tr><td>12. Country experience with BFHI (optional)
■ Brief case study of “BFHI in Action,” such as:
▪ Experience of a local hospital that has become baby-friendly, or
▪ Presentation of the experience of another country.</td><td>If it is appropriate and of interest, arrange for a brief “case study” presentation. An administrator or decision-maker from a local hospital that has become baby-friendly can describe “how they did it”. Alternatively, a slide set or video showing experience elsewhere can be shown.

Leave time for any questions at the end.</td></tr>
</table>

Handout 3.1

Presentation for session 3: The Baby-friendly Hospital Initiative

Goals of the Baby-friendly Hospital Initiative

1. To transform hospitals and maternity facilities through implementation of the "Ten steps".
2. To end the practice of distribution of free and low-cost supplies of breast-milk substitutes to maternity wards and hospitals.

Transparency 3.1

Every facility providing maternity services and care for newborn infants should follow these *Ten steps to successful breastfeeding*

1. **Have a written breastfeeding policy that is routinely communicated to all health care staff.**
2. **Train all health care staff in skills necessary to implement this policy.**
3. **Inform all pregnant women about the benefits and management of breastfeeding.**
4. **Help mothers initiate breastfeeding within a half-hour of birth.**
5. **Show mothers how to breastfeed, and how to maintain lactation even if they should be separated from their infants.**

Transparency 3.2

Every facility providing maternity services and care for newborn infants should follow these *Ten steps to successful breastfeeding*

6. **Give newborn infants no food or drink other than breast milk, unless medically indicated.**
7. **Practise rooming-in — allow mothers and infants to remain together — 24 hours a day.**
8. **Encourage breastfeeding on demand.**
9. **Give no artificial teats or pacifiers (also called dummies or soothers) to breastfeeding infants.**
10. **Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or clinic.**

Transparency 3.3

Key dates in the history of breastfeeding and BFHI

1979 – Joint WHO/UNICEF Meeting on Infant and Young Child Feeding, Geneva
1981 – Adoption of the International Code of Marketing of Breast-Milk Substitutes
1989 – Protecting, promoting and supporting breast-feeding. The special role of maternity services. A Joint WHO/UNICEF Statement.
– Convention on the Rights of the Child
1990 – Innocenti Declaration
– World Summit for Children

Transparency 3.4

Key dates in the history of breastfeeding and BFHI

1991 – Launching of Baby-friendly Hospital Initiative
2000 – WHO Expert Consultation on HIV and Infant Feeding
2001 – WHO Consultation on the optimal duration of exclusive breastfeeding
2002 – Endorsement of the Global Strategy for Infant and Young Child Feeding by the WHA
2005 – Innocenti Declaration 2005
2007 – Revision of BFHI documents

Transparency 3.5

The International code of marketing of breast-milk substitutes:

Summary and role of Baby-friendly hospitals

Transparency 3.6

Aim

To contribute to the provision of safe and adequate nutrition for infants by:

- the protection and promotion of breastfeeding, and
- ensuring the proper use of breast-milk substitutes, when these are necessary, on basis of adequate information and through appropriate marketing and distribution.

Transparency 3.7

Scope

Marketing, practices related, quality and availability, and information concerning the use of:

- breast-milk substitutes, including infant formula
- other milk products, foods and beverages, including bottle-fed complementary foods, when intended for use as a partial or total replacement of breast milk
- feeding bottles and teats

Transparency 3.8

Summary of the main points of the International Code

- No advertising of breast-milk substitutes and other products to the public
- No donations of breast-milk substitutes and supplies to maternity hospitals
- No free samples to mothers
- No promotion in the health services
- No company personnel to advise mothers
- No gifts or personal samples to health workers

Transparency 3.9

Summary of the main points of the International Code

- No use of space, equipment or education materials sponsored or produced by companies when teaching mothers about infant feeding.
- No pictures of infants, or other pictures idealizing artificial feeding on the labels of the products.
- Information to health workers should be scientific and factual.
- Information on artificial feeding, including that on labels, should explain the benefits of breastfeeding and the costs and dangers associated with artificial feeding.
- Unsuitable products, such as sweetened condensed milk, should not be promoted for babies.

Transparency 3.10

The role of administrators and staff in upholding the International Code

- Free or low-cost supplies of breast-milk substitutes should not be accepted in health care facilities.
- Breast-milk substitutes should be purchased by the health care facility in the same way as other foods and medicines, and for at least wholesale price.
- Promotional material for infant foods or drinks other than breast milk should not be permitted in the facility.
- Pregnant women should not receive materials that promote artificial feeding.
- Feeding with breast-milk substitutes should be demonstrated by health workers only, and only to pregnant women, mothers, or family members who need to use them.

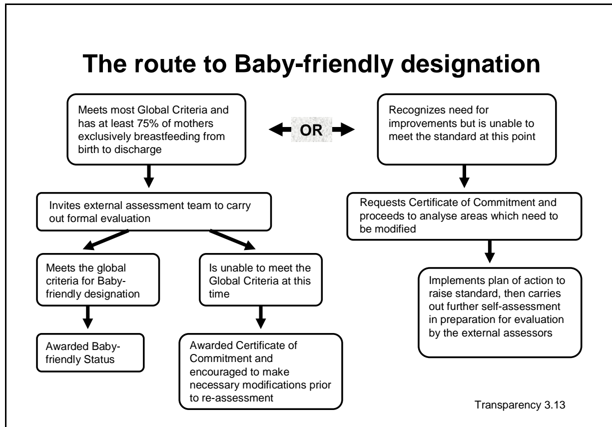
Transparency 3.11

The role of administrators and staff in upholding the International Code

- Breast-milk substitutes in the health facility should be kept out of the sight of pregnant women and mothers.
- The health facility should not allow sample gift packs with breast-milk substitutes or related supplies that interfere with breastfeeding to be distributed to pregnant women or mothers.
- Financial or material inducements to promote products within the scope of the Code should not be accepted by health workers or their families.
- Manufacturers and distributors of products within the scope of the Code should disclose to the institution any contributions made to health workers such as fellowships, study tours, research grants, conferences, or the like. Similar disclosures should be made by the recipient.

Transparency 3.12

The route to Baby-friendly designation



Transparency 3.13

Differences between monitoring and reassessment

Monitoring	Reassessment
Measures progress on the "10 steps"	Evaluates whether the hospital meets the Global Criteria for the "10 steps"
Identifies areas needing improvement and helps in planning actions	Same, but also used to decide if hospital should remain designated "Baby-friendly"
Can be organized by the hospital or by the national BFHI coordination group	Is usually organized by the national BFHI coordination group

Transparency 3.14

Differences between monitoring and reassessment

Monitoring	Reassessment
Can be performed by monitors "internal" to the hospital or from outside	Must be performed by "external" assessors
Quite inexpensive if performed "internally"	Somewhat more costly, as requires "external" assessors
Can be done frequently	Usually scheduled less frequently

Transparency 3.15

The role of the hospital administrator in BFHI

- Become familiar with the BFHI process
- Decide where responsibility lies within the hospital structure. This can be a coordinating committee, working group, multidisciplinary team, etc.
- Establish the process within the hospital of working with the identified responsible body
- Work with key hospital staff to fill in the self-appraisal tool using the Global Criteria and interpret results

Transparency 3.16

The role of the hospital administrator in BFHI

- Support staff in decisions taken to achieve "Baby-friendliness"
- Facilitate any BFHI-related training that may be needed
- Collaborate with national BFHI coordination group and ask for an external assessment team when the hospital is ready for assessment
- Encourage staff to sustain adherence to the "10 steps", arranging for refresher training and periodic monitoring and reassessment

Transparency 3.17

Global Strategy on Infant and Young Child Feeding (IYCF): Aim

- To improve – through optimal feeding – the nutritional status, growth and development, health, and thus the survival of infants and young children.

Transparency 3.18

Operational targets in the strategy

- **Develop, implement, monitor, and evaluate a comprehensive policy on IYCF;**
- **Ensure that the health and other relevant sectors protect, promote and support exclusive breastfeeding for six months and continued breastfeeding up to two years of age or beyond, while providing women access to the support they require;**
- **Promote timely, adequate, safe, and appropriate complementary feeding with continued breastfeeding;**
- **Provide guidance on feeding infants and young children in exceptionally difficult circumstances;**
- **Consider what new legislation or other suitable measures may be required, as part of a comprehensive policy on IYCF, to give effect to the principles and aim of the International Code of Marketing and to subsequent relevant Health Assembly resolutions.**

Transparency 3.19

Further strengthening of BFHI

The Global Strategy urges that hospital routines and procedures *remain* fully supportive of the successful initiation and establishment of breastfeeding through the:

- implementation of the Baby-friendly Hospital Initiative
- monitoring and reassessing already designated facilities; and
- expanding the Initiative to include clinics, health center, and paediatric hospitals

Transparency 3.20

It also urges that support be given for feeding infants and young children in exceptionally difficult circumstances,

- with one aspect of this being to adapt the BFHI by taking account of HIV/AIDS,
- and by ensuring that those responsible for emergency preparedness are well trained to support appropriate feeding practices consistent with the Initiative's universal principles.

Transparency 3.21

Handout 3.2

Breastfeeding: an issue on the world's agenda

Joint WHO/UNICEF Meeting on Infant and Young Child Feeding

The Joint WHO/UNICEF Meeting on Infant and Young Child Feeding took place at WHO Geneva from 9 to 12 October 1979. It was held as part of the two organizations' on going programmes on the promotion of breastfeeding and improvement of infant and young child nutrition.

The participants included representatives of governments, the United Nations system and technical agencies, non governmental organizations active in the area, the infant food industry and scientists working in the field. A total of some 150 participants were present.

The meeting was conducted in plenary and five working groups. There was one background document prepared by WHO and UNICEF (FHE/ICF/79.3). The themes of the working groups were:

- encouraging and supporting breastfeeding;
- promotion and support of appropriate weaning practices;
- information, education, communication, and training;
- health and social status of women in relation to infant and young child feeding;
- appropriate marketing and distribution of breast-milk substitutes.

International Code of Marketing of Breast-milk Substitutes

Efforts to promote breastfeeding and to overcome problems that might discourage it are a part of the overall nutrition and child health programmes of the World Health Organization (WHO) and UNICEF, and are a key element of primary health care as a means of achieving health for all by the year 2000. As early as 1974, the 27th World Health Assembly noted the general decline in breastfeeding in many parts of the world. The Assembly found this decline to be related to the promotion of manufactured breast-milk substitutes, and urged "member countries to review sales promotion activities on baby foods and to introduce appropriate remedial measures, including advertisement codes and legislation where necessary".

The issue was taken up again by the 31st World Health Assembly, which recommended, in May 1978, "regulating inappropriate sales promotion of infant foods that can be used to replace breast milk". Years of discussion and debate resulted in the drafting and adoption, on 21 May 1981, of the International Code of Marketing of Breast-milk Substitutes.

The Code seeks mainly to "contribute to the provision of safe and adequate nutrition for infants by protecting and promoting breastfeeding and by ensuring that breast-milk substitutes not be marketed or distributed in ways that may interfere with breastfeeding". But it also recognizes, in its preamble, the interconnectedness of breastfeeding and infant nutrition and that malnutrition is linked to "wider problems of lack of education, poverty, and social injustice". The Code points out that the health of infants and young children cannot be isolated from the health and nutrition of women, their socio-economic status and their roles as mothers. In taking this broad view of breastfeeding, the Code helped set the stage for breastfeeding's inclusion in a series of other social rights documents.

Convention of the Rights of the Child

Adopted by the General Assembly of the United Nations on 20 November 1989, the Convention on the Rights of the Child recalls the basic principles of the United Nations and the provisions of relevant human rights treaties and proclamations, and makes children the focus of these. In seeking to ensure the health of children, it makes it a condition that all segments of society, particularly parents, should have access to education about, and be supported in, the use of breastfeeding. In calling for universal ratification of the Convention by 1995, former UNICEF Executive Director James P. Grant cited breastfeeding as part of the "revolution for children", noting that "the scientific rediscovery of the miracle of mother's milk means that more than a million children's lives a year could be saved by effective breastfeeding".

Protecting, Promoting and Supporting Breastfeeding: The Special Role of Maternity Services. A Joint WHO/UNICEF Statement

The joint WHO/UNICEF statement has been prepared to increase awareness of the critical role that health services play in promoting breastfeeding, and to describe what should be done to provide mothers with appropriate information and support. It is intended for use, after adaptation to suit local circumstances, by policy-makers and managers as well as by clinicians, midwives, and nursing personnel.

Focusing on the brief period of prenatal, delivery, and perinatal care provided in maternity wards and clinics, the statement encourages those concerned with the provision of maternity services to review policies and practices that affect breastfeeding. It outlines practical steps that they can take to promote and facilitate the initiation and establishment of breastfeeding by mothers in their care.

Innocenti Declaration

Born of the policy-makers' meeting on "Breastfeeding in the 1990s: a Global Initiative", jointly sponsored by WHO and UNICEF in August 1990, the Innocenti Declaration on the Protection, Promotion and Support of Breastfeeding spells out clearly the benefits of breastfeeding. It calls for policies and the attainment of a "breastfeeding culture" enabling women to breastfeed their children exclusively for the first four to six months, and then up to two years of age and beyond. The Declaration asks that national authorities integrate breastfeeding programmes into their overall health and development policies.

Its four targets include the appointment of a national breastfeeding coordinator and establishment of a multisectoral national breastfeeding committee, ensuring that every facility providing maternity services fully practices all "Ten Steps" set out in the Joint WHO/UNICEF Statement, taking action to give effect to the principles and aim of all Articles of the International Code of Marketing of Breast-Milk Substitutes and subsequent World Health Assembly resolutions, and enacting imaginative legislation protecting the breastfeeding rights of working women and establishing means for its enforcement.

World Summit for Children

The World Summit for Children was convened in New York on 30 September 1990. 71 heads of state and 58 other observer delegations met for two days to talk about children. The Summit adopted the World Declaration on the Survival, Protection, and Development of Children and related Plan of Action containing specific 27 time-bound goals for children and development in the 1990s, including a cluster of food and nutrition targets. It stated that: "For the young child and the pregnant woman, provision of adequate food during pregnancy and lactation; promotion, protection and support of breastfeeding and complementary feeding practices, including frequent feeding; growth monitoring with appropriate follow-up actions; and nutritional surveillance are the most essential needs." National plans of action were to report on how the Summit goals were to be met all over the world. The World Summit and the World Declaration and its related Plan of Action reaffirmed the importance of achieving optimal infant and young child feeding practices, laying the foundation for future initiatives to promote, protect and support these practices.

Launching of the "Baby-friendly Hospital Initiative"

The Forty-fifth World Health Assembly (4-14 May 1992) in its resolution 45.34 welcomes the leadership of the Executive Heads of WHO and UNICEF in organizing the "Baby-friendly" hospital initiative, with its simultaneous focus on the role of health services in protecting, promoting and supporting breastfeeding, and on the use of breastfeeding as a means of strengthening the contribution of health services to safe motherhood, child survival, and primary health care in general, and endorses this initiative as a most promising means of increasing the prevalence and duration of breastfeeding.

World Declaration on Nutrition

Signatories to the World Declaration on Nutrition, adopted in December 1992 at the International Conference on Nutrition, pledge, in article 19, "to reduce substantially within this decade social and other impediments to optimal breastfeeding". The Plan of Action for Nutrition, adopted at the same Conference, endorses breastfeeding under sections on preventing and managing infectious diseases and preventing and controlling specific micronutrient deficiencies. It also calls for the promotion of breastfeeding by asking governments and the international community to provide maximum support for women to breastfeed, whether they are formally or informally working, and under a variety of other conditions.

WHO Expert Consultation on HIV and Infant Feeding

WHO's Department of Reproductive Health and Research, in collaboration with the HIV/STI Initiative and the Department of Child and Adolescent Health and development, convened a Technical Consultation on new data on the prevention of MTCT and their policy implications. The objective was to review recent scientific data and update current recommendations on the provision of ARVs and infant feeding counselling. The Technical Consultation focused on these two components, although it

was recognized that many other components are important for a comprehensive package for MTCT-prevention.

The conclusions and recommendations of the meeting related to infant feeding addressed (1) risks of breastfeeding and replacement feeding, (2) cessation of breastfeeding, (3) infant feeding counselling, (4) breast health, and (5) maternal health.

WHO Consultation on the optimal duration of exclusive breastfeeding

WHO convened in 28-30 March 2001 an expert consultation on the optimal duration of exclusive breastfeeding. The objectives to the consultation were:

- To review the scientific evidence on the optimal duration of exclusive breastfeeding.
- To formulate recommendations for practice on the optimal duration of exclusive breastfeeding.
- To formulate recommendations for research needs in this area.

The report of the Expert Consultation summarizes the objectives of the consultation as well as the findings, recommendations for practice, and research. The agenda of the consultation and list of participants in the consultation is included.

WHO Global Strategy for Infant and Young Child Feeding

Over the past decades, the evidence of biological requirements for appropriate nutrition, recommended feeding practices and factors impeding appropriate feeding has grown steadily. Moreover, much has been learned about interventions that are effective in promoting improved feeding. For example, recent studies in Bangladesh, Brazil and Mexico have demonstrated the impact of counselling, in communities and health services, to improve feeding practices, food intake, and growth.

The Global Strategy for Infant and Young Child Feeding aims to revitalize efforts to promote, protect, and support appropriate infant and young child feeding. It builds upon past initiatives, in particular the Innocenti Declaration and the Baby-friendly Hospital Initiative, and addresses the needs of all children including those living in difficult circumstances, such as infants of mothers living with HIV, low-birth-weight infants, and infants in emergency situations.

The strategy specifies not only responsibilities of governments, but also of international organisations, non-governmental organisations, and other concerned parties. It engages all relevant stakeholders and provides a framework for accelerated action, linking relevant intervention areas and using resources available in a variety of sectors.

Innocenti Declaration 2005

The event, “Celebrating Innocenti 1990-2005: Achievements, Challenge and Future Imperatives” was held on 22 November 2005, in Florence, Italy, to celebrate the 15 years since the original “Innocenti Declaration”. It was jointly organized by the Regional Authority of Tuscany and

the UNICEF Innocenti Research Centre with a wide partnership, including the Italian National Committee for UNICEF, UN organizations, as well as non-governmental organizations like the World Alliance for Breastfeeding Action, the International Baby Food Action Network among others and an international expert panel.

The meeting highlighted the achievements of the last 15 years and issued the "Innocenti Declaration 2005 on Infant and Young Child Feeding". Statements in the Declaration related to BFHI include that:

- All governments revitalize the Baby-friendly Hospital Imitative (BFHI), maintaining the Global Criteria as the minimum requirement for all facilities, expanding the Initiative's application to include maternity, neonatal and child health services and community-based support for lactating women and caregivers of young children.

- Multilateral and bilateral organizations and international financial institutions identify and budget for sufficient financial resources and expertise to support governments in formulating, implementing, monitoring and evaluating their policies and programmes on optimal infant and young child feeding, including revitalizing the BFHI.

Handout 3.3

The International Code of Marketing of Breast-milk Substitutes Summary of main points[1]

- No advertising of breast-milk substitutes and other products to the public.
- No donations of breast-milk substitutes and supplies to maternity hospitals.
- No free samples to mothers.
- No promotion in the health services.
- No company personnel to advise mothers.
- No gifts or personal samples to health workers.
- No use of space, equipment or educational materials sponsored or produced by companies when teaching mothers about infant feeding.
- No pictures of infants or other pictures idealizing artificial feeding on the labels of the products.
- Information to health workers should be scientific and factual.
- Information on artificial feeding, including labels, should explain the benefits of exclusive breastfeeding and the costs and dangers associated with artificial feeding.
- Unsuitable products, such as sweetened condensed milk, should not be promoted for babies.

[1]Adapted from UNICEF UK Baby-friendly Initiative, Course in Lactation Management and Breastfeeding Promotion, Module 5 by A. Radford.

Handout 3.4

BABY-FRIENDLY HOSPITAL INITIATIVE
Revised, Updated and Expanded
for Integrated Care

SECTION 1
BACKGROUND AND IMPLEMENTATION

2009

Original BFHI guidelines developed 1992

SECTION 1.2 HOSPITAL LEVEL IMPLEMENTATION

Breastfeeding rates

The Baby-friendly Hospital Initiative (BFHI) seeks to provide mothers and babies with a good start for breastfeeding, increasing the likelihood that babies will be breastfed exclusively for the first six months and then given appropriate complementary foods while breastfeeding continues for two years or beyond.

For purposes of assessing a maternity facility, the number of women breastfeeding exclusively from birth to discharge may serve as an approximate indicator of whether protection, promotion, and support for breastfeeding are adequate in that facility. The maternity facility's annual statistics should indicate that at least 75% of the mothers who delivered in the past year are either exclusively breastfeeding or exclusively feeding their babies human milk from birth to discharge or, if not, this is because of acceptable medical reasons (in settings where HIV status is known, if mothers have made fully informed decisions to replacement feed, these can be considered "acceptable medical reasons", and thus counted towards the 75% exclusive breastfeeding goal). If fewer than 75% of women who deliver in a facility are breastfeeding exclusively from birth to discharge, the managers and staff may wish to study the results from the *Self Appraisal*, consider the *Global Criteria* carefully, and work, through the Triple A process of assessment, analysis, and action, to increase their exclusive breastfeeding rates. Once the 75% exclusive breastfeeding goal has been achieved, an external assessment visit should be arranged.

The BFHI cannot guarantee that women who start out breastfeeding exclusively will continue to do so for the recommended 6 months. However, research studies have shown that delay in initiation of breastfeeding and early supplemental feeding in hospital are associated with less exclusive breastfeeding thereafter. By establishing a pattern of exclusive breastfeeding during the maternity stay, hospitals are taking an essential step towards longer durations of exclusive breastfeeding after discharge.

If hospital staff believes that antenatal care provided elsewhere contributes to rates of less than 75% breastfeeding after the birth, or that community practices need to be more supportive of breastfeeding, they may consider how to work with the antenatal caregivers to improve antenatal education on breastfeeding and with breastfeeding advocates to improve community practices (see Section 1.5 for a discussion of strategies for fostering Baby-friendly Communities).

Supplies of breast-milk substitutes

Research has provided evidence that clearly shows that breast-milk substitute marketing practices influence health workers' and mothers' behaviours related to infant feeding. Marketing practices prohibited by *The International Code of Marketing of Breast-milk Substitutes* (the *Code)* have been shown to be harmful to infants, increasing the likelihood that they will be given formula and other items under the scope of *The Code* and decreasing optimal feeding practices. The 1991 UNICEF Executive Board called for the ending of free and low-cost supplies of formula to all hospitals and maternity wards by the end of 1992. Compliance with *The Code* is required for health facilities to achieve Baby-friendly status.

Questions have been added to the *Self-Appraisal Tool* that will help the national BFHI coordination groups and maternity facilities determine how well their maternity services are

complying with *The Code* and subsequent WHA resolutions and what actions are needed to achieve full compliance.

Support for non-breastfeeding mothers

This revised version of the assessment includes specific questions related to the training staff has received on providing support for "non-breastfeeding mothers" and what actual support these mothers have received. The inclusion of these questions does NOT mean that the BFHI is promoting formula feeding but, rather, that the Initiative wants to help insure that ALL mothers, regardless of feeding method, get the feeding support they need.

Mother-friendly care

New *Global Criteria* and questions have been added to insure that practices are in place for mother-friendly labour and delivery. These practices are important, in their own right, for the physical and psychological health of the mothers themselves, and also have been shown to enhance infants' start in life, including breastfeeding. Many countries have explored options for including mother-friendly criteria within the Initiative, in some cases re-terming their national initiatives as "mother and baby friendly". Other countries have adopted full "mother-friendly" initiatives. New self-appraisal and assessment questions on this topic offer a way for countries that have not done so already to add a component focused on the key "mother-friendly" criteria needed for an optimal "continuum of care" for both mother and child from the antenatal to postpartum period[1]. These criteria should be required only after health facilities have trained their staff on policies and practices related to mother-friendly care.

HIV and infant feeding

The increasing prevalence of HIV among women of childbearing age in many countries has made it important to give guidance on how to offer appropriate information and support for women related to HIV within the BFHI. Thus, as mentioned earlier, components on HIV and infant feeding have been added to the *20-hour Course* and to the *Global Criteria* and assessment tools.

The course material aims to raise the awareness of participants as to why BFHI continues to be important in areas of high HIV prevalence and ways to assist mothers who are HIV-positive as part of regular care in the health facility. This 20-hour course does not train participants to counsel women who are HIV-positive on infant feeding decisions. Another course and counselling aids are available from WHO for that specialized training and counselling.

It is recommended that the BFHI national authorities and coordination groups in each country work with other relevant national decision-makers to determine whether the HIV components of the assessment will be required and whether this requirement will be for all facilities or only those meeting specified criteria. The decision should be based on the prevalence of HIV among pregnant women and mothers and, therefore, the need for information and support on this issue. If this information is not available, surveys may be necessary to determine what percentages of pregnant women and mothers using the antenatal and delivery services in maternity facilities are HIV positive. It is suggested that if a maternity facility has a prevalence of more than 20% HIV positive clients, and/or has a PMTCT[2] programme, this component of the assessment should be required. If prevalence is over 10%, the use of this component is strongly advised. National decision-makers in countries with high HIV

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1. See the website for the Coalition for Improving Maternity Services (CIMS) http://www.motherfriendly.org/MFCI/ for a description of *The Mother-Friendly Childbirth Initiative*.

2 Prevention of mother-to-child-transmission (of HIV/AIDS).

prevalence may decide to include additional HIV-related criteria and questions, depending on their needs.

The *Global Criteria*, *Self-Appraisal Tool* and *Hospital External Assessment Tool* all have HIV-related items added in such a way that they can be included or not, depending on the need. The HIV and Infant Feeding criteria are listed separately in the *Global Criteria*. The questions related to HIV in both the *Self-Appraisal* and the various interviews in the *Assessment Tool* are either presented in separate sections or at the end of the respective interviews. There is a separate Summary Sheet in the *Assessment Tool* to display the HIV-related results.

A handout that provides guidance for “Applying the Ten Steps in facilities with high HIV prevalence” is attached as Annex 1 of Section 1.2.

The Baby-friendly Hospital designation process

The BFHI is initiated at national level, with the BFHI national authority and coordination group, UNICEF, WHO, breastfeeding, nutrition and other health groups, and others interested parties as catalysts. The *Global Criteria* and *Self-Appraisal Tool* are available to all who are interested in accessing it on the UNICEF website. UNICEF and WHO will encourage the national authorities and BFHI coordination groups to access it and encourage health facilities to join or continue to participate in the Initiative. For details on country level implementation, please read Section 1.1 of this document.

At the facility level the assessment and designation process includes a number of steps, with facilities following differing paths, depending on the outcomes at various stages of the process. Once a facility has used the *Self-Appraisal Tool* to conduct a “self assessment” of whether it meets baby-friendly standards and has studied the *Global Criteria* to determine whether an external assessment is likely to give the same results, it will decide whether or not it is ready for external assessment.

If the facility determines that it is ready for external assessment in some countries the next step would be an optional or required pre-assessment visit during which an outside consultant explores the readiness of the hospital for a full assessment, using the *Self-Appraisal Tool* and *Global Criteria*. This could be done through an on site visit or by means of an extensive telephone interview/survey, if travel costs are prohibitive. This can be a quite useful intermediate step, as many hospitals overrate their compliance with the *Global Criteria* and this type of visit, followed by working on any further improvements needed, can save a lot of time, money, and anguish both for the hospital and the national BFHI coordination group.

If a facility has used the *Self-Appraisal Tool,* studied the *Global Criteria*, and received feedback during a pre-assessment visit or telephone interview, if scheduled, and determined that it does not yet meet the BFHI standards and recognizes its need for improvement, it should analyse its deficiencies and develop plans to address them. This may include scheduling the *20-hour Course* (presented in Section 3 of these BFHI materials) for its maternity staff, if this training has not been given or was conducted very long ago.

The facility may also request a *Certificate of Commitment* while it is working to become Baby-friendly, if the BFHI coordination group supplies this for facilities at this stage of the process. When it is ready, the facility should then request an external assessment, following the process described in the paragraph above.

The next step, as mentioned above, would be for a facility to request or invite an external assessment. The BFHI coordination group may review the *Self Appraisal* results, any supporting documents that it requires, and the results from a pre-assessment visit or telephone

interview, if one has been made, to help determine if the facility is ready. The external assessment will determine whether the facility meets the *Global Criteria for a Baby-friendly Hospital*. If so, the BFHI coordination group should award the facility the Global BFH Award and Plaque for a specified period.

If the facility, on the other hand, does not meet the *Global Criteria*, it would be awarded a *Certificate of Commitment* to becoming Baby-friendly and would be encouraged or supported to further analyse problem areas and take whatever actions are needed to comply, then inviting another assessment. Whether this second assessment would be a full one, or only partial, focusing on those criteria on which the facility did not originally comply, would depend on the decision made by the assessors and BFHI coordination group at the time of the original assessment.

If the national BFHI coordination group finds that hospitals that have been assessed as failing at times do not agree with the conclusions reached by the assessors, it might consider setting up an appeal process, when necessary, with a review of results by panels of assessors not involved in the original assessments.

Reassessments should be scheduled for baby-friendly hospitals, after the specified period for the Award. If the facility passes the reassessment, it should be given a renewal. If not, it needs to work to address any identified problems and then apply again for reassessment.

SECTION 1.3
THE GLOBAL CRITERIA FOR THE BFHI

Criteria for the 10 Steps and other components

The Global Criteria for the Baby-friendly Hospital Initiative serve as the standard for measuring adherence to each of the Ten Steps for Successful Breastfeeding and the International Code of Marketing of Breast-milk Substitutes. The criteria listed below for each of the Ten Steps and the Code are the minimum global criteria for baby-friendly designation. Additional criteria are provided for ”Mother-friendly care” and “HIV and Infant Feeding”. It is recommended that the criteria for “Mother-friendly care” be implemented gradually, after maternity staff has received necessary training on this topic. Relevant decision-makers in each country should decide whether the criteria on HIV and infant feeding should be required, depending on the prevalence of HIV among women using the maternity facilities.

The BFHI Self-Appraisal Tool, presented in Section 4 of this series, gives maternity facilities a tool for making a preliminary assessment of whether they are fully implementing the Ten Steps, adhering to the International Code of Marketing, and meeting criteria related to mother-friendly care and HIV and infant feeding. The Global Criteria actually describe how “baby-friendliness” will be judged during the external assessment, and thus can be very useful for maternity staff to study as they work to get ready for assessment. The Global Criteria are listed both here and after the respective sections of the Self Appraisal Tool, for easy reference during self-appraisal.

It is important that the hospital consider adding the collection of statistics on infant feeding and implementation of the Ten Steps into its maternity record-keeping system, if it has not done so already. It is best if this data collection process be integrated into whatever information gathering system is already in place. If the hospital needs guidance on how to gather this data and possible forms to use, responsible staff can refer to the sample data-gathering tools available in Section 4.2: Guidelines and Tools for Monitoring BFHI.

STEP 1. Have a written breastfeeding policy that is routinely communicated to all health care staff.

Global Criteria - Step One

The health facility has a written breastfeeding or infant feeding policy that addresses all 10 Steps and protects breastfeeding by adhering to the International Code of Marketing of Breast-milk Substitutes. It also requires that HIV-positive mothers receive counselling on infant feeding and guidance on selecting options likely to be suitable for their situations. The policy should include guidance for how each of the "Ten Steps" and other components should be implemented (see Section 4.1, Annex 1 for suggestions).

The policy is available so that all staff members who take care of mothers and babies can refer to it. Summaries of the policy covering, at minimum, the Ten Steps, the Code and subsequent WHA Resolutions, and support for HIV-positive mothers, are visibly posted in all areas of the health care facility which serve pregnant women, mothers, infants, and/or children. These areas include the labour and delivery area, antenatal care in-patient wards and clinic/consultation rooms, post partum wards and rooms, all infant care areas, including well baby observation areas (if there are any), and any special care baby units. The summaries are displayed in the language(s) and written with wording most commonly understood by mothers and staff.

STEP 2. Train all health care staff in skills necessary to implement the policy.

Global Criteria - Step Two

The head of maternity services reports that all health care staff members who have any contact with pregnant women, mothers, and/or babies, have received orientation on the breastfeeding/infant feeding policy. The orientation that is provided is sufficient.

A copy of the curricula or course session outlines for training in breastfeeding promotion and support for various types of staff is available for review, and a training schedule for new employees is available.

Documentation of training indicates that 80% or more of the clinical staff members who have contact with mothers and/or infants and have been on the staff 6 months or more have received training at the hospital, prior to arrival, or though well-supervised self-study or on-line courses that covers all 10 Steps, the Code and subsequent WHA resolutions, and mother-friendly care. It is likely that at least 20 hours of targeted training will be needed to develop the knowledge and skills necessary to adequately support mothers. At least three hours of supervised clinical experience are required.

Documentation of training also indicates that non-clinical staff members have received training that is adequate, given their roles, to provide them with the skills and knowledge needed to support mothers in successfully feeding their infants.
Training on how to provide support for non-breastfeeding mothers is also provided to staff. A copy of the course session outlines for training on supporting non-breastfeeding mothers is also available for review. The training covers key topics such as:

- the risks and benefits of various feeding options;
- helping the mother choose what is acceptable, feasible, affordable, sustainable and safe (AFASS) in her circumstances;
- the safe and hygienic preparation, feeding and storage of breast-milk substitutes;
- how to teach the preparation of various feeding options, and

Global Criteria - Step Two

(Continued from previous page)

- how to minimize the likelihood that breastfeeding mothers will be influenced to use formula.

The type and percentage of staff receiving this training is adequate, given the facility's needs.

Out of the randomly selected clinical staff members*:

- At least 80% confirm that they have received the described training or, if they have been working in the maternity services less than 6 months, have, at minimum, received orientation on the policy and their roles in implementing it.
- At least 80% are able to answer 4 out of 5 questions on breastfeeding support and promotion correctly.
- At least 80% can describe two issues that should be discussed with a pregnant woman if she indicates that she is considering giving her baby something other than breast milk.

Out of the randomly selected non-clinical staff members**:

- At least 70% confirm that they have received orientation and/or training concerning the promotion and support of breastfeeding since they started working at the facility.
- At least 70% are able to describe at least one reason why breastfeeding is important.
- At least 70% are able to mention one possible practice in maternity services that would support breastfeeding.
- At least 70% are able to mention at least one thing they can do to support women so they can feed their babies well.

* *These include staff members providing clinical care for pregnant women, mothers and their babies.*

** *These include staff members providing non-clinical care for pregnant women, mother and their babies or having contact with them in some aspect of their work.*

STEP 3. Inform all pregnant women about the benefits and management of breastfeeding.

Global Criteria - Step Three

If the hospital has an affiliated antenatal clinic or an in-patient antenatal ward:

A written description of the minimum content of the breastfeeding information and any printed materials provided to all pregnant women is available.

The antenatal discussion covers the importance of breastfeeding, the importance of immediate and sustained skin-to-skin contact, early initiation of breastfeeding, rooming-in on a 24 hour basis, feeding on cue or baby-led feeding, frequent feeding to help assure enough milk, good positioning and attachment, exclusive breastfeeding for the first 6 months, the risks of giving formula or other breast-milk substitutes, and the fact that breastfeeding continues to be important after 6 months when other foods are given.

Out of the randomly selected pregnant women in their third trimester who have come for at least two antenatal visits:

- At least 70% confirm that a staff member has talked with them individually or offered a group talk that includes information on breastfeeding.
- At least 70% are able to adequately describe what was discussed about two of the following topics: importance of skin-to-skin contact, rooming-in, and risks of supplements while breastfeeding in the first 6 months.

STEP 4. Help mothers initiate breastfeeding within a half-hour of birth.

This Step is now interpreted as:

Place babies in skin-to-skin contact with their mothers immediately following birth for at least an hour. Encourage mothers to recognize when their babies are ready to breastfeed and offer help if needed.

Global Criteria - Step Four

Out of the randomly selected mothers with vaginal births or caesarean sections without general anaesthesia in the maternity wards:

- At least 80% confirm that their babies were placed in skin-to-skin contact with them immediately or within five minutes after birth and that this contact continued without separation for an hour or more, unless there were medically justifiable reasons.

  (Note: It is preferable that babies be left even longer than an hour, if feasible, as they may take longer than 60 minutes to breastfeed).

- At least 80% also confirm that they were encouraged to look for signs for when their babies were ready to breastfeed during this first period of contact and offered help, if needed.

  (Note: The baby should not be forced to breastfeed but, rather, supported to do so when ready. If desired, the staff can assist the mother with placing her baby so it can move to her breast and latch when ready).

If any of the randomly selected mothers have had caesarean deliveries with general anaesthesia, at least 50% should report that their babies were placed in skin-to-skin contact with them as soon as the mothers were responsive and alert, with the same procedures followed.

At least 80% of the randomly selected mothers with babies in special care report that they have had a chance to hold their babies skin-to-skin or, if not, the staff could provide justifiable reasons why they could not.

Observations of vaginal deliveries, if necessary to confirm adherence to Step 4, show that in at least 75% of the cases babies are placed with their mothers and held skin-to-skin within five minutes after birth for at least 60 minutes without separation, and that the mothers are shown how to recognize the signs that their babies are ready to breastfeed and offered help, or there are justified reasons for not following these procedures.

STEP 5. Show mothers how to breastfeed and how to maintain lactation, even if they should be separated from their infants.

Global Criteria - Step Five

The head of maternity services reports that mothers who have never breastfed or who have previously encountered problems with breastfeeding receive special attention and support both in the antenatal and postpartum periods.

Observations of staff demonstrating how to safely prepare and feed breast-milk substitutes confirm that in 75% of the cases, the demonstrations were accurate and complete, and the mothers were asked to give "return demonstrations"

Out of the randomly selected clinical staff members:
- At least 80% report that they teach mothers how to position and attach their babies for breastfeeding and are able to describe or demonstrate correct techniques for both or, if not, can describe to whom they refer mothers on their shifts for this advice.
- At least 80% report that they teach mothers how to hand express and can describe or demonstrate an acceptable technique for this, or, if not, can describe to whom they refer mothers on their shifts for this advice.
- At least 80% can describe how non-breastfeeding mothers can be assisted to safely prepare their feeds, or can describe to whom they refer mothers on their shifts for this advice.

Out of the randomly selected mothers (including caesarean):
- At least 80% of those who are breastfeeding report that someone on the staff offered further assistance with breastfeeding within six hours of birth.
- At least 80% of those who are breastfeeding report that someone on the staff offered them help with positioning and attaching their babies for breastfeeding.
- At least 80% of those who are breastfeeding are able to demonstrate or describe correct positioning of their babies for breastfeeding.
- At least 80% of those who are breastfeeding are able to describe what signs would indicate that their babies are attached and suckling well.
- At least 80% of those who are breastfeeding report that they were shown how to express their milk by hand or given written information and told where they could get help if needed.
- At least 80% of the mothers who have decided not to breastfeed report that they have been offered help in preparing and giving their babies feeds, can describe the advice they were given, and have been asked to prepare feeds themselves, after being shown how.

Out of the randomly selected mothers with babies in special care:
- At least 80% of those who are breastfeeding or intending to do so report that they have been offered help to start their breast milk coming and to keep up the supply within 6 hours of their babies' births.
- At least 80% of those breastfeeding or intending to do so report that they have been shown how to express their breast milk by hand.
- At least 80% of those breastfeeding or intending to do so can adequately describe and demonstrate how they were shown to express their breast milk by hand.
- At least 80% of those breastfeeding or intending to do so report that they have been told they need to breastfeed or express their milk 6 times or more every 24 hours to keep up their supply.

STEP 6. Give newborn infants no food or drink other than breast milk, unless medically indicated.

Global Criteria - Step Six

Hospital data indicate that at least 75% of the babies delivered in the last year have been exclusively breastfed or exclusively fed expressed breast milk from birth to discharge or, if not, that there were documented medical reasons.

Review of all clinical protocols or standards related to breastfeeding and infant feeding used by the maternity services indicates that they are in line with BFHI standards and current evidence-based guidelines.

No materials that recommend feeding breast milk substitutes, scheduled feeds or other inappropriate practices are distributed to mothers.

The hospital has an adequate facility/space and the necessary equipment for giving demonstrations of how to prepare formula and other feeding options away from breastfeeding mothers.

Observations in the postpartum wards/rooms and any well baby observation areas show that at least 80% of the babies are being fed only breast milk or there are acceptable medical reasons for receiving something else.

At least 80% of the randomly selected mothers report that their babies had received only breast milk or expressed or banked human milk or, if they had received anything else, it was for acceptable medical reasons, described by the staff.

At least 80 % of the randomly selected mothers who have decided not to breastfeed report that the staff discussed with them the various feeding options and helped them to decide what was suitable in their situations.

At least 80% of the randomly selected mothers with babies in special care who have decided not to breastfeed report that staff has talked with them about risks and benefits of various feeding options.

STEP 7. Practice rooming-in - allow mothers and infants to remain together – 24 hours a day.

Global Criteria - Step Seven

Observations in the postpartum wards and any well-baby observation areas and discussions with mothers and staff confirm that at least 80% of the mothers and babies are together or, if not, have justifiable reasons for being separated.

At least 80% of the randomly selected mothers report that their babies have been in the same room with them without separation or, if not, there were justifiable reasons.

STEP 8. Encourage breastfeeding on demand.

Global Criteria - Step Eight

Out of the randomly selected breastfeeding mothers:

- At least 80% report that they have been told how to recognize when their babies are hungry and can describe at least two feeding cues.
- At least 80% report that they have been advised to feed their babies as often and for as long as the babies want or something similar.

STEP 9. Give no artificial teats or pacifiers (also called dummies or soothers) to breastfeeding infants.

Global Criteria - Step Nine

Observations in the postpartum wards/rooms and any well baby observation areas indicate that at least 80% of the breastfeeding babies observed are not using bottles or teats or, if they are, their mothers have been informed of the risks.

Out of the randomly selected breastfeeding mothers:

- At least 80% report that, as far as they know, their infants have not been fed using bottles with artificial teats (nipples).
- At least 80% report that, as far as they know, their infants have not sucked on pacifiers.

STEP 10. Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or clinic.

Global Criteria - Step Ten

The head/director of maternity services reports that:

- Mothers are given information on where they can get support if they need help with feeding their babies after returning home, and the head/director can also mention at least one source of information.
- The facility fosters the establishment of and/or coordinates with mother support groups and other community services that provide breastfeeding/infant feeding support to mothers, and can describe at least one way this is done.
- The staff encourages mothers and their babies to be seen soon after discharge (preferably 2-4 days after birth and again the second week) at the facility or in the community by a skilled breastfeeding support person who can assess feeding and give any support needed and can describe an appropriate referral system and adequate timing for the visits.

A review of documents indicates that printed information is distributed to mothers before discharge, if appropriate, on how and where mothers can find help on feeding their infants after returning home and includes information on at least one type of help available.

Out of the randomly selected mothers at least 80% report that they have been given information on how to get help from the facility or how to contact support groups, peer counsellors or other community health services if they have questions about feeding their babies after return home and can describe at least one type of help that is available.

Compliance with the International Code of Marketing of Breast-milk Substitutes

Global Criteria – Code compliance

The head/director of maternity services reports that:

- No employees of manufacturers or distributors of breast-milk substitutes, bottles, teats or pacifiers have any direct or indirect contact with pregnant women or mothers.
- The hospital does not receive free gifts, non-scientific literature, materials or equipment, money, or support for in-service education or events from manufacturers or distributors of breast-milk substitutes, bottles, teats or pacifiers.
- No pregnant women, mothers or their families are given marketing materials or samples or gift packs by the facility that include breast-milk substitutes, bottles/teats, pacifiers, other infant feeding equipment or coupons.

A review of the breastfeeding or infant feeding policy indicates that it uphold the Code and subsequent WHA resolutions by prohibiting:

- the display of posters or other materials provided by manufacturers or distributors of breast-milk substitutes, bottles, teats and dummies or any other materials that promote the use of these products;
- any direct or indirect contact between employees of these manufacturers or distributors and pregnant women or mothers in the facility;
- distribution of samples or gift packs with breast-milk substitutes, bottles or teats or of marketing materials for these products to pregnant women or mothers or members of their families;
- acceptance of free gifts (including food), literature, materials or equipment, money or support for in-service education or events from these manufacturers or distributors by the hospital;
- demonstrations of preparation of infant formula for anyone that does not need them, and
- acceptance of free or low cost breast-milk substitutes or supplies.

A review of records and receipts indicates that any breast-milk substitutes, including special formulas and other supplies, are purchased by the health care facility for the wholesale price or more.

Observations in the antenatal and maternity services and other areas where nutritionists and dieticians work indicate that no materials that promote breast-milk substitutes, bottles, teats or dummies, or other designated products as per national laws, are displayed or distributed to mothers, pregnant women, or staff.

Observations indicate that the hospital keeps infant formula cans and pre-prepared bottles of formula out of view unless in use.

At least 80% of the randomly selected clinical staff members can give two reasons why it is important not to give free samples from formula companies to mothers.

Mother-friendly care

Global Criteria – Mother-friendly care

***Note**. These criteria should be required only after health facilities have trained their staff on policies and practices related to mother-friendly care.*

A review of the hospital policies indicates that they require mother-friendly labour and birthing practices and procedures including:

- Encouraging women to have companions of their choice to provide continuous physical and/or emotional support during labour and birth, as desired.
- Allowing women to drink and eat light foods during labour, as desired.
- Encouraging women to consider the use of non-drug methods of pain relief unless analgesic or anaesthetic drugs are necessary because of complications, respecting the personal preferences of the women.
- Encouraging women to walk and move about during labour, if desired, and assume positions of their choice while giving birth, unless a restriction is specifically required for a complication and the reason is explained to the mother.
- Care that does not involve invasive procedures such as rupture of the membranes, episiotomies, acceleration or induction of labour, instrumental deliveries, or caesarean sections unless specifically required for a complication and the reason is explained to the mother.

Out of the randomly selected clinical staff members:

- At least 80% are able to describe at least two recommended practices and procedures that can help a mother be more comfortable and in control during labour and birth
- At least 80% are able to list at least three labour or birth procedures that should not be used routinely, but only if required due to complications.
- At least 80% are able to describe at least two labour and birthing practices and procedures that make it more likely that breastfeeding will get off to a good start.

Out of the randomly selected pregnant women:

- Aat least 70% report that the staff has told them women can have companions of their choice with them throughout labour and birth and at least one reason it could be helpful.
- At least 70% report that they were told at least one thing by the staff about ways to deal with pain and be more comfortable during labour, and what is better for mothers, babies and breastfeeding.

HIV and infant feeding (optional)

Note: *The national BFHI coordination group and/or other appropriate national decision-makers will determine whether or not maternity services should be assessed on whether they provide support related to HIV and infant feeding.*

Global Criteria – HIV and infant feeding

The head/director of maternity services reports that:

- The hospital has policies and procedures that seem adequate concerning providing or referring pregnant women for testing and counselling for HIV, counselling women concerning PMTCT of HIV, providing individual, private counselling for pregnant women and mothers who are HIV positive on infant feeding options, and insuring confidentiality.
- Mothers who are HIV positive or concerned that they are at risk are referred to community support services for HIV testing and infant feeding counselling, if they exist.

A review of the infant feeding policy indicates that it requires that HIV-positive mothers receive counselling, including information about the risks and benefits of various infant feeding options and specific guidance in selecting the options for their situations, supporting them in their choices.

A review of the curriculum on HIV and infant feeding and training records indicates that training is provided for appropriate staff and is sufficient, given the percentage of HIV positive women and the staff needed to provide support for pregnant women and mothers related to HIV and infant feeding. The training covers basic facts on:

- the risks of HIV transmission during pregnancy, labour and delivery and breastfeeding and its prevention.
- the importance of testing and counselling for HIV.
- local availability of feeding options.
- the dangers of mixed feeding for HIV transmission.
- facilities/provision for counselling HIV positive women on advantages and disadvantages of different feeding options; assisting them in exclusive breastfeeding or formula feeding (note: may involve referrals to infant feeding counsellors).
- how to assist HIV positive mothers who have decided to breastfeed; including how to transition to replacement feeds at the appropriate time.
- how to minimize the likelihood that a mother whose status is unknown or HIV negative will be influenced to replacement feed.

A review of the antenatal information indicates that it covers the important topics on this issue. (these include the routes by which HIV-infected women can pass the infection to their infants, the approximate proportion of infants that will (and will not) be infected by breastfeeding; the importance of counselling and testing for HIV and where to get it; and the importance of HIV positive women making informed infant feeding choices and where they can get the needed counselling).

A review of documents indicates that printed material is available, if appropriate, on how to implement various feeding options and is distributed to or discussed with HIV positive mothers before discharge. It includes information on how to exclusively replacement feed, how to exclusively breastfeed, how to stop breastfeeding when appropriate, and the dangers of mixed feeding.

Continued on next page

Global Criteria – HIV and infant feeding

(continued from previous page)

Out of the randomly selected clinical staff members:

- At least 80% can describe at least one measure that can be taken to maintain confidentiality and privacy of HIV positive pregnant women and mothers.
- At least 80% are able to mention at least two policies or procedures that help prevent transmission of HIV from an HIV positive mother to her infant during feeding within the first six months.
- At least 80% are able to describe two issues that should be discussed when counselling an HIV positive mother who is deciding how to feed her baby.

Out of the randomly selected pregnant women who are in their third trimester and have had at least two antenatal visits or are in the antenatal in-patient unit:

- At least 70% report that a staff member has talked with them or given a talk about HIV/AIDS and pregnancy.
- At least 70% report that the staff has told them that a woman who is HIV-positive can pass the HIV infection to her baby.
- At least 70% can describe at least one thing the staff told them about why testing and counselling for HIV is important for pregnant women.
- At least 70% can describe at least one thing the staff told them about what women who do not know their HIV status should consider when deciding how to feed their babies.

Handout 3.5

BABY-FRIENDLY HOSPITAL INITIATIVE
Revised, Updated and Expanded
for Integrated Care

SECTION 4

HOSPITAL SELF-APPRAISAL AND MONITORING

2009

Original BFHI guidelines developed 1992

4.1. The Hospital Self-Appraisal Tool

Using the hospital self-appraisal tool to assess policies and practices

Any hospital or health facility with maternity services that is interested in becoming Baby-friendly should - as a first step - appraise its current practices with regard to the *Ten Steps to Successful Breastfeeding*. This *Self-Appraisal Tool* has been developed for use by hospitals, maternity facilities, and other health facilities to evaluate how their current practices measure up to the *Ten Steps*, and how they practice other recommendations of the 1989 WHO/UNICEF Joint Statement titled *Protecting, Promoting and Supporting Breastfeeding: The Special Role of Maternity Services*. It also assists facilities in determining how well they comply with the *International Code of Marketing of Breast-milk Substitutes* and subsequent relevant World Health Assembly resolution, whether they provide mother-friendly care , and how well they support HIV-positive women and their infants.

In many cases, it is useful if the hospital decision-makers and policy-maker attend an orientation to the goals and objectives of the Baby-friendly Hospital Initiative (BFHI), before the self appraisal. An orientation session can be developed, using Session 3: "The Baby-friendly Hospital Initiative", i*n Section 2: Strengthening and sustaining the Baby-friendly Hospital Initiative: A course for decision-makers* and/or Session 15 "Making your hospital baby-friendly" in *Section 3: Breastfeeding promotion and support in a Baby-friendly Hospital: A course for maternity staff*, along with a review of the *Self-appraisal tool* and *Global Criteria for BFHI* discussed in the following pages.

The *Self-appraisal tool* that follows will permit the director and heads of relevant units in a hospital or other health facility giving maternity care to make an initial appraisal or review of its practices in support of breastfeeding. Completion of this initial self-appraisal checklist is the first stage of the process, but does not in itself qualify the hospital for designation as Baby-friendly.

The *Global Criteria*, which guide the external assessment of whether the hospital qualifies as Baby-friendly, should also be reviewed by staff when reflecting upon the effectiveness of their breastfeeding programme. For ease of reference, the *Global Criteria* for each of the Steps, for the Code, mother-friendly care and HIV and infant feeding are reproduced with the respective sections in the *Self-appraisal tool.* The *Self-appraisal tool* also includes four Annexes:

Annex 1, a checklist to assist in appraising the hospital's breastfeeding or infant feeding policy;

Annex 2, a list of the main points in the *International Code of Marketing* and the role of administrator and staff in upholding it;

Annex 3, a set of recommendations for HIV and infant feeding, and

Annex 4, acceptable medical reasons for use of breast-milk substitutes.

Nationally determined criteria and local experience may cause national and institutional authorities responsible for BFHI to consider the addition of other relevant queries to this global self appraisal tool. Whatever practices are seen by a facility to discourage breastfeeding may be considered during the process of self-appraisal.

If it does not do so already, it is important that the hospital consider adding the collection of statistics on feeding and implementation of the Ten Steps into its maternity record-keeping system, preferably integrated into whatever information gathering system is already in place. If the hospital needs guidance on how to gather this data and possible forms to use, responsible staff can refer to the sample data-gathering tools available in this document in *Section 4.2: Guidelines and tools for monitoring BFHI.*

Analysing the Self-Appraisal Results

Under ideal circumstances, most of the questions in this tool will be answered as "yes". Numerous negative answers will suggest divergence from the recommendations of the *WHO/UNICEF Joint Statement* and its *Ten Steps to successful breastfeeding*. In addition to answering the questions in the *Self appraisal*, the hospital could consider doing some informal testing of staff and mothers, using the *Global Criteria* listed for the various steps as a guide, to determine if they meet the required standards.

When a facility can answer most of the questions with "yes", it may then wish to take further steps towards being designated as a Baby-friendly Hospital. In some countries, a pre-assessment visit is the next step, with a local consultant visiting the health facility and working with managers and staff to make sure the facility is ready for assessment.

Then a visit by an external assessment team is arranged, in consultation with the national BFHI coordination group. The external assessors will use the *Hospital external assessment tool* to determine if the hospital meets the criteria for "Baby-friendly" designation.

A hospital with many "no" answers on the *Self-appraisal tool* or where exclusive breastfeeding or breast-milk feeding from birth to discharge is not yet the norm for at least 75%[3] of newborns delivered in the maternity facility may want to develop an action plan. The aim is to eliminate practices that hinder initiation of exclusive breastfeeding and to expand those that enhance it.

Action

Results of the self-appraisal should be shared with the national BFHI coordination group. If improvements in knowledge and practices are needed before arranging for an external assessment, training may be arranged for the facility staff, facilitated by senior professionals who have attended a national or international training-of-trainers course in lactation management and/or have received national or international certification as lactation consultants.

In many settings, it has been found valuable to develop various cadres of specialists who can provide help with breastfeeding, both in health care facilities and at the community level. Through community-based health workers (village health workers, traditional birth attendants, etc.) and mother support groups, mothers can be reached with education and support in their home settings, a vital service wherever exclusive and sustained breastfeeding have become uncommon.

It is useful if a "breastfeeding support" or BFHI committee or team is organized at the health facility at the time of the self-appraisal, if this has not been done earlier. This committee or team can be charged with coordination of all activities regarding the implementation and monitoring of BFHI, including monitoring compliance with the *Code of Marketing*. The committee can serve as leader and coordinator for all further activities, including arranging for training, if needed, further self-appraisal, external assessment, self-monitoring, and reassessment. Members should include professionals of various disciplines (for example, physicians such as neonatologists, paediatricians, obstetricians, nurses, midwives, nutritionists, social workers, etc.) with some members in key management or leadership positions.

The facility can consult with the relevant local authority and the UNICEF and WHO country offices, which may be able to provide more information on policies and training, which can contribute to increasing the Baby-friendliness of health facilities.

3 As mentioned elsewhere, if mothers are not breastfeeding for justified medical reasons, including by mothers who are HIV-positive, they can be counted as part of the 75%.

Preparing for the external assessment

Before seeking assessment and designation as Baby-friendly hospitals are encouraged to develop:

- a written breastfeeding/infant feeding policy covering all *Ten Steps to successful breastfeeding* and compliance with the *Code*, as well as HIV and infant feeding, if included in the criteria,
- a written policy addressing mother-friendly care, if included in the criteria,
- a written curriculum for training given to hospital staff caring for mothers and babies on breastfeeding management, feeding of the non-breastfeeding infant, and mother-friendly care, and
- an outline of the content covered in antenatal health education on these topics.

If HIV and infant feeding criteria are being covered in the assessment, documents related to staff training and antenatal education on this topic should also be developed.

Also needed for the assessment are:

- proof of purchase of infant formula and various related supplies, and
- a list of the staff members who care for mothers and/or babies and the numbers of hours of training they have received on required topics.

The external assessment teams may request that these documents be assembled and sent to the team leader before the assessment.

The Self Appraisal Questionnaire

Hospital data sheet

General information on hospital and senior staff:

Hospital name and address: ____

Name and title of hospital director or administrator: ____________________________
Telephone or extension: ______________________E-mail address: ________________________

The hospital is: *[tick all that apply]*

☐ a maternity hospital
☐ a general hospital
☐ a teaching hospital
☐ a tertiary hospital
☐ a government hospital
☐ a privately run hospital
☐ other (specify:) ____________________

Total number of hospital beds: ________ Total number of hospital employees: ________

Information on antenatal services:

Hospital has antenatal services (either on or off site): ☐Yes ☐No

(if *"No"*, skip all but the last question in this section.)

Name and title of the director of antenatal services/clinic: ______________________________
Telephone or extension: ______________________E-mail address: ______________________

What percentage of mothers delivering at the hospital attends the hospital's antenatal clinic? ___%

Does the hospital hold antenatal clinics at other sites outside the hospital? ☐Yes ☐No
[if "Yes"] Please describe when and where they are held: ________________________________

____

Are there beds designated for high-risk pregnancy cases? ☐Yes ☐No *[if "Yes":]*
How many?________

What percentage of women arrives for delivery without antenatal care? _______% ☐ Don't know

Information on labour and delivery services:

Name and title of the director of labour and delivery services: ____________________________
Telephone or extension: ______________________E-mail address: ________________________

Information on maternity and related services:

Name and title of the director of maternity services: ___________________________________
Telephone or extension: ______________________E-mail address: ________________________

Number of postpartum maternity beds: __________

Average daily number of mothers with full term babies in the postpartum unit(s): __________

Does the facility have unit(s) for infants needing special care (LBW, premature, ill, etc.)?
☐Yes ☐No

[if "Yes"] Name of first unit: ____________________________ Average daily census: ______
Name of director(s) of this unit: ____

Name of additional unit: ___________________________________ Average daily census: ____
Name of director(s) of this unit: ____

Are there areas in the maternity wards designated as well baby observation areas? ☐Yes ☐No
[if "Yes"] Average daily census of each area: ____
Name of head/director(s) of these areas: ____

Staff responsible for breastfeeding/infant feeding

The following staff has direct responsibility for assisting women with breastfeeding (BF), feeding breast-milk substitutes (BMS), or providing counselling on HIV and infant feeding):
[tick all that apply]

	BF	BMS	HIV		BF	BMS	HIV
Nurses	☐	☐	☐	Paediatricians	☐	☐	☐
Midwives	☐	☐	☐	Obstetricians	☐	☐	☐
SCBU/NICU nurses	☐	☐	☐	Infant feeding counsellors	☐	☐	☐
Dieticians	☐	☐	☐	Lay/peer counsellors	☐	☐	☐
Nutritionists	☐	☐	☐	Other staff (specify):			
Lactation consultants	☐	☐	☐	____________________	☐	☐	☐General
physicians	☐	☐	☐	____________________	☐	☐	☐

[use information for completing I.C. 10, 13 and 17]

Are there breastfeeding and/or HIV and infant feeding committee(s) in the hospital? ☐Yes ☐No
[if "Yes"] Please describe: ____

____

Is there a BFHI coordinator at the hospital? ☐Yes ☐No (*if "Yes"*, name:) ___________________

Statistics on births:

Total births in the last year: ______ of which:

____% were by C-section without general anaesthesia.

____% were by C-section with general anaesthesia.

____% infants were admitted to the SCBU/NICU or similar units.

Statistics on infant feeding:

Total number of babies discharged from the hospital last year: ____ of which:

____% were exclusively breastfed (or fed human milk) from birth to discharge.

____% received at least one feed other than breast milk (formula, water or other fluids) in the hospital because of documented medical reason. (if a mother knew she was HIV positive and made an informed decision to replacement feed, this can be considered a medical reason).

____% received at least one feed other than breast milk without any documented medical reason.

[Note: the total percentages listed above should equal 100%]

The hospital data above indicates that at least 75% of the babies delivered in the past year were exclusively breastfed or fed human milk from birth to discharge, or, if they received any feeds other than human milk this was because of documented medical reasons:

[Note: add the percentages in categories one and two to calculate this percentage]

☐Yes ☐No 6.1

Statistics on HIV/AIDS:

Percentage of pregnant women who received testing and counselling for HIV: _____%

Percentage of mothers who were known to be HIV-positive at the time of babies' births: _____%

Data sources:

Please describe sources for the above data: ____

____

____

STEP 1. Have a written breastfeeding policy that is routinely communicated to all health care staff.

	YES	NO
1.1 Does the health facility have a written breastfeeding/infant feeding policy that addresses all 10 Steps to Successful Breastfeeding in maternity services and support for HIV-positive mothers?	☐	☐
1.2 Does the policy protect breastfeeding by prohibiting all promotion of breast-milk substitutes, feeding bottles, and teats?	☐	☐
1.3 Does the policy prohibit distribution of gift packs with commercial samples and supplies or promotional materials for these products to pregnant women and mothers?	☐	☐
1.4 Is the breastfeeding/infant feeding policy available so all staff who take care of mothers and babies can refer to it?	☐	☐
1.5 Is a summary of the breastfeeding/infant feeding policy, including issues related to the 10 Steps, The International Code of Marketing of Breast-milk Substitutes and subsequent WHA resolutions, and support for HIV-positive mothers posted or displayed in all areas of the health facility which serve mothers, infants, and/or children?	☐	☐
1.6 Is the summary of the policy posted in language(s) and written with wording most commonly understood by mothers and staff?	☐	☐
1.7 Is there a mechanism for evaluating the effectiveness of the policy?	☐	☐
1.8 Are all policies or protocols related to breastfeeding and infant feeding in line with current evidence-based standards?	☐	☐

STEP 2. Train all health care staff in skills necessary to implement the policy.

	YES	NO
2.1 Are all staff members caring for pregnant women, mothers, and infants oriented to the breastfeeding/infant feeding policy of the hospital when they start work?	☐	☐
2.2 Are staff members who care for pregnant women, mothers and babies both aware of the importance of breastfeeding and acquainted with the facility's policy and services to protect, promote, and support breastfeeding?	☐	☐
2.3 Do staff members caring for pregnant women, mothers and infants (or all staff members, if they are often rotated into positions with these responsibilities) receive training on breastfeeding promotion and support within six months of commencing work, unless they have received sufficient training elsewhere?	☐	☐
2.4 Does the training cover all Ten Steps to Successful Breastfeeding and The International Code of Marketing of Breast-milk Substitutes?	☐	☐
2.5 Is training for clinical staff at least 20 hours in total, including a minimum of 3 hours of supervised clinical experience?	☐	☐
2.6 Is training for non-clinical staff sufficient, given their roles, to provide them with the skills and knowledge needed to support mothers in successfully feeding their infants?	☐	☐
2.6 Is training also provided either for all or designated staff caring for women and infants on feeding infants who are not breastfed and supporting mothers who have made this choice?	☐	☐
2.7 Are clinical staff members who care for pregnant women, mothers, and infants able to answer simple questions on breastfeeding promotion and support and care for non-breastfeeding mothers?	☐	☐
2.8 Are non-clinical staff such as care attendants, social workers, and clerical, housekeeping and catering staff able to answer simple questions about breastfeeding and how to provide support for mothers on feeding their babies?	☐	☐
2.9 Has the healthcare facility arranged for specialized training in lactation management of specific staff members?	☐	☐

STEP 3. Inform all pregnant women about the benefits and management of breastfeeding.

	YES	NO
3.1 Does the hospital include an antenatal clinic or satellite antenatal clinics or in-patient antenatal wards?	☐	☐
3.2 If yes, are the pregnant women who receive antenatal services informed about the importance and management of breastfeeding?	☐	☐
3.3 Do antenatal records indicate whether breastfeeding has been discussed with pregnant women?	☐	☐
3.4 Does antenatal education, including both that provided orally and in written form, cover key topics related to the importance and management of breastfeeding?	☐	☐
3.5. Are pregnant women protected from oral or written promotion of and group instruction for artificial feeding?	☐	☐
3.6. Are the pregnant women who receive antenatal services able to describe the risks of giving supplements while breastfeeding in the first six months?	☐	☐
3.7 Are the pregnant women who receive antenatal services able to describe the importance of early skin-to-skin contact between mothers and babies and rooming-in?	☐	☐
3.8 Is a mother's antenatal record available at the time of delivery?	☐	☐

STEP 4. Help mothers initiate breastfeeding within a half-hour of birth.

This Step is now interpreted as:

Place babies in skin-to-skin contact with their mothers immediately following birth for at least an hour. Encourage mothers to recognize when their babies are ready to breastfeed and offer help if needed.

	YES	NO
4.1 Are babies who have been delivered vaginally or by caesarean section without general anaesthesia placed in skin-to-skin contact with their mothers immediately after birth and their mothers encouraged to continue this contact for an hour or more?	☐	☐
4.2 Are babies who have been delivered by caesarean section with general anaesthesia placed in skin-to-skin contact with their mothers as soon as the mothers are responsive and alert, and the same procedures followed?	☐	☐
4.3 Are all mothers helped, during this time, to recognize the signs that their babies are ready to breastfeed and offered help, if needed?	☐	☐
4.4 Are the mothers with babies in special care encouraged to hold their babies, with skin-to-skin contact, unless there is a justifiable reason not to do so?	☐	☐

STEP 5. Show mothers how to breastfeed and how to maintain lactation, even if they should be separated from their infants.

	YES	NO
5.1 Does staff offer all breastfeeding mothers further assistance with breastfeeding their babies within six hours of delivery?	☐	☐
5.2 Can staff describe the types of information and demonstrate the skills they provide both to mothers who are breastfeeding and those who are not, to assist them in successfully feeding their babies?	☐	☐
5.3 Are staff members or counsellors who have specialized training in breast-feeding and lactation management available full-time to advise mothers during their stay in healthcare facilities and in preparation for discharge?	☐	☐
5.4 Does the staff offer advice on other feeding options and breast care to mothers with babies in special care who have decided not to breastfeed?	☐	☐
5.5 Are breastfeeding mothers able to demonstrate how to correctly position and attach their babies for breastfeeding?	☐	☐
5.6 Are breastfeeding mothers shown how to hand express their milk or given information on expression and advised of where they can get help, should they need it?	☐	☐
5.7 Do mothers who have never breastfed or who have previously encountered problems with breastfeeding receive special attention and support from the staff of the healthcare facility, both in the antenatal and postpartum periods?	☐	☐
5.8 Are mothers who have decided not to breastfeed shown individually how to prepare and give their babies feeds and asked to prepare feeds themselves, after being shown how?	☐	☐
5.9 Are mothers with babies in special care who are planning to breastfeed helped within 6 hours of birth to establish and maintain lactation by frequent expression of milk and told how often they should do this?	☐	☐

STEP 6. Give newborn infants no food or drink other than breast milk, unless medically indicated.

	YES	NO
6.1 Does hospital data indicate that at least 75% of the full-term babies discharged in the last year have been exclusively breastfeed (or exclusively fed expressed breast milk) from birth to discharge or, if not, that there were acceptable medical reasons?	☐	☐
6.2 Are babies breastfed, receiving no food or drink other than breast milk, unless there were acceptable medical reasons or fully informed choices?	☐	☐
6.3 Does the facility take care not to display or distribute any materials that recommend feeding breast-milk substitutes, scheduled feeds, or other inappropriate practices?	☐	☐
6.4 Do mothers who have decided not to breastfeed report that the staff discussed with them the various feeding options, and helped them to decide what was suitable in their situations?	☐	☐
6.5 Does the facility have adequate space and the necessary equipment and supplies for giving demonstrations of how to prepare formula and other feeding options away from breastfeeding mothers?	☐	☐
6.6 Are all clinical protocols or standards related to breastfeeding and infant feeding in line with BFHI standards and evidence-based guidelines?	☐	☐

STEP 7. Practice rooming-in - allow mothers and infants to remain together – 24 hours a day.

	YES	NO
7.1 Do the mother and baby stay together and/or start rooming-in immediately after birth?	☐	☐
7.2 Do mothers who have had Caesarean sections or other procedures with general anaesthesia stay together with their babies and/or start rooming in as soon as they are able to respond to their babies' needs?	☐	☐
7.3 Do mothers and infants remain together (rooming-in or bedding-in) 24 hours a day, unless separation is fully justified?	☐	☐

STEP 8. Encourage breastfeeding on demand.

	YES	NO
8.1 Are breastfeeding mothers taught how to recognize the cues that indicate when their babies are hungry?	☐	☐
8.2 Are breastfeeding mothers encouraged to feed their babies as often and for as long as the babies want?	☐	☐
8.3 Are breastfeeding mothers advised that if their breasts become overfull they should also try to breastfeed?	☐	☐

STEP 9. Give no artificial teats or pacifiers (also called dummies or soothers) to breastfeeding infants.

	YES	NO
9.1 Are breastfeeding babies being cared for without any bottle feeds?	☐	☐
9.2 Have mothers been given information by the staff about the risks associated with feeding milk or other liquids with bottles and teats?	☐	☐
9.3 Are breastfeeding babies being cared for without using pacifiers?	☐	☐

STEP 10. Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or clinic.

	YES	NO
10.1 Do staff discuss plans with mothers who are close to discharge for how they will feed their babies after return home?	☐	☐
10.2 Does the hospital have a system of follow-up support for mothers after they are discharged, such as early postnatal or lactation clinic check-ups, home visits, telephone calls?	☐	☐
10.3 Does the facility foster the establishment of and/or coordinate with mother support groups and other community services that provide support to mothers on feeding their babies?	☐	☐
10.4 Are mothers referred for help with feeding to the facility's system of follow-up support and to mother support groups, peer counsellors, and other community health services such as primary health care or MCH centres, if these are available?	☐	☐
10.5 Is printed material made available to mothers before discharge, if appropriate and feasible, on where to get follow-up support?	☐	☐
10.6 Are mothers encouraged to see a health care worker or skilled breastfeeding support person in the community soon after discharge (preferably 2-4 days after birth and again the second week) who can assess how they are doing in feeding their babies and give any support needed?	☐	☐
10.7 Does the facility allow breastfeeding/infant feeding counselling by trained mother-support group counsellors in its maternity services?	☐	☐

Compliance with the International Code of Marketing of Breast-milk Substitutes

	YES	NO
Code.1 Does the healthcare facility refuse free or low-cost supplies of breast-milk substitutes, purchasing them for the wholesale price or more?	☐	☐
Code.2 Is all promotion for breast-milk substitutes, bottles, teats, or pacifiers absent from the facility, with no materials displayed or distributed to pregnant women or mothers?	☐	☐
Code.3 Are employees of manufacturers or distributors of breast-milk substitutes, bottles, teats, or pacifiers prohibited from any contact with pregnant women or mothers?	☐	☐
Code.4 Does the hospital refuse free gifts, non-scientific literature, materials or equipment, money or support for in-service education or events from manufacturers or distributors of products within the scope of the Code?	☐	☐
Code.5 Does the hospital keep infant formula cans and pre-prepared bottles of formula out of view unless in use?	☐	☐
Code.6 Does the hospital refrain from giving pregnant women, mothers and their families any marketing materials, samples or gift packs that include breast-milk substitutes, bottles/teats, pacifiers or other equipment or coupons?	☐	☐
Code.7 Do staff members understand why it is important not to give any free samples or promotional materials from formula companies to mothers?	☐	☐

Mother-friendly care

Note: *These criteria should be required only after health facilities have trained their staff on policies and practices related to mother-friendly care (see Section 5.1 "Assessors Guide", p. 5, for discussion).*

		YES	NO
MF.1	Do hospital policies require mother-friendly labour and birthing practices and procedures, including:		
	Encouraging women to have companions of their choice to provide constant or continuous physical and/or emotional support during labour and birth, if desired?	☐	☐
	Allowing women to drink and eat light foods during labour, if desired?	☐	☐
	Encouraging women to consider the use of non-drug methods of pain relief unless analgesic or anaesthetic drugs are necessary because of complications, respecting the personal preferences of the women?	☐	☐
	Encouraging women to walk and move about during labour, if desired, and assume positions of their choice while giving birth, unless a restriction is specifically required for a complication and the reason is explained to the mother?	☐	☐
	Care that avoids invasive procedures such as rupture of the membranes, episiotomies, acceleration or induction of labour, instrumental deliveries, caesarean sections unless specifically required for a complication and the reason is explained to the mother?	☐	☐
MF.2	Has the staff received orientation or training on mother-friendly labour and birthing policies and procedures such as those described above?	☐	☐
MF.3	Are women informed during antenatal care (if provided by the facility) that women may have companions of their choice during labour and birth to provide continuous physical and/or emotional support, if they desire?	☐	☐
MF.4	Once they are in labour, are their companions made welcome and encouraged to provide the support the mothers want?	☐	☐
MF.5	Are women given advice during antenatal care (if provided by the facility) about ways to use non-drug comfort measures to deal with pain during labour and what is better for mothers and babies?	☐	☐
MF.6	Are women told that it is better for mothers and babies if medications can be avoided or minimized, unless specifically required for a complication?	☐	☐
MF.7	Are women informed during antenatal care (if provided by the facility) that they can move around during labour and assume positions of their choice while giving birth, unless a restriction is specifically required due to a complication?	☐	☐
MF.8	Are women encouraged, in practice, to walk and move around during labour, if desired, and assume whatever positions they want while giving birth, unless a restriction is specifically required due to a complication?	☐	☐

HIV and infant feeding (optional)

Note: *The national BFHI coordination group and/or other appropriate national decision-makers will determine whether or not maternity services should be assessed on whether they provide support related to HIV and infant feeding. See BFHI Section 1.2 for suggested guidelines for making this decision.*

		YES	**NO**
HIV.1	Does the breastfeeding/infant feeding policy require support for HIV positive women to assist them in making informed choices about feeding their infants?	☐	☐
HIV.2	Are pregnant women told about the ways a woman who is HIV positive can pass the HIV infection to her baby, including during breastfeeding?	☐	☐
HIV.3	Are pregnant women informed about the importance of testing and counselling for HIV?	☐	☐
HIV.4	Does staff receive training on: ▪ the risks of HIV transmission during pregnancy, labour and delivery and breastfeeding and its prevention, ▪ the importance of testing and counselling for HIV, and ▪ how to provide support to women who are HIV- positive to make fully informed feeding choices and implement them safely?	☐	☐
HIV.5	Does the staff take care to maintain confidentiality and privacy of pregnant women and mothers who are HIV-positive?	☐	☐
HIV.6	Are printed materials available that are free from marketing content on how to implement various feeding options and distributed to mothers, depending on their feeding choices, before discharge?	☐	☐
HIV.7	Are mothers who are HIV-positive or concerned that they are at risk informed about and/or referred to community support services for HIV testing and infant feeding counselling?	☐	☐

Summary

	YES	NO
Does your hospital fully implement all **10 STEPS** for protecting, promoting, and supporting breastfeeding? (if "No") List questions for each of the 10 Steps where answers were "No":	☐	☐
Does your hospital fully comply with the **Code of Marketing of Breast-milk Substitutes**? (if "No") List questions concerning the Code where answers were "No":	☐	☐
Does your hospital provide **mother-friendly care**? (if "No") List questions concerning mother-friendly care where answers were "No":	☐	☐
Does your hospital provide adequate support related to **HIV and infant feeding** (if required)? (if "No") List questions concerning HIV and infant feeding where answers were "No":	☐	☐
If the answers to any of these questions in the "Self Appraisal" are "no", what improvements are needed? If improvements are needed, would you like some help? If yes, please describe:		

This form is provided to facilitate the process of hospital self-appraisal. The hospital or health facility is encouraged to study the Global Criteria as well. If it believes it is ready and wishes to request a pre-assessment visit or an external assessment to determine whether it meets the Global Criteria for Baby-friendly designation, the completed form may be submitted in support of the application to the relevant national health authority for BFHI.

If this form indicates a need for substantial improvements in practice, hospitals are encouraged to spend several months in readjusting routines, retraining staff, and establishing new patterns of care. The self-appraisal process may then be repeated. Experience shows that major changes can be made in three to four months with adequate training. In-facility or in-country training is easier to arrange than external training, reaches more people, and is therefore encouraged.

Handout 3.6

WHO/UNICEF breastfeeding and young child feeding courses

Title	WHO/UNICEF Strengthening and sustaining the Baby-friendly Hospital Initiative: A course for decision-makers	WHO/UNICEF Breastfeeding promotion and support in a Baby-friendly Hospital: a 20-hour course for maternity staff	WHO/UNICEF Breastfeeding counselling: a training course	WHO Complementary feeding counselling: A training course	WHO Infant and young child feeding counselling: an integrated course
Length	8 -12 hours	20 hours	40 hours	21 hours	5 days (plus 1 day for follow-up)
Clinical Practice	None	4 ½ hours	4x2 hours	2x2 hours	8 hours (4 sessions)
Aim	To raise awareness and provide practical guidance on administrative actions needed to become Baby-friendly	To change maternity care to be "Baby-friendly"	To develop clinical and counselling skills in breastfeeding	To provide knowledge and skills for counselling on appropriate complementary feeding practices	To provide knowledge and skills for counselling on breastfeeding, HIV and infant feeding and complementary feeding
Target Group	Health facility directors and administrators	All staff of a maternity facility	Key health workers in all parts of the health system	Health workers that care for and counsel caregivers of young children	Health workers that care for and counsel caregivers of infants and young children
Trainers	Training skills and experience needed	Training skills and experience needed	Preparation of trainers and detailed training instructions included	Training skills and experience needed	Training skills and experience needed
Materials	Course guide - Session plans – Handouts – Slides – Transparencies – Reference materials	Session plans and PowerPoint slides	Director's Guide -Trainer's Guide - Participants' Manual - Transparencies and flipchart – Slides -Forms and check lists – Video – Reference materials	Director's Guide Trainer's Guide Participants' Manual Transparencies	Director's Guide Trainer's Guide Participant's Manual Guidelines for follow-up Slides
Website	http://www.unicef.org/nutrition/index_24850.html?q=printme	http://www.unicef.org/nutrition/index_24850.html?q=printme	http://www.who.int/child-adolescent-health/publications/NUTRITION/BFC.htm	For information contact NHD/WHO Geneva	http://www.who.int/nutrition/iycf_intergrated_course/en/index.html

Handout 3.7

The Baby-friendly Hospital Initiative Guidelines and tools for monitoring and reassessment

A need for monitoring and reassessment tools

With the steady increase of hospitals worldwide that have been designated "Baby-friendly", health authorities in many countries have expressed a need for monitoring and reassessment tools that will help them build on progress achieved through the Baby-friendly Hospital Initiative (BFHI).

Guidelines and tools available from WHO and UNICEF

The revised BFHI package, ***The Baby-friendly Hospital Initiative, Revised, Updated and Expanded for Integrated Care,*** includes guidelines and tools for both monitoring and reassessing baby-friendly hospitals. The monitoring guidelines and tools can be used either by the national BFHI coordination group to monitor designated hospitals or by the hospitals themselves, as part of their own self-monitoring or quality assurance programmes. The reassessment guidelines and tool are designed to be used as part of an external reassessment and re-designation process, and thus are only available to UNICEF and WHO offices, national BFHI authorities, and their assessment teams. The implementation of a systematic monitoring and reassessment process is important for insuring the Initiative's long-term credibility and sustainability.

The documents and their contents

BFHI Section 4: Hospital Self-Appraisal and Monitoring

4.2: Guidelines and Tools for Monitoring Baby-friendly Hospitals

- Guide to developing a national process for BFHI monitoring
- Annex 1: Infant feeding record and report
- Annex 2: Staff training record and report
- Annex 3: BFHI monitoring tool
- Annex 4: The BFHI reassessment tool and its possible use for monitoring.

BFHI Section 5: External Assessment and Reassessment

5.3: Guidelines and Tool for External Reassessment

- Guide to developing a national process for BFHI reassessment
- Annex 1: BFHI reassessment tool.

BFHI Section 4 is available for downloading at the UNICEF/WHO website,.

BFHI Section 5 has been posted on the UNICEF "intranet" and can be accessed by UNICEF regional and country offices and provided to national BFHI coordinator groups and assessors.

Session 4:
The scientific basis for the "Ten steps to successful breastfeeding"

Objective

At the conclusion of this session, participants will be able to:

Describe the scientific basis for the "Ten steps to successful breastfeeding".

Duration

Total: 90 minutes

Teaching methods

Lecture and discussion

Preparation for session

Review the WHO document, *"Evidence for the ten steps to successful breast-feeding"*. Geneva, World Health Organization, 1998.
http://www.who.int/nutrition/publications/infantfeeding/evidence_ten_step_eng.pdf
http://whqlibdoc.who.int/publications/2004/9241591544_eng.pdf

Review all handouts and research summaries which follow the Session 4 outline. (be sure to have the most up-to-date statement from the Joint United Nations Programme on HIV/AIDS (UNAIDS) on HIV and infant feeding).
Review video "Delivery, Self Attachment" (time: 6 minutes). See the *Course Guide* for information on how to order the video.
Review all PowerPoint slides and/or transparencies and choose *for each step* about three slides or transparencies most appropriate for your audience. If desired, you may change the order of the slide/transparency presentation. Review the generic photo slides and use them and/or your own slides, to illustrate points as needed.
Review locally available breastfeeding training courses and list them on an overhead or flipchart.
If available, display poster of the Ten Steps where the speaker can easily refer to it.

Training materials

Summaries

Summaries of research studies

Handouts

Protecting, Promoting and Supporting Breast-feeding, The Special Role of Maternity Services, A Joint WHO/UNICEF Statement (booklet, same as Session 3)

4.1 Presentation for Session 4

4.2 National policy on infant and young child feeding (for health institutions), Sultanate of Oman

4.3 The Baby and Mother Friendly Hospital Programme, Ministry of Health, Mexico

4.4 UNICEF UK Baby Friendly Initiative: Sample combined maternity/community services policy on breastfeeding

4.5 Acceptable medical reasons for use of breast-milk substitutes

Slides/Transparencies

4.1.1-4.11.7 and photo slides 4.a-4.z

The website featuring this Course contains links to the slides and transparencies for this session in two Microsoft PowerPoint files. The photo slides are included in the "slides" file in the order in which they are listed in the Session Plan. When possible, trainers should substitute appropriate photos taken locally or in situations that are similar to local conditions.

The slides (in colour) can be used with a laptop computer and LCD projector, if available. Alternatively, the transparencies (in black and white) can be printed out and copied on acetates and projected with an overhead projector. The transparencies are also reproduced as the first handout for this session, with 6 transparencies to a page.

Other training materials

Flipchart
Video
Poster with the Ten Steps

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Outline

Content	Trainer's Notes
	This session will review selected studies to illustrate the physiological and sociological basis for the Ten Steps. All steps are interrelated. The first 2 steps provide the foundation for implementing the remaining eight. Refer participants to the handout (booklet), "Promoting, Protecting, and Supporting Breast-feeding". Invite participants to comment or ask questions during the presentation. Write down problems, barriers or solutions that come up during the presentation so they can be addressed in Session 5. Try to allow some discussion during this presentation but postpone major discussions until Session 5 due to time constraints. Mention that a mini-version of the presentation is reproduced in Handout 4.1 and included in the participants' folder.
1. Step 1: Have a written breastfeeding policy that is routinely communicated to all health-care staff.	***Slides*** 4.1.1 Step 1. 4.1.2 Why have a policy? 4.a Mention the "Joint Statement" and fact that it serves as the background document for BFHI and the "Ten Steps". 4.1.3 What should it cover? 4.1.4 How should it be presented? Policy examples (refer to handouts of choice, 4.2-4.4) (may use your own policy examples. Policies need to be adapted to your own settings and should be based on the Ten Steps). 4.b Show photo of health professionals consulting a written policy during on-the-job training (optional). 4.1.5 Graph: rates of exclusive breast-milk feeds improved while in the birth hospital after implementing the Baby-friendly Hospital Initiative (*Philipp et al., see summary).*
2. Step 2: Train all health-care staff in the skills necessary to implement this policy.	***Slides*** 4.2.1 Step 2.

Content	Trainer's Notes
	4.c Show photo of health professionals attending a classroom session (optional). 4.d. Show photo of women during a group discussion in training workshop (optional). 4.2.2 Areas of knowledge to be included in staff education (may ask participants to answer before showing). 4.2.3 Additional topics for training in the context of HIV. 4.2.4 Hospital staff breastfeeding training had a significant effect on exclusive breastfeeding rate at discharge, which increased from 41% to 77% *(Cattaneo et al., see summary).* 4.2.5 In several studies health professionals trained in breastfeeding counselling provided counselling and/or trained support groups to assist mothers in a variety of circumstances (prenatally, postnatally, after admission for diarrhoea). In each of the studies there was a significant increase in exclusive breastfeeding, when compared to the control group *(WHO/CAH, see summary).* 4.2.6 Ask participants to give examples of health professionals - other than perinatal staff - who influence breastfeeding success. Consider other staff in the institution coming into contact with mothers such as cleaning staff, clerks, or other specialty groups.
3. Step 3: Inform all pregnant women about the benefits and management of breastfeeding.	***Slides*** 4.3.1 Step 3. 4.3.2 Antenatal education content (can be adapted to reflect individual country needs). 4.e-f Show photos of an antenatal group class and individual counselling (optional). 4.3.3 Antenatal care can significantly impact breastfeeding practices related to colostrum feeding and early breastfeeding

Content	Trainer's Notes
	initiation within 2 hours of birth *(Nielsen et al., see summary).* 4.3.4 Antenatal education can lead to significant increases in initiation rates (23%) and duration of short-term breastfeeding (up to 3 months) (39%), as shown by a meta-analysis of studies of education and support *(Guise et al., see summary).*
4. Step 4: Help mothers initiate breastfeeding within a half-hour of birth.	***Slides*** 4.4.1 Step 4. 4.4.2 The revised BFHI Global Criteria interpret this step as "Place babies in skin-to-skin contact with their mothers immediately following birth for at least an hour. Encourage mothers to recognize when their babies are ready to breastfeed and offer help if needed." Discuss reasons for this change, including research on the time it takes babies to start breastfeeding without assistance (see photos 4h-j and slide 4.4.8 below). 4.4.3 Why encourage early initiation? The points in this list are illustrated in the following transparencies. 4.4.4 How to encourage early initiation? 4.g-j Show one or more photos illustrating early initiation. The first photo shows a nurse assisting a mother to position her baby just after delivery. The next three photos illustrate how the baby will find the mother's nipple and begin to suck on his own, if time is allowed for this process. 4.4.5 Graph: Study demonstrates how contact within the first hour after delivery increased duration of breastfeeding at 3 months *(DeChateau et al., see summary).* 4.4.6 Graph: Study concluded that skin-to-skin care as compared to care in a bed during the unique period just following birth is associated with higher body and skin temperatures and more rapid metabolic adaptation. Maternal body is an efficient heat source for the baby *(Christensson et al., see summary).*

Content	Trainer's Notes
	4.4.7 Table: This summary of when immune factors are produced in the infant demonstrates the importance of colostrum and mature milk's role in compensating for the relative absence of immunity in the infant *(Worthington-Roberts)*. 4.4.8 Graph: Study concluded that in order to promote successful suckling patterns naked infants should be left undisturbed on their mothers' abdomens until the first suckling is accomplished and the infants' efforts to take the breast actively should be promoted *(Righard et al., see summary).* Show *"Delivery, Self Attachment"* video if available, as an alternative to photo slides g, h, and i. Note the infant's suckling pattern when there is no interference with the mother and newborn.
5. Step 5: Show mothers how to breastfeed and how to maintain lactation even if they are separated from their infants.	***Slides*** 4.5.1 Step 5. 4.5.2 Quote (*Woolridge*). 4.k-l Show photos of staff showing mothers how to breastfeed (optional). 4.5.3 Graph: Study demonstrates that if at hospital discharge a mother is breastfeeding her infant with good technique, or if 5-10 minutes of instruction time is spent correcting faulty technique, the duration of breastfeeding is almost doubled compared to mothers discharged with uncorrected faulty breastfeeding technique *(Righard et al., see summary).* 4.5.4 Graph: Breastfeeding initiation occurred among 75% of women who were encouraged to breastfeed compared to only 43% who were not encouraged to breastfeed by a health professional *(Lu et al., see summary).* 4.5.5 Graph: breastfeeding duration rates were significantly higher among mothers whose babies roomed in postpartum and whose mothers received breastfeeding guidance during the hospital stay compared to mothers whose babies did not room in and did not receive any breastfeeding guidance

Content	Trainer's Notes
	while in the hospital *(Perez-Escamilla et al., see summary).* 4.5.6 Supply and demand. 4.m Show photo of milk expression.
6. Step 6: Give newborn infants no food or drink other than breast milk unless *medically* indicated.	***Slides*** 4.6.1 Step 6. 4.n Show photo of breast-milk substitute and water bottles, <u>not</u> to be given unless medically indicated *(optional).* 4.o Show photo of nurse giving baby a bottle (<u>not</u> appropriate unless medically indicated) *(optional).* 4.6.2 Graph: This study suggests a correlation between a more "physiologic" start of breastfeeding and the overall duration of the lactation period *(Nylander et al., see summary).* 4.6.3 To address the concern that colostrum alone is "not enough", this graphic illustrates that newborn and infant stomach capacities are perfectly matched to the amount of colostrum (about 200 ml/24 hours at day two) and mature milk (about 800-900 ml/24 hours at 1 year). 4.6.4 Impact of routine formula supplementation. 4.6.5 This study shows that early introduction of a bottle in inversely associated with breastfeeding duration *(Perez-Escamilla et al., see summary).* 4.6.6 The data in this table shows there is no need for water supplementation for infants exclusively breastfed no matter what temperature and humidity, as reflected in normal urine osmolarity. 4.6.7 There are rare exceptions during which infants may require other fluids or food in addition to, or in place of, breast milk. 4.6.8 - 4.6.10 Acceptable medical reasons for use of breast-milk substitutes (distribute Handout 4.5). If questions arise concerning HIV and breastfeeding refer

Content	Trainer's Notes
	participants to Handout 4.6 (HIV): Infant and young child feeding in the context of HIV, available in the "HIV" version of this session.
7. Step 7: Practice rooming-in—allow mothers and infants to stay together—24 hours a day.	***Slides*** 4.7.1 Step 7. 4.7.2 Definition (describe bedding-in if relevant. "Bedding-in" is when infant and mother stay in the same bed). 4.p-q Show one or more photos of rooming-in and bedding-in. 4.7.3 Why institute rooming-in? (points discussed in slides to follow). 4.7.4 Graph: Positive impact of rooming-in policy on prevention of infectious disease when infants rooming-in were compared to newborns not rooming-in with their mothers *(Soetjiningsih et al., see summary).* 4.7.5 Graph: Positive effect of infants rooming-in with their mothers on frequency of breastfeeding in the first 6 days of life compared to infants not rooming-in *(Yamauchi et al., see summary).*
8. Step 8: Encourage breastfeeding on demand.	***Slides*** 4.8.1 Step 8. 4.8.2 Definition of "on-demand". 4.8.3 Why feed on demand? 4.r-s Show one or more photos of feeding on demand. 4.8.4 Table: Study demonstrates the positive impact of on-demand, frequent breastfeeding (number of times during the first 24 hours) on bilirubin levels of 6 day-old full-term healthy infants *(Yamauchi et al., see summary).* 4.8.5 This data shows that the greater the frequency of feeds, the lower the level of serum bilirubin *(DeCarvalho et al., see*

Content	Trainer's Notes
	summary).
9. Step 9: Give no artificial teats or pacifiers (also called dummies and soothers) to breastfeeding infants.	***Slides*** 4.9.1 Step 9. 4.t Show photo of various nipples/teats – should not be used (optional). 4.u Show photo of various pacifiers/dummies/ soothers – should not be used (optional). 4.9.2 Alternatives to artificial teats or pacifiers. 4.9.3 Illustration of cup feeding. It is recommended to use an ordinary small 50-100 ml glass or polypropylene plastic "cup". The rim of the "cup" should be smooth and not sharp and the "cup" should be boiled or sterilised. 4.v Show photo of cup feeding (optional). 4.9.4 Early weaning was associated with daily pacifier use even when confounding factors were accounted for *(Victora et al., see summary).*
10. Step 10: Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from hospital or clinic.	***Slides*** 4.10.1 Step 10. 4.10.2 Quote. 4.10.3 Examples of support. 4.10.4 Summary of types of breastfeeding support. A "doula" is a woman caregiver of another woman who provides support during the perinatal period. 4.w-z Show photos illustrating various types of mother support (home visiting by nurse, mother support groups, and mothers dancing in a community breastfeeding meeting). 4.10.5 Trained peer counsellors positively effected the duration of exclusive breastfeeding *(Haider et al., see summary).* 4.10.6 Home visits improved exclusive breastfeeding at 2 weeks and 3 months *(Morrow et al., see summary).*

Content	Trainer's Notes
11. Effects of combined steps.	In addition, it is highly effective to combine the steps since by applying all steps or some in combination the hospital and the administration obtain better results. This is illustrated in many of the previous studies presented above. To further elaborate on this point the following series of slides are presented. 4.11.1 In a randomised trial in Belarus 17,000 mother-infant pairs, with mothers intending to breastfeed, were followed for 12 months. In 15 control hospitals and associated polyclinics that provide care following discharge, staff members were asked to continue their usual practices. In 16 experimental hospitals and associated polyclinics staff received baby-friendly training and support *(Kramer et al., see summary).* 4.11.2 Differences following intervention between control and intervention hospitals. 4.11.3 Effect of baby-friendly changes on exclusive breastfeeding at 3 and 6 months. 4.11.4 Impact of baby-friendly changes on selected health conditions. 4.11.5 In a study in Switzerland, data was analysed for 2861 infants aged 0–11 months in 145 health facilities. Breastfeeding data was compared with both the progress towards baby-friendly status of each hospital and the degree to which designated hospitals were successfully maintaining the Baby-friendly standards *(Merten et al., see summary).* 4.11.6 The proportion of babies exclusively breastfed for 5 months for those born in Baby-friendly hospitals compared to those born elsewhere. 4.11.7 The median duration of exclusive breastfeeding for babies born in baby-friendly hospitals if the hospital showed good compliance with the 10 steps, and if it did not. This result illustrates the importance of maintaining Baby-friendly standards.

Content	Trainer's Notes
12. Conclusion.	Acknowledge differences in opinion, perceived barriers, and innovative solutions relating to this subject matter. These areas of interest will be covered in the remaining sessions.

Summaries of research studies presented during Session 4

Slide: Study:

4.1.5 Philipp BL, Merewood A, Miller LW et al. Baby-friendly Hospital Initiative improves breastfeeding initiation rates in a US hospital setting. *Pediatrics,* 2001, 108:677-681.

4.2.4 Cattaneo A, Buzzetti R. Effect on rates of breast feeding of training for the Baby Friendly Hospital Initiative. *BMJ,* 2001, 323:1358-1362.

4.2.5 Albernaz E, Giugliani ERJ, Victora CG. Supporting breastfeeding: a successful experience. *Journal of Human Lactation,* 1998, 14(4):283-285.

Haider R et al Breast-feeding counselling in a diarrhoeal disease hospital. *Bulletin of the World Health Organization*, 1996, 74(2):173-179.

4.3.3 Nielsen B, Hedegaard M, Thilsted S, Joseph A and Liliestrand J. Does antenatal care influence postpartum health behaviour? Evidence from a community based cross-sectional study in rural Tamil Nadu, South India. *British Journal of Obstetrics and Gynaecology,* 1998, 105: 697-703.

4.3.4 Guise, J-M, Palda V, Westhoff C, Chan BKS, Helfand M, and Lieu T. The effectiveness of primary care-based interventions to promote breastfeeding: Systematic evidence review and meta-analysis for the US preventive services task force. *Annals of Family Medicine,* 2003, 1(2):70-78.

4.4.4 DeChateau P and Wiberg B. Long term effect on mother-infant behavior of extra contact during the first hour postpartum. *Acta Paediatr,* 1977, 66:145-151.

4.4.5 Christensson K, Siles C, Moreno L, Belaustequi A, De La Fuente P, Lagercrantz H, Puyol P, and Winberg J. Temperature, metabolic adaptation and crying in health full-term newborns cared for skin-to-skin or in a cot. *Acta Paediatr,* 1992, 81:488-93.

4.4.7 Righard L and Alade MO. Effect of delivery room routines on success of first breastfeed. *Lancet,* 1990, 336:1105-1107.

4.5.3 Righard L & Alade O. Sucking technique and its effect on success of breastfeeding. *Birth, 1992,*19(4):185-189.

4.5.4 Lu M, Lange L, Slusser W et al. Provider encouragement of breast-feeding: Evidence from a national survey. *Obstetrics and Gynecology,* 2001, 97:290-295.

4.5.5 Perez-Escamilla R, Segura-Millan S, Pollitt E, Dewey KG. Effect of the maternity ward system on the lactation success of low-income urban Mexican women. *Early Hum Dev*, 1992, 31(1):25-40.

4.6.2 Nylander G, Lindemann R, Helsing E, Bendvold E Unsupplemented breastfeeding in the maternity ward. *Acta Obstet Gynecol Scand,* 1991, 70:205-209.

4.6.5 Perez-Escamilla, Sergura-Millan S, Pollitt E, Dewey KG. Determinants of lactation performance across time in an urban population from Mexico. *Soc Sci Med,* 1993, 37(8): 1069-1078.

4.7.4 Soetjiningsih and Suraatmaja S. The advantages of rooming-in. *Pediatrica Indonesia,* 1986, 26:229-235.

4.7.5 Yamauchi Y and Yamanouchi I. The relationship between rooming-in/not rooming-in and breast-feeding variables. *Acta Paediatr Scan,* 1990, 1017-1022.

4.8.4 Yamauchi Y and Yamanouchi I. Breast-feeding frequency during the first 24 hours after birth in full-term neonates. *Pediatrics, 1990,* 86(2):171-175.

4.8.5 De Carvalho M, Klaus MH, Merkatz RB. Frequency of breast-feeding and serum bilirubin concentration. *Am J Dis Child,* 1982, Aug, 136(8):737-738.

4.9.4 Victora C, Behague D, Barros F et al. Pacifier use and short breastfeeding duration: cause, consequence, or coincidence? *Pediatrics,* 1997, 99:445-453.

4.10.5 Haider R, Kabir I, Huttly S and Ashworth. Training peer counselors to promote and support exclusive breastfeeding in Bangladesh. *J Hum Lact*, 2002, 18:7-12.

4.10.6 Morrow A, Guerrereo ML, Shultis J, et al. Efficacy of home-based peer counselling to promote exclusive breastfeeding: a randomised controlled trial. *Lancet,* 1999, 353:1226-1231.

4.11.1-4 Kramer MS, Chalmers B, Hodnett ED et al. Promotion of Breastfeeding Intervention Trial (PROBIT): a randomized trial in the Republic of Belarus. *JAMA,* 2001, Jan 24-31; 285(4):413-420.

4.11.5-7 Merten S et al. Do Baby-Friendly Hospitals Influence Breastfeeding Duration on a National Level. Pediatrics, 2005, 116: e702 – e708.

Baby Friendly Hospital Initiative improves breastfeeding initiation rates in a US hospital setting

Refers to Slide 4.1.5

Reference: Philipp BL, Merewood A, Miller LW et al. Baby Friendly Hospital Initiative improves breastfeeding initiation rates in a US hospital setting. *Pediatrics,*2001, 108:677-681.

Method: Two hundred complete medical records, randomly selected by a computer, were reviewed from each of 3 years: 1995, 1998, and 1999. Infants were excluded if there was missing data or for medical reasons. All infant feedings during the hospital postpartum stay were tallied, and each infant was categorized into 1 of 4 groups: exclusive breast milk, mostly breast milk, mostly formula, and exclusive formula.

Findings: Maternal and infant demographics for all 3 years were comparable.

The breastfeeding initiation rate increased during and after Baby-Friendly Policies were in place at Boston Medical Centre, an inner-city teaching hospital that provides care primarily to poor, minority, and immigrant families.

	Before	During	After	
Breastfeeding initiation	58.0%	77.5%	86.5%	$p<.001$
Exclusive breastfeeding initiation	5.5%	28.5%	33.5%	$p<.001$

Conclusion: Full implementation of the Ten Steps to Successful Breastfeeding leading to Baby-Friendly designation is an effective strategy to increase breastfeeding initiation rates in the US hospital setting.

Effect on rates of breast feeding of training for the Baby Friendly Hospital Initiative

Refers to Slide 4.2.4

Reference: Cattaneo A, Buzzetti R. Effect on rates of breast feeding of training for the Baby Friendly Hospital Initiative. *BMJ,* 2001, 323:1358-1362.

Method: Controlled, non-randomised study among 8 hospitals in Italy.* Data was collected measuring knowledge of 571 health workers and breastfeeding rates at discharge, 3, and 6 months of 2669 mother and baby pairs before and after breastfeeding training in group 1 and 2 hospitals. The training was based on the UNICEF 18 hour course that also included 2 hours from the WHO 40 hour counselling course. Training covered 54% of obstetricians, 72% of paediatricians, 84% of midwives, and 68% of nurses.

Findings:	Before	After	
Hospital compliance with the 10 steps (mean)	2.4	7.7	
Knowledge scores of health professionals			
Group 1	41%	72%	
Group 2	53%	75%	
Exclusive BF at discharge			
Group 1	41%	77%	$p<0.05$
Group 2	23%	73%	$p<0.05$
Full BF at 3 months			
Group 1	37%	50%	$p<0.05$
Group 2	40%	59%	$p<0.05$
Any BF at 6 months			
Group 1	43%	62%	$p<0.05$
Group 2	41%	64%	$p<0.05$

Four factors were significantly associated with exclusive breast feeding at discharge: First breast feed within one hour; rooming in; not using a pacifier; and instructions on expressing breast milk.

Conclusion: Breastfeeding training health professionals for 18 hours that includes practical sessions and counselling skills is effective in changing hospital practice, knowledge of health workers, and breastfeeding rates.

*Hospitals were grouped into two different groups according to geography with the following characteristics:
Group 1: 3 general and 1 teaching hospitals in Southern Italy.
Group 2: 3 general and 1 teaching hospitals in Northern and Central Italy.

	#Births in 1998	# Maternity beds	%C-section rate	%LBW
Group 1	2957	30-80	31-44	7-15
Group 2	374	16-40	7-15	3-9

Breastfeeding counselling increases exclusive breastfeeding
Refers to Slide 4.2.5

Reference: Albernaz E, Giugliani ERJ, Victora CG. Supporting breastfeeding: a successful experience. *Journal of human lactation,* 1998, 14(4):283-285.

Method: This paper relates the success of a study that helped enhance breastfeeding by means of a support group in Southern Brazil. The International Metacentre Growth Reference Study was designed to help WHO develop new growth charts to measure nutritional status of populations and to evaluate individual growth. Southern Brazil was one of the sites selected for the study, and an ongoing data collection for the longitudinal component of the study (based on children aged 0-24 months) began in July 1997. The new growth reference will be based on the growth of children with the following characteristics: gestational age at birth between 37 and 42 full weeks, single birth, lack of significant perinatal morbidity, absence of maternal smoking, no economic constraints on growth, and being breastfed for at least 1 full year and given no other foods during the first 4-6 months. Since few mothers in Brazil follow this recommendation, a lactation support group was trained to help mothers breastfeed their babies.

Findings: It was found that the breastfeeding support group really made a difference, at least with regard to the duration of breastfeeding. Mothers who had support breastfed longer and waited longer to introduce other foods into their children's diet compared to those who had no support. The factors that contributed to increased breastfeeding duration are enumerated.

Conclusion: Supporting mothers in breastfeeding is beneficial to both mothers and children and can lead to a better quality of life.

Reference: Haider R et al. Breast-feeding counselling in a diarrhoeal disease hospital. *Bulletin of the World Health Organization*, 1996,74(2):173-179.

Method: Lactation counsellors were trained to advise mothers of partially breastfed infants who were admitted to hospital because of diarrhoea, so that they could start exclusive breastfeeding during their hospital stay. Infants (n = 250) up to 12 weeks of age were randomised to intervention and control groups. Mothers in the intervention group were individually advised by the counsellors while mothers in the control group received only routine group health education. During follow-up at home by the counsellors a week later, only the mothers in the intervention group were counselled. All the mothers were evaluated for infant feeding practices at home two weeks after discharge.

When infants afflicted with diarrhoea were brought to the Hospital of the International Centre for Diarrhoeal Disease Research, Bangladesh (ICDDR, B) in Dhaka, Bangladesh, 125 mother-infant pairs received at least three lactation counselling sessions on the benefits of exclusive breast feeding. Researchers compared data on these 125 pairs with data on 125 other mother-infant pairs who were also at ICDDR,B due to diarrhoea but did not receive any counselling. Infants in the intervention group had a shorter hospital stay than those in the control group (4.3 vs. 3 days; p .001). The controls left before diarrhoea ended, while cases were discharged after diarrhoea ended.

Findings: At discharge, mothers in the intervention group were more likely than controls to be predominantly breastfeeding (breast milk plus oral rehydration solution [ORS]) (30% vs. 19%) as well as exclusively breastfeeding (60% vs. 6%) (p .001). Two weeks after discharge, when ORS was stopped, mothers in the intervention group were more likely to be exclusively breast feeding than those in the control group (75% vs. 8%), while those in the control group were more likely to bottle feed than cases (49% vs. 12%) (p .001). Infants in the control group were more likely to have another episode of diarrhoea within 2 weeks than those in the intervention group (15 vs. 4; p = .05; odds ratio = 2.92).

Conclusions: These findings indicate that individual lactation counselling had a strong influence on mothers to begin exclusive breastfeeding during hospitalisation and to continue to do so at home. Thus, staff at maternal and child health facilities should integrate lactation counselling into their program to improve infant feeding practices.

Does antenatal care influence postpartum health behaviour? Evidence from a community based cross-sectional study in rural Tamil Nadu, South India.

Refers to Slide 4.3.3

Reference: Nielsen B, Hedegaard M, Thilsted S, Joseph A and Liliestrand J. Does antenatal care influence postpartum health behaviour? Evidence from a community based cross-sectional study in rural Tamil Nadu, South India. *British Journal of Obstetrics and Gynaecology,* 1998, 105: 697-703.

Methods: Community-based, cross-sectional questionnaire study of 30 randomly selected areas served by health sub centres in rural India. 1321 women who delivered in the 6 months before the questionnaire-based interview were asked a series of questions.

Findings:

Information about breastfeeding in the prenatal period was associated with feeding colostrum and early initiation of breastfeeding:

	No colostrum	Colostrum*	Adj OR (95%)
Informed about breastfeeding:			
No information	57% (n=487)	43% (n=363)	1.00
Information given*	42% (n=180)	58% (n=250)	1.86 (1.47-2.36)
	BF after 2 h	BF before 2h	Adj OR (95%)
Informed about breastfeeding			
No information	82% (n=684)	18% (n=148)	1.00
Information given	73% (n=313)	27% (n=116)	1.81

*this was not defined in the report.

*Colostrum feeding was also associated with number of prenatal visits and women who initiated antenatal care in the first trimester.

Conclusion: Information about breastfeeding given prenatally and number and timing of prenatal care can impact breastfeeding practice positively.

The effectiveness of primary care-based interventions to promote breastfeeding: Systematic evidence review and meta-analysis

Refers to Slide 4.3.4

Reference: Guise, J-M, Palda V, Westhoff C, Chan BKS, Helfand M, and Lieu T. The effectiveness of primary care-based interventions to promote breastfeeding: Systematic evidence review and meta-analysis for the US preventive services task force. *Annals of Family Medicine,* 2003 1(2):70-78.

Purpose: We wanted to systematically review whether primary care-based interventions improve initiation and duration of breastfeeding.

Methods: Studies were found by searching MEDLINE (1966–2001), HealthSTAR, the Cochrane Database of Systematic Reviews, the National Health Service Centre for Reviews and Dissemination Databases, and bibliographies of identified trials and review articles. Studies were included if they originated in the primary care setting and were conducted in a developed country, written in English, and contained a concurrent control group.

Results: Thirty randomized and nonrandomized controlled trials and 5 systematic reviews of breastfeeding counselling were included. Educational programs had the greatest effect of any single intervention on both initiation (difference 0.23; 95% confidence interval [CI], 0.12–0.34) and short-term duration (difference 0.39; 95% CI, 0.27–0.50). Support programs conducted by telephone, in person, or both increased short-term (difference 0.11; 95% CI, 0.03–0.19) and long-term duration (difference 0.08; 95% CI, 0.02–0.16). In contrast, written materials such as pamphlets did not significantly increase breastfeeding. Data were insufficient to determine whether the combination of education with support was more effective than education alone.

Conclusions: Educational programs were the most effective single intervention. One woman would breastfeed for up to 3 months for every 3 to 5 women attending breastfeeding educational programs. Future research and policy should focus on translating these findings into more widespread practice in diverse primary care settings.

Impact of infant early contact with mother on breastfeeding duration
Refers to Slide 4.4.5

Reference: DeChateau P and Wiberg B. Long term effect on mother-infant behavior of extra contact during the first hour postpartum. *Acta Paediatr,* 1977, 66:145-151.

Method: A prospective study in Sweden where a study of primiparous mothers randomly assigned and with comparable background data were assigned to two different groups.

The mothers in the study group had 15-20 minutes suckling and skin-to-skin contact (extra contact) with newborn infants in first hour after delivery.

The mothers in the control group had no extra contact.

Study looked at mother-infant behaviour at 36 hours and 3 months postpartum. Only one mother from each group was lost to follow-up for the three-month interview with the mother and observation of infant-mother interaction.

Findings: Among other findings at three months postpartum 58% of the study group (n=21) vs. 26% (n=19) of control group were breastfeeding infant-mother pairs.

In addition at 3 months mothers in the extra contact group spent more time kissing and looking in face at their infants and their infants smiled more and cried less frequently when compared to the control groups.

Conclusion: Extra infant-mother contact in the first hour of life can influence the duration of breastfeeding.

Temperatures after birth in infants kept either skin-to-skin with mother or in cot

Refers to Slide 4.4.6

Reference: Christensson K, Siles C, Moreno L, Belaustequi A, De La Fuente P, Lagercrantz H, Puyol P, and Winberg J. Temperature, metabolic adaptation and crying in health full-term newborns cared for skin-to-skin or in a cot. *Acta Paediatr,* 1992, 81: 488-93.

Method: 50 healthy full-term newborns with no history of complications prenatally or at delivery were randomly placed into one of two study groups: infant placed skin-to-skin to mother or placed in a cot next to mother. The following steps were taken with each infant in both groups:

1. Infants were wrapped in cotton cloth and placed on mother's abdomen in prone position.
2. Umbilical cord cut 30-45 seconds after birth.
3. Nurse dried infant, suctioned mouth and pharynx, weighed infant and swaddled head in cotton cloth.
4. Electronic thermometer placed with insulating tape in axillary, interscapular, and outside thigh positions.
5. 8-11 minutes after birth infant placed in prone position either skin-to-skin with the mother or in cot all were tucked in by two thick terry cloth towels. Temperature of rooms 26°C.
6. The infants were observed for the first 90 minutes after birth measuring axillary, interscapular, and outside left thigh skin temperatures every 15 minutes for 90 minutes after delivery.
7. At 90 minutes after delivery heart rate, respiratory rate, skin colour, blood gas, and blood glucose were measured.
8. In 18 babies of each group, recorded every 15 minutes whether or not infant was crying.

Findings: There were significant differences between the groups especially towards the end of the observation period (90 minutes). The skin-to-skin group was always warmer. In both groups, the mean axillar temperatures were significantly higher than the mean thigh temperatures ($p < 0.001$). All infants in both groups increased in temperature at similar rates after birth until they were placed skin to skin or in the cot. It was an average of four to seven minutes after being placed in the two different groups that differences in skin temperature were measured and significant differences already noted. Skin colour and heart rate were not significantly different. Whether the infants were fed in this study was not mentioned.

More cot babies were crying at all observation events between 15 and 90 minutes after birth. In all, 41 crying episodes were registered among the cot babies compared to 4 among skin-to-skin babies.

Conclusion: Skin to skin care as compared to care in a bed during the unique period just following birth is associated with higher body and skin temperatures and more rapid metabolic adaptation. Maternal body is an efficient heat source for the baby.

Recommendations: The mother is an important heat source for the newborn and promotion of body to body mother baby contact during the first 1-2 hours after delivery may benefit mother and baby from a physiological point of view especially in countries where the incidence of neonatal hypothermia has been reported high.

Effect of delivery room practices on early breastfeeding
Refers to Slide 4.4.8

Reference: Righard L and Alade MO. Effect of delivery room routines on success of first breastfeed. *Lancet,* 1990, 336: 1105-1107.

Method: 72 infants who delivered normally were randomly assigned to the separation (n=34) or the contact (n=38) group. The infants in the separation group were placed on their mother's abdomen immediately after birth but removed after 20 minutes for measuring and dressing (took about 20 minutes); then they were returned to their mother. The infants in the contact group were placed on their mother's abdomen naked and were uninterrupted for at least one hour after birth or until after the first breastfeed took place. Both groups of infants were observed for a total of two hours following birth.

Findings: Infants in the contact group started to make crawling movements towards the breast about 20 minutes after birth, first with arm and leg movements and then with mouthing and sucking movements. By 50 minutes after birth most of the infants were sucking at the breast. At two hours after delivery 24/38 infants in the contact group were sucking correctly at the breast versus 7/34 infants in the separation group. Sucking correctly was defined as mouth opened widely, tongue under areola, and milk expressed with deep sucks. 40/72 of the infants had been exposed to Pethidine; of those 25/40 did not suck well.

Recommendations: Naked infants should be left undisturbed on the mother's abdomen until the first breastfeeding is accomplished and the infant's efforts to take the breast actively should be promoted.

Note: May show the video at this time that illustrates the infant's innate tendency to crawl.

Effect of proper attachment on duration of breastfeeding
Refers to Slide 4.5.3

Reference: Righard L and Alade O. Sucking technique and its effect on success of breastfeeding. *Birth,* 1992, 19 (4): 185-189.

Method: A prospective study in a University Hospital in Sweden enrolled 82 exclusively breastfeeding mothers who had delivered term infants with 5 min. Apgar scores of 9 or 10 and were free of any apparent neonatal disease. Breastfeeding technique was assessed on the fourth to sixth day postpartum at time of discharge. The mother-infant pairs were randomly assigned to two groups once poor sucking technique (faulty technique was defined as superficial nipple sucking) was identified:

> **Group 1**- incorrect breastfeeding technique remained uncorrected.
>
> **Group 2**- mothers with incorrect breastfeeding technique were given a brief (5-10 minute) instruction on correct technique.
>
> **Controls**- mother-infant pairs with correct technique (defined as the infant having a wide-open mouth, with the tongue under the areola, and expressing milk from the breast by slow, deep sucks) consecutively selected as controls.

All groups matched for maternal age, marital status, parity, education, and coffee drinking and smoking habits. Follow-up took place by telephone at two, three, and four months after delivery; questions asked related to infant feeding practices.

Findings: All the mothers were followed up in the study. No solid foods were given to the infants at the time of follow-up period. No mothers had returned to work at time of follow-up period (maternity leave is 12 months in Sweden).

All mothers were breastfeeding exclusively at discharge from the hospital. A changeover from the breast to the bottle within the first month was 10 times more common in the poor technique group uncorrected than in those with corrected technique or initial good technique (36 % versus 3.5%, $p<0.001$); note the corrected and the initial good technique group results are combined since their findings in each group were similar in this study. At the two-, three-, and four-month follow-ups, the uncorrected sucking technique group breastfed significantly less than the infants in the other two groups (refer to slide 4.5.3 for more details). The reasons given for cessation of breastfeeding were insufficient milk or introduction of a bottle (21), colicky infant (4), maternal illness (3), engorgement (1), and previous cosmetic breast surgery (1).

During the four-month period 88 percent of the uncorrected sucking technique group reported breastfeeding problems compared with 48 % ($P<0.01$) of the corrected group and 57 % of the controls ($P< 0.5$). The most common breastfeeding problems were insufficient milk or introduction of a bottle, child restless between feeds, uncertainty in parents or introduction of an evening bottle, breast problems such as sore nipples or engorgement, illness in mother or child, breast pumped milk given by bottle, child restless while feeding and insufficient weight gain.

Breastfeeding problems were more commonly reported by mothers using pacifiers regularly (>2 hours/day) than those using them only occasionally or not all (83% versus 53%, $P<0.05$).

Conclusion: The study showed it was possible to identify and correct a faulty sucking technique in the maternity ward, and thereby improve the women's chances of achieving successful breastfeeding.

Checks of sucking technique and correction of faulty technique by an experienced midwife or nurse should be routine in maternity units. Also shown were that excessive use of pacifiers and the early introduction of occasional bottle-feeding should be avoided.

Provider encouragement of breastfeeding: Evidence from a national survey
Refers to Slide 4.5.4

Reference: Lu M, Lange L, Slusser W et al. Provider encouragement of breastfeeding: Evidence from a national survey. *Obstetrics and Gynecology,* 2001, 97:290-295.

Methods: A US nationally representative sample of 2017 parents with children younger than 3 years was surveyed by telephone. The responses of 1229 women interviewed were included in the analysis. Respondents were asked to recall whether their physicians or nurses had encouraged or discouraged them from breastfeeding in the hospital.

Findings: 74.6% of women who were encouraged initiated breastfeeding compared to only 43.2% of those who were not encouraged $p<0.001$.

Women who were encouraged to breastfeed by a health professional in the hospital were more than 4 times more likely to initiate breastfeeding as women who did not receive encouragement. The influence of provider encouragement was significant across all strata of the sample.

Conclusion: Provider encouragement in the hospital significantly increased breastfeeding initiation among American women of all social and ethnic backgrounds.

Effect of the maternity ward system on the lactation success of low-income urban Mexican women.

Refers to slide 4.5.5

Reference: Perez-Escamilla R, Segura-Millan S, Pollitt E, Dewey KG. Effect of the maternity ward system on the lactation success of low-income urban Mexican women. *Early Hum Dev*., 1992*,* 31 (1): 25-40.

Method: Comparison between the lactation performance of 165 health mothers who planned to breastfeed and gave birth by vaginal delivery without complications to health infant in either a nursery (58) or a rooming-in hospital (107) where formula supplementation was not allowed. In the rooming in hospital, women were randomly assigned to a group that received breastfeeding guidance during the hospital stay or to a control group. Interviews of women were conducted at 8, 70 and 135 days post-partum. Groups were similar in socio-economic, demographic, anthropometric, previous breastfeeding experience, and prenatal care variables.

Findings: Adjusting for confounding factors, breastfeeding guidance had a positive impact on breastfeeding duration among primiparous women who delivered in the rooming-in hospital. This was true for short-term and long-term breastfeeding when compared to mothers who delivered in the nursery hospital where there was no breastfeeding guidance given in hospital. Primiparous women in the rooming-in group who received no breastfeed guidance had a positive impact on breastfeeding duration in the short term, but not in the long term when compared to the women who delivered in the hospital with the nursery.

Recommendations: Rooming-in and breastfeeding guidance during the postpartum period can impact breastfeeding duration in the short term and long term. Rooming-in alone is not sufficient to impact duration rates.

Long-term effects of a change in maternity ward feeding routines
Refers to Slide 4.6.2

Reference: Nylander G, Lindemann R, Helsing E, Bendvold E. Unsupplemented breastfeeding in the maternity ward. *Acta Obstet Gynecol Scand,* 1991, 70:205-209.

Method: Prospective study in Norway enrolled 407 consecutive mother-infant pairs, normal full-term infants weighing 2500-4500 g. Once 204 infants were enrolled who started life with routine supplementary feedings of sugar solution and almost all having received formula for 1 meal before hospital discharge, a change in the hospital's routines was introduced so infants first nursed within 30 minutes after delivery with on demand breastfeeding encouraged thereafter (>5/24 hours), and no routine supplementation took place. At 1 year a follow-up questionnaire with feeding-related questions was sent to the head nurse of the local health care centres where the babies' health records were kept.

Findings:

Control group (before changed routines): all received supplemental glucose water and were formula-fed at least once (N=204).

Intervention group (after change): early, frequent, unsupplemented breastfeeds (N=203).

Control group lost less birth weight (4.6% by day 3 with minimum weight vs. 6.4% for intervention group with minimum weight on day 2.6).

Intervention group took a greater volume of breast milk and correspondingly less formula and sugar solution. They regained birth weight sooner than control group.

Follow-up at 1 year was for 62% in intervention group and 52% in control group with most of those lost to follow-up because of moving or nurse lacking time to locate records. The subjects followed up matched for parity and infant's birth weight. Weight curves for both groups were similar.

Mothers in intervention group breastfed significantly longer than did the control-group mothers.

	Control	Intervention
Mean duration exclusive breastfeeding $p<0.001$	3.5 months (±2.1)	4.5 months (±1.8)
Duration of breastfeeding $p<0.01$	6.9 months (±3.3)	8.0 months (±2.4)
Any breastfeeding at 6 months	66%	87%

Conclusion: Study demonstrates that healthy, full-term infants usually have no need for supplements to their mother's milk provided that they have had a satisfactory start with early and frequent feeds at breast. The changes in policy increased the overall length of the exclusive breastfeeding period.

Determinants of lactation performance across time in an urban population from Mexico

Refers to Slide 4.6.5

Reference: Perez-Escamilla, Sergura-Millan S, Pollitt E, Dewey KG. Determinants of lactation performance across time in an urban population from Mexico. *Soc Sci Med,* 1993, 37(8): 1069-1078.

Method:

Determinants of breastfeeding and full breastfeeding were measured among 165 healthy mothers in Mexico who planned to breastfeed and vaginally delivered healthy term infants. Deliveries were either in a hospital with a nursery or rooming-in policy where formula supplementation was not allowed. Breastfeeding was recorded at 1 week, 2 months, and 4 months through questionnaires.

Findings:

	Rooming-in hospital	Hospital with the nursery
Milk came in:	Earlier	Later

Rooming-in mothers reported that their milk came in earlier. Milk arrival was later when a bottle was introduced in the first week. Breastfeeding was positively associated with early milk arrival and inversely associated with early introduction of supplementary bottles, maternal employment, maternal body mass index, and infant age.

Clinical data: morbidity of newborn babies at Sanglah Hospital before and after rooming-in

Refers to Slide 4.7.4

Reference: Soetjiningsih and Suraatmaja S. The advantages of rooming-in. *Pediatrica Indonesia,* 1986, 26:229-235.

Method: Prospective study in Bali, Indonesia, over one year in which this study examined morbidity, mortality, amount of milk formula and IV fluid consumed, and length of hospital stay in the maternity ward and newborn nursery for the 6 months when infants and babies were separated and compared it to the 6 months after instituting a rooming-in policy.

Findings: Infant profiles for the 2 periods were similar.

	Before rooming-in	After rooming-in
Total Live Births	1862	1965
Low birth-weight	241	232
Normal full-terms	1621	1733

After rooming-in was instituted for only the first 6 months:

Diarrhoeal diseases, otitis media, neonatal sepsis, and meningitis decreased in low-birth-weight and normal full-term infants (see slide 4.7.5 for details).

Mortality due to infection decreased (41 or 2.21% vs. 16 or 0.81%); whereas deaths due to other causes did not greatly change during this period (58 or 3.13 % versus 51 or 2.59%).

Need for milk formula decreased from 105.6 tins to 25.6 tins per month (400 g tin of powdered milk formula).

Need for IV fluid dropped from 135.8 bottles to 74.1 bottles per month (500 cc/bottle).

Number of days in the hospital was reduced from 4.2 to 1.8 days.

Conclusion:

There were advantages for the mother, infant, and the hospital when the rooming-in policy was introduced:

Mothers: less crowding secondary to shorter hospital stays.

Infants: decreased mortality and morbidity.

Hospital: savings in milk, fuel, personnel to prepare milk and watch after infants, less IV fluids, less antibiotics.

Effects of rooming-in on frequency of breastfeeding per 24 hours
Refers to Slide 4.7.5

Reference: Yamauchi Y and Yamanouchi I. The relationship between rooming-in/not rooming-in and breastfeeding variables. *Acta Paediatr Scand*, 1990, 1017-1022.

Methods: N=100 healthy, full-term breastfed newborns were selected in each of two study periods, one during non-rooming-in and the second during rooming-in. **Non-rooming-in infants** (N=112) were kept in the newborn nursery from birth, and mothers brought them to their room according to a predetermined schedule of breastfeeding for 2 hours every three or four hours. They were then taken back to the well-baby nursery. **Rooming-in infants** (N=92) stayed in their mother's rooms immediately after delivery. Mothers were encouraged to nurse their babies whenever they suspected they were hungry and were told not to limit the frequency or length of nursing. Data regarding the frequency of breastfeeding was obtained from the charts of the mother and infant.

Findings: The frequency of breastfeeding per 24 hours was significantly higher in rooming-in than non-rooming-in infants from day 2 to day 7 ($p<0.01$).

Conclusions: This study demonstrated that rooming-in infants had significantly higher breastfeeding frequencies than non-rooming-in infants during the first week of life.

The authors conclude that some of the neonatal feeding problems related to breastfeeding such as the need for human milk supplements or poor weight recovery could be eliminated by education of mothers and nurses and by changes in hospital policies and practices regarding breastfeeding.

Breastfeeding frequency during the first 24 hours after birth and incidence of hyperbilirubinemia on day 6

Refers to Slides 4.8.4

Reference: Yamauchi Y and Yamanouchi I. Breast-feeding frequency during the first 24 hours after birth in full-term neonates. *Pediatrics,* 1990, 86(2):171-175.

Method: Study in Japan looked at the relation between the frequency of breastfeeding and intake, weight loss, meconium passage, and bilirubin levels. N=140 healthy, full-term, breastfed neonates born vaginally without complications.

All neonates remained in their mothers' rooms from the time of delivery. Mothers were encouraged to nurse their babies whenever they suspected they were hungry and were told not to limit the frequency or length of nursing. Mother recorded in detail the frequency and duration of each breastfeeding for the first 2 postpartum days. Transcutaneous bilirubin (TcB) levels were measured using the Minolta-Airshields jaundice meter. Measurements were obtained on day 6 from the forehead, chest, and sternum, and the mean value from these three sites was used instead of serum total bilirubin measurements. The accuracy and reliability of TcB measurements have been documented. The correlation coefficient was .930 and the 95% confidence limits were +2.68 mg/dL.

For analysis of the data, the neonates were separated into two groups according to whether their frequency of feedings during the first 24 hours of life was above or below seven feedings per 24 hours. This frequency was arbitrarily chosen because it fit with the traditional 3- to 4-hour breastfeeding schedules in their non-rooming-in nursery.

Findings: The incidence of significant hyperbilirubinemia (TcB > 23.5) (approximately equal to serum total bilirubin level of 15 mg/dL) decreased with increased frequency of breastfeedings during the first 24 hours after birth, as depicted in this graph.

In addition, the neonates fed seven or more times had significantly increased meconium passage, breast-milk intake, and weight gain compared with those fed less frequently.

Conclusions: There was a strong dose-response relationship between feeding frequency and a decreased incidence of hyperbilirubinemia.

Recommendations: Frequent suckling in the first days of life has numerous beneficial effects in the breastfed, full-term newborn.

Frequency of breastfeeding and serum bilirubin concentration

Refers to Slide 4.8.5

Reference: De Carvalho M, Klaus MH, Merkatz RB. Frequency of breast-feeding and serum bilirubin concentration. *Am J Dis Child,* 1982 Aug, 136(8):737-738.

Background: Recent studies suggest that the three- to four-hour feeding regimens followed in many maternity units for breastfeeding mothers may not be physiological and that human infants should be fed more frequently.

Methods: To determine the effects of frequency and length of breastfeeding in the first days after birth, we studied 55 mothers and their infants.

Findings: Infants who nursed on average more than eight times per 24 hours in the first three days of life had significantly lower serum bilirubin levels (65. v 9.3 mg/fL, P less than 01) than those who fed less than eight times per 24 hours.

Conclusions: The results of this investigation suggest that present breastfeeding policies that reduce or limit the number of feedings may interfere with the normal processes that eliminate bilirubin from the newborn infant.

Pacifier use and short breastfeeding duration: Cause, consequence or coincidence?

Refers to Slide 4.9.4

Reference: Victora C, Behague D, Barros F et al. Pacifier use and short breastfeeding duration: cause, consequence, or coincidence. *Pediatrics,* 1997, 99:445-453.

Methods: A population-based cohort of 650 mothers and infants were visited shortly after delivery and at 1, 3, and 6 months. Mothers were interviewed regarding pacifier use, breastfeeding patterns, and socio-economic, environmental, and reproductive variables. Breastfeeding duration refers to the total duration of any breastfeeding.

Findings: Intense pacifier users at 1 month (children who used the pacifiers during most of the day and at least until falling asleep) were four times more likely to stop breastfeeding at 6 months of age than nonusers.

	Users	Nonusers	
At one month:			
Receiving daily breastfeeds (n=450)	10.6%	12.2%	p<.001
Receiving formula (n=450)	12.2%	37%	p=.001
Receiving teas (n=450)	49.4%	76.1%	p=.001
BF at 3 mo (n=447)	86.4%	58.7%	p<.001
BF at 6 mo (n=437)	65%	16.3%	p<.001

Conclusions: Pacifiers may be an effective weaning mechanism used by mothers who have explicit or implicit difficulties in breastfeeding. To be successful, breastfeeding promotion campaigns to reduce pacifier use need to also help women face the challenges of nursing and address their anxieties.

Training peer counsellors to promote and support exclusive breastfeeding in Bangladesh

Refers to Slide 4.10.5

Reference: Haider R, Kabir I, Huttly S and Ashworth A. A training peer counselors to promote and support exclusive breastfeeding in Bangladesh. *J Hum Lact,* 2002, 18:7-12.

Method: A peer counselling intervention program was instituted in Dhaka, Bangladesh and exclusive breastfeeding rates at 5 months were compared in the intervention area and the control area. Peer counsellors lived in the neighbourhoods where they worked and they received classroom, practice, and supervised practice sessions. Peer counsellors visited mothers a minimum of twice in the last trimester of pregnancy and within 48 hours, 5th day, once during days 10-14, and then every 2 weeks until 5 months postpartum. A protocol for referring to breastfeeding supervisors and to study coordinator was developed.

Findings:

70% of mothers in the project area breastfed exclusively.

6% of mothers in the control area breastfed exclusively.

Conclusions: Community based peer counselling is useful and effective strategy in breastfeeding promotion. Providing the peer counsellors with on going supervision for support and linkages to health facilities for a doctor's treatment gave the peer counsellors confidence and credibility with the mothers.

Efficacy of home-based peer counselling to promote exclusive breastfeeding: a randomised controlled trial

Refers to Slide 4.10.6

Reference: Morrow A, Guerrereo ML, Shultis J, Calva JJ, Lutter C, Bravo J, Ruiz-Palacios G, Morrow RC, Butterfoss FD. Efficacy of home-based peer counselling to promote exclusive breastfeeding: a randomised controlled trial. *Lancet,* 1999, 353:1226-1231.

Background: Exclusive breastfeeding is recommended worldwide but not commonly practised. We undertook a randomised controlled study of the efficacy of home-based peer counselling to increase the proportion of exclusive breastfeeding among mothers and infants residing in periurban Mexico City.

Methods: Two intervention groups with different counselling frequencies, six visits (44) and three visits (52), were compared with a control group (34) that had no intervention. From March, 1995, to September, 1996, 170 pregnant women were identified by census and invited to participate in the study. Home visits were made during pregnancy and early post partum by peer counsellors recruited from the same community and trained by La Leche League. Data were collected by independent interview. Exclusive breastfeeding was defined by WHO criteria.

Findings: 130 women participated in the study. Only 12 women refused participation. Study groups did not differ in baseline factors. At 3 months post partum, exclusive breastfeeding was practised by 67% of six-visit, 50% of three-visit, and 12% of control mothers (intervention groups vs. controls, $p<0.001$; six-visit vs. three-visit, $p=0.02$). Duration of breastfeeding was significantly ($p=0.02$) longer in intervention groups than in controls, and fewer intervention than control infants had an episode of diarrhoea (12% vs. 26%, $p=0.03$).

Interpretation: This is the first reported community-based randomised trial of breastfeeding promotion. Early and repeated contact with peer counsellors was associated with a significant increase in breastfeeding exclusivity and duration. The two-fold decrease in diarrhoea demonstrates the importance of breastfeeding promotion to infant health.

Promotion of Breastfeeding Intervention Trial (PROBIT): a randomized trial in the Republic of Belarus
Refers to Slides 4.11.1-4

Reference: Kramer MS, Chalmers B, Hodnett ED, Sevkovskaya Z, Dzikovich I, Shapiro S, Collet JP, Vanilovich I, Mezen I, Ducruet T, Shishko G, Zubovich V, Mknuik D, Gluchanina E, Dombrovskiy V, Ustinovitch A, Kot T, Bogdanovich N, Ovchinikova L, Helsing E; PROBIT Study Group (Promotion of Breastfeeding Intervention Trial). Promotion of Breastfeeding Intervention Trial (PROBIT): a randomized trial in the Republic of Belarus. *JAMA,* 2001, Jan 24-31;285(4):413-20.

Context: Current evidence that breastfeeding is beneficial for infant and child health is based exclusively on observational studies. Potential sources of bias in such studies have led to doubts about the magnitude of these health benefits in industrialized countries.

Objective: To assess the effects of breastfeeding promotion on breastfeeding duration and exclusivity and gastrointestinal and respiratory infection and atopic eczema among infants. DESIGN: The Promotion of Breastfeeding Intervention Trial (PROBIT), a cluster-randomised trial conducted June 1996-December 1997 with a 1-year follow-up.

Setting: Thirty-one maternity hospitals and polyclinics in the Republic of Belarus.

Participants: A total of 17 046 mother-infant pairs consisting of full-term singleton infants weighing at least 2500 g and their healthy mothers who intended to breastfeed, 16491 (96.7%) of which completed the entire 12 months of follow-up.

Interventions: Sites were randomly assigned to receive an experimental intervention (n = 16) modelled on the Baby-friendly Hospital Initiative of the World Health Organization and United Nations Children’s Fund, which emphasizes health care worker assistance with initiating and maintaining breastfeeding and lactation and postnatal breastfeeding support, or a control intervention (n = 15) of continuing usual infant feeding practices and policies.

Main outcome measures: Duration of any breastfeeding, prevalence of predominant and exclusive breastfeeding at 3 and 6 months of life and occurrence of 1 or more episodes of gastrointestinal tract infection, 2 or more episodes of respiratory tract infection, and atopic eczema during the first 12 months of life, compared between the intervention and control groups.

Results: Infants from the intervention sites were significantly more likely than control infants to be breastfed to any degree at 12 months (19.7% versus 11.4%; adjusted odds ratio [OR], 0.47; 95% confidence interval [CI], 0.32-0.69), were more likely to be exclusively breastfed at 3 months (43.3% versus 6.4%; P<.001) and at 6 months (7.9% versus 0.6%; P =.01), and had a significant reduction in the risk of 1 or more gastrointestinal tract infections (9.1% versus 13.2%; adjusted OR, 0.60; 95% CI, 0.40-0.91) and of atopic eczema (3.3% versus 6.3%; adjusted OR, 0.54; 95% CI, 0.31-0.95), but no significant reduction in respiratory tract infection (intervention group, 39.2%; control group, 39.4%; adjusted OR, 0.87; 95% CI, 0.59-1.28).

Conclusions: Our experimental intervention increased the duration and degree (exclusivity) of breastfeeding and decreased the risk of gastrointestinal tract infection and atopic eczema in the first year of life. These results provide a solid scientific underpinning for future interventions to promote breastfeeding.

The effects of the Baby-friendly Hospital Imitative on breastfeeding duration in Switzerland

Refers to Slide 4.11.5-7

Reference: Merten S et al. Do Baby-Friendly Hospitals Influence Breastfeeding Duration on a National Level. Pediatrics, 2005, 116:e702 – e708.

Objectives: This study examined the question of whether Baby-friendly hospital status and compliance with the 10 Steps influence breastfeeding duration on a national level in Switzerland.

Methods: Data was analysed for 2861 infants aged 0 to 11 months of age born in 145 different health facilities. Breastfeeding data was compared with both the progress towards Baby-friendly status of each hospital and the degree to which accredited hospitals were successfully maintaining the Baby-friendly standards.

Results: The proportion of babies exclusively breastfed for their first 5 months of life was 42% for those born in Baby-friendly hospitals, compared with 34% for infants born elsewhere. Median breastfeeding duration for infants born in Baby-friendly hospitals, compared with infants born in other hospitals, was longer if the hospital showed good compliance with the Ten Steps (35 weeks versus 29 weeks for any breastfeeding, 20 weeks versus 17 weeks for full breastfeeding, and 12 weeks versus 6 weeks for exclusive breastfeeding.

In 2003 the median duration of any breastfeeding across Switzerland was 31 weeks, compared with 22 weeks in 1994. The median duration of full breastfeeding was 17 weeks, compared with 15 weeks in 1994.

Conclusions: The authors conclude that the general increase in breastfeeding in Switzerland since 1994 can be interpreted in part as a consequence of the growing implementation of the Baby-friendly Hospital Initiative. Longer breastfeeding duration was also associated with 24 hours rooming-in, early initiation of breastfeeding, feeding on demand and avoiding dummy use.

Handout 4.1

Presentation for Session 4: The scientific basis for the "Ten steps to successful breastfeeding"

Ten steps to successful breastfeeding

Step 1. Have a written breastfeeding policy that is routinely communicated to all health care staff.

A JOINT WHO/UNICEF STATEMENT (1989)

Transparency 4.1.1

Breastfeeding policy

Why have a policy?

- Requires a course of action and provides guidance
- Helps establish consistent care for mothers and babies
- Provides a standard that can be evaluated

Transparency 4.1.2

Breastfeeding policy

What should it cover?

- At a minimum, it should include:
  - The 10 steps to successful breastfeeding
  - An institutional ban on acceptance of free or low cost supplies of breast-milk substitutes, bottles, and teats and its distribution to mothers
  - A framework for assisting HIV positive mothers to make informed infant feeding decisions that meet their individual circumstances and then support for this decision
- Other points can be added

Transparency 4.1.3

Breastfeeding policy

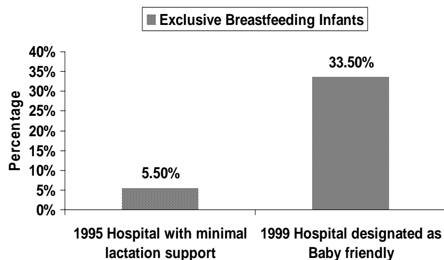
How should it be presented?

It should be:

- Written in the most common languages understood by patients and staff
- Available to all staff caring for mothers and babies
- Posted or displayed in areas where mothers and babies are cared for

Transparency 4.1.4

Step 1: Improved exclusive breast-milk feeds while in the birth hospital after implementing the Baby-friendly Hospital Initiative



Adapted from: Philipp BL, Merewood A, Miller LW et al. Baby-friendly Hospital Initiative improves breastfeeding initiation rates in a US hospital setting. *Pediatrics*, 2001, 108:677-681.

Transparency 4.1.5

Ten steps to successful breastfeeding

Step 2. Train all health-care staff in skills necessary to implement this policy.

A JOINT WHO/UNICEF STATEMENT (1989)

Transparency 4.2.1

Areas of knowledge

- Advantages of breastfeeding
- Risks of artificial feeding
- Mechanisms of lactation and suckling
- How to help mothers initiate and sustain breastfeeding
- How to assess a breastfeed
- How to resolve breastfeeding difficulties
- Hospital breastfeeding policies and practices
- Focus on changing negative attitudes which set up barriers

Transparency 4.2.2

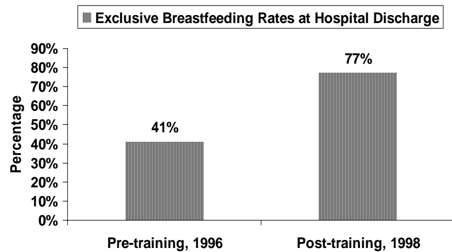
Additional topics for BFHI training in the context of HIV

Train all staff in:

- Basic facts on HIV and on Prevention of Mother-to-Child Transmission (PMTCT)
- Voluntary testing and counselling (VCT) for HIV
- Locally appropriate replacement feeding options
- How to counsel HIV + women on risks and benefits of various feeding options and how to make informed choices
- How to teach mothers to prepare and give feeds
- How to maintain privacy and confidentiality
- How to minimize the “spill over” effect (leading mothers who are HIV - or of unknown status to choose replacement feeding when breastfeeding has less risk)

Transparency 4.2.3

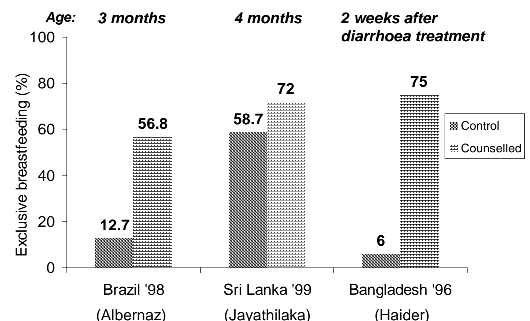
Step 2: Effect of breastfeeding training for hospital staff on exclusive breastfeeding rates at hospital discharge



Adapted from: Cattaneo A, Buzzetti R. Effect on rates of breast feeding of training for the Baby Friendly Hospital Initiative. *BMJ*, 2001, 323:1358-1362.

Transparency 4.2.4

Step 2: Breastfeeding counselling increases exclusive breastfeeding



All differences between intervention and control groups are significant at p<0.001.
From: CAH/WHO based on studies by Albernaz, Jayathilaka and Haider.

Transparency 4.2.5

Which health professionals other than perinatal staff influence breastfeeding success?

Transparency 4.2.6

Ten steps to successful breastfeeding

Step 3. Inform all pregnant women about the benefits of breastfeeding.

A JOINT WHO/UNICEF STATEMENT (1989)

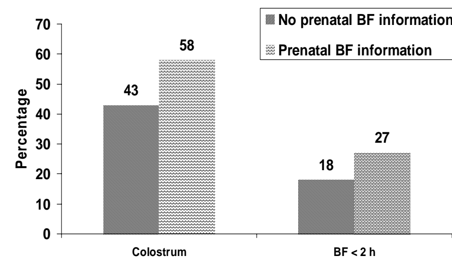
Transparency 4.3.1

Antenatal education should include:

- Benefits of breastfeeding
- Early initiation
- Importance of rooming-in (if new concept)
- Importance of feeding on demand
- Importance of exclusive breastfeeding
- How to assure enough breastmilk
- Risks of artificial feeding and use of bottles and pacifiers (soothers, teats, nipples, etc.)
- Basic facts on HIV
- Prevention of mother-to-child transmission of HIV (PMTCT)
- Voluntary testing and counselling (VCT) for HIV and infant feeding counselling for HIV+ women
- Antenatal education should not include group education on formula preparation

Transparency 4.3.2

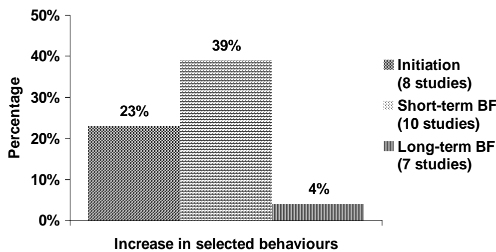
Step 3: The influence of antenatal care on infant feeding behaviour



Adapted from: Nielsen B, Hedegaard M, Thilsted S, Joseph A , Liljestrand J. Does antenatal care influence postpartum health behaviour? Evidence from a community based cross-sectional study in rural Tamil Nadu, South India. *British Journal of Obstetrics and Gynaecology,* 1998, 105:697-703.

Transparency 4.3.3

Step 3: Meta-analysis of studies of antenatal education and its effects on breastfeeding



Adapted from: Guise et al. The effectiveness of primary care-based interventions to promote breastfeeding: Systematic evidence review and meta-analysis… *Annals of Family Medicine,* 2003, 1(2):70-78.

Transparency 4.3.4

Ten steps to successful breastfeeding

Step 4. Help mothers initiate breastfeeding within a half-hour of birth.

A JOINT WHO/UNICEF STATEMENT (1989)

Transparency 4.4.1

New interpretation of Step 4 in the revised BFHI Global Criteria (2007):

"Place babies in skin-to-skin contact with their mothers immediately following birth for at least an hour. Encourage mothers to recognize when their babies are ready to breastfeed and offer help if needed."

Transparency 4.4.2

Early initiation of breastfeeding for the normal newborn
Why?

- Increases duration of breastfeeding
- Allows skin-to-skin contact for warmth and colonization of baby with maternal organisms
- Provides colostrum as the baby's first immunization
- Takes advantage of the first hour of alertness
- Babies learn to suckle more effectively
- Improved developmental outcomes

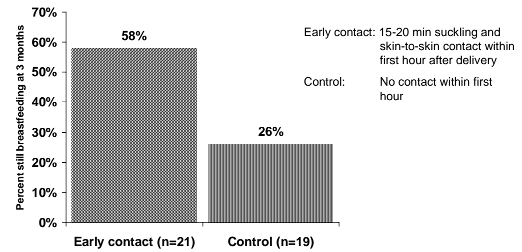
Transparency 4.4.3

Early initiation of breastfeeding for the normal newborn
How?

- Keep mother and baby together
- Place baby on mother's chest
- Let baby start suckling when ready
- Do not hurry or interrupt the process
- Delay non-urgent medical routines for at least one hour

Transparency 4.4.4

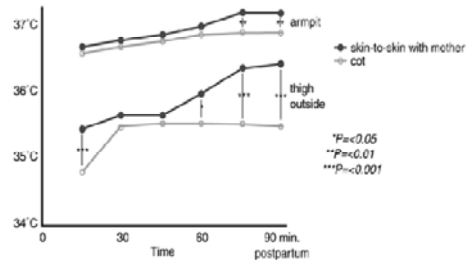
Impact on breastfeeding duration of early infant-mother contact



Adapted from: DeChateau P, Wiberg B. Long term effect on mother-infant behavior of extra contact during the first hour postpartum. *Acta Peadiatr,* 1977, 66:145-151.

Transparency 4.4.5

Temperatures after birth in infants kept either skin-to-skin with mother or in cot



Adapted from: Christensson K et al. Temperature, metabolic adaptation and crying in healthy full-term newborns cared for skin-to-skin or in a cot. *Acta Paediatr,* 1992, 81:490.

Transparency 4.4.6

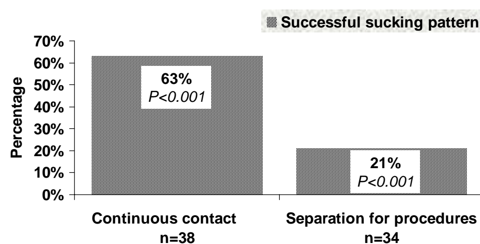
Protein composition of human colostrum and mature breast milk (per litre)

Constituent	Measure	Colostrum (1-5 days)	Mature Milk (>30 days)
Total protein	G	23	9-10.5
Casein	mg	1400	1870
α-Lactalbumin	mg	2180	1610
Lactoferrin	mg	3300	1670
IgA	mg	3640	1420

From: Worthington-Roberts B, Williams SR. *Nutrition in Pregnancy and Lactation, 5th ed.* St. Louis, MO, Times Mirror/Mosby College Publishing, p. 350, 1993.

Transparency 4.4.7

Effect of delivery room practices on early breastfeeding



Adapted from: Righard L, Alade O. Effect of delivery room routines on success of first breastfeed *Lancet,* 1990, 336:1105-1107.

Transparency 4.4.8

Ten steps to successful breastfeeding

Step 5. Show mothers how to breastfeed and how to maintain lactation, even if they should be separated from their infants.

A JOINT WHO/UNICEF STATEMENT (1989)

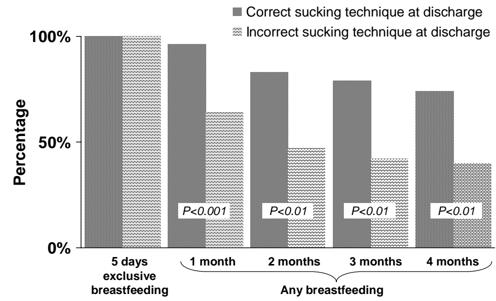
Transparency 4.5.1

" Contrary to popular belief, attaching the baby on the breast is not an ability with which a mother is [born…]; rather it is a learned skill which she must acquire by observation and experience."

From: Woolridge M. The "anatomy" of infant sucking. *Midwifery*, 1986, 2:164-171.

Transparency 4.5.2

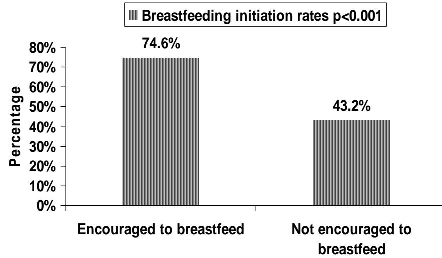
Effect of proper attachment on duration of breastfeeding



Adapted from: Righard L , Alade O. (1992) Sucking technique and its effect on success of breastfeeding. *Birth* 19(4):185-189.

Transparency 4.5.3

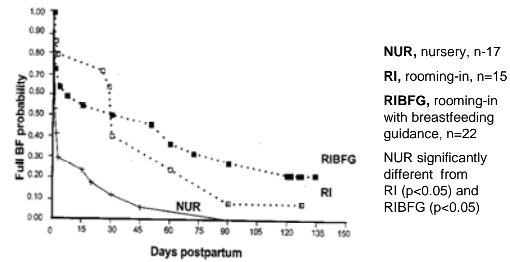
Step 5: Effect of health provider encouragement of breastfeeding in the hospital on breastfeeding initiation rates



Adapted from: Lu M, Lange L, Slusser W et al. Provider encouragement of breast-feeding: Evidence from a national survey. *Obstetrics and Gynecology*, 2001, 97:290-295.

Transparency 4.5.4

Effect of the maternity ward system on the lactation success of low-income urban Mexican women



NUR, nursery, n-17

RI, rooming-in, n=15

RIBFG, rooming-in with breastfeeding guidance, n=22

NUR significantly different from RI (p<0.05) and RIBFG (p<0.05)

From: Perez-Escamilla R, Segura-Millan S, Pollitt E, Dewey KG. Effect of the maternity ward system on the lactation success of low-income urban Mexican women. *Early Hum Dev.*, 1992, 31 (1): 25-40.

Transparency 4.5.5

Supply and demand

- Milk removal stimulates milk production.
- The amount of breast milk removed at each feed determines the rate of milk production in the next few hours.
- Milk removal must be continued during separation to maintain supply.

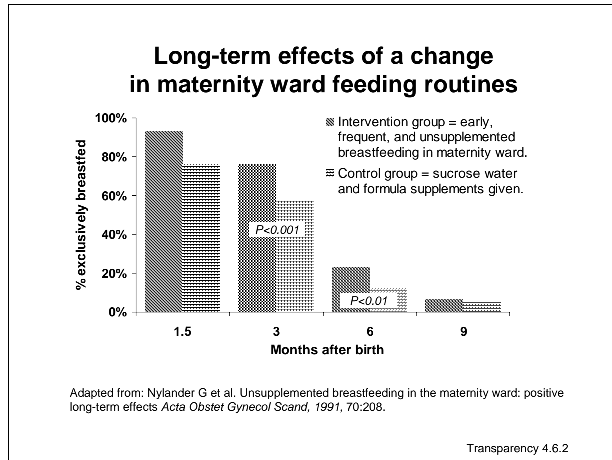
Transparency 4.5.6

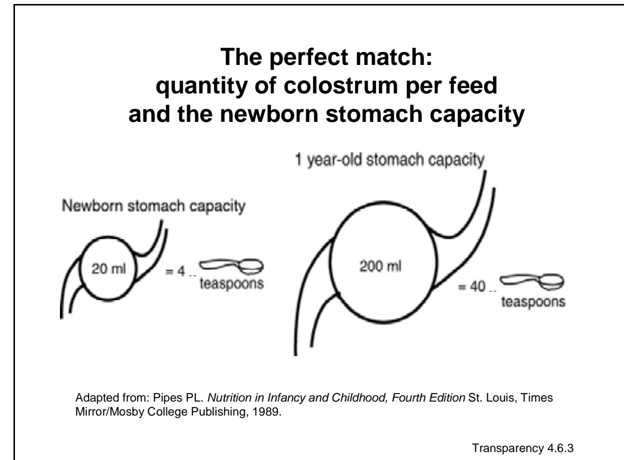
Ten steps to successful breastfeeding

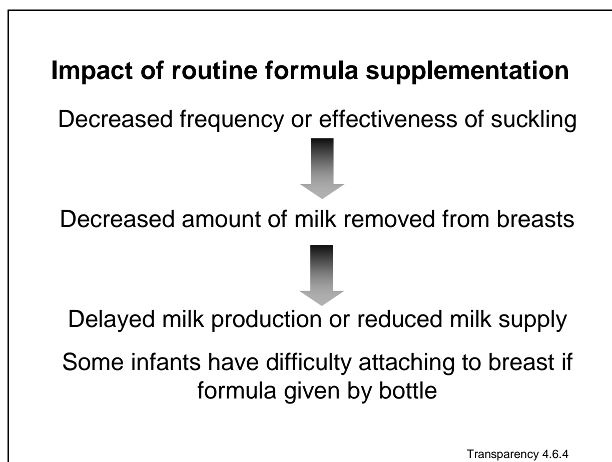
Step 6. Give newborn infants no food or drink other than breast milk unless *medically* indicated.

A JOINT WHO/UNICEF STATEMENT (1989)

Transparency 4.6.1







Determinants of lactation performance across time in an urban population from Mexico

- Milk came in earlier in the hospital with rooming-in where formula was not allowed
- Milk came in later in the hospital with nursery ($p<0.05$)
- Breastfeeding was positively associated with early milk arrival and inversely associated with early introduction of supplementary bottles, maternal employment, maternal body mass index, and infant age.

From: Perez-Escamilla et al. Determinants of lactation performance across time in an urban population from Mexico. *Soc Sci Med*, 1993, (8):1069-78.

Transparency 4.6.5

Summary of studies on the water requirements of exclusively breastfed infants

Country	Temperature °C	Relative Humidity %	Urine osmolarity (mOsm/l)
Argentina	20-39	60-80	105-199
India	27-42	10-60	66-1234
Jamaica	24-28	62-90	103-468
Peru	24-30	45-96	30-544

Note: Normal range for urine osmolarity is from 50 to 1400 mOsm/kg.

From: *Breastfeeding and the use of water and teas.* Division of Child Health and Development Update No. 9, Geneva, World Health Organization, reissued, Nov. 1997.

Transparency 4.6.6

Medically indicated

There are rare exceptions during which the infant may require other fluids or food in addition to, or in place of, breast milk. The feeding programme of these babies should be determined by qualified health professionals on an individual basis.

Transparency 4.6.7

Acceptable medical reasons for use of breast-milk substitutes

Infant conditions:

Infants who should not receive breast milk or any other milk except specialized formula:

- Classic galactosemia: A special galactose-free formula is needed.
- Maple syrup urine disease: A special formula free of leucine, isoleucine and valine is needed.
- Phenylketonuria: A special phenylalanine free formula is required (some BF is possible, under careful monitoring).

Infants for whom breast milk remains the best feeding option but may need other food in addition to breast milk for a limited period:

- Very low birth weight infants (less than 1500g)
- Very preterm infants (less than 32 weeks gestational age)
- Newborn infants at risk of hypoglycaemia.

Transparency 4.6.8

Maternal conditions:

Mothers who may need to avoid BF permanently:

- HIV infection – if replacement feeding is AFASS.

Mothers who may need to avoid BF temporarily:

- Severe illness that prevents a mother from caring for her infant
- Herpes simplex virus type 1. (If lesions on breasts, avoid BF until active lesions have resolved.)
- Maternal medications – sedating psychotherapeutic drugs; radioactive iodine – 131 better avoided given that safer alternatives are available; excessive use of topical iodine; cytotoxic chemotherapy usually requires mother to stop BF permanently.

Transparency 4.6.9

Mothers who can continue breastfeeding:

- Breast abscess
- Hepatitis B – infants should get vaccine.
- Hepatitis C
- Mastitis – if painful, remove milk by expression
- TB – manage together following national guidelines
- Substance use: maternal use of nicotine, alcohol, ecstasy, amphetamines, cocaine and related stimulants have harmful effects on BF babies; alcohol, opioids, benzodiazepines and cannabis can cause sedation in mother and baby

Transparency 4.6.10

Ten steps to successful breastfeeding

Step 7. Practice rooming-in — allow mothers and infants to remain together — 24 hours a day.

A JOINT WHO/UNICEF STATEMENT (1989)

Transparency 4.7.1

Rooming-in

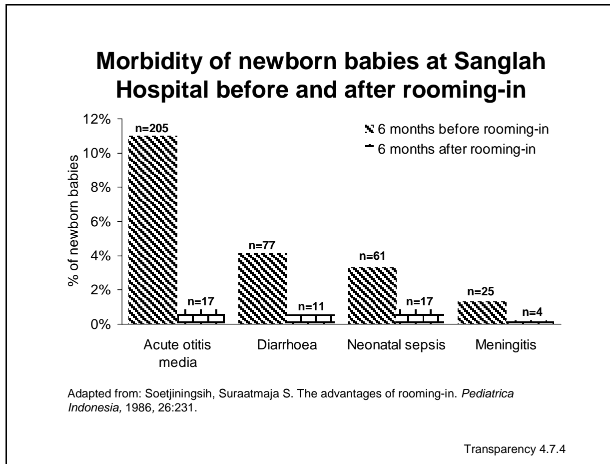
A hospital arrangement where a mother/baby pair stay in the same room day and night, allowing unlimited contact between mother and infant

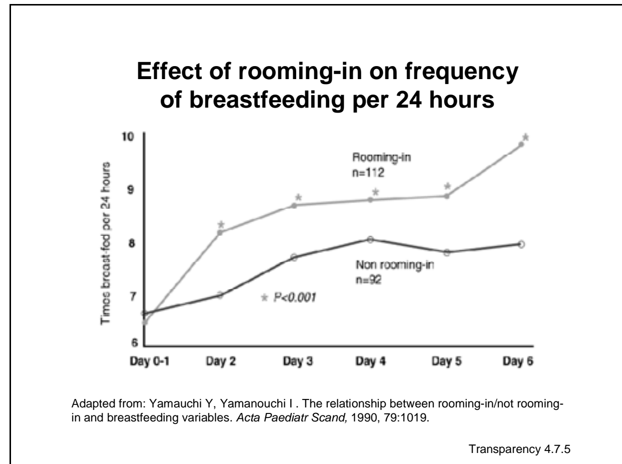
Transparency 4.7.2

Rooming-in
Why?

- Reduces costs
- Requires minimal equipment
- Requires no additional personnel
- Reduces infection
- Helps establish and maintain breastfeeding
- Facilitates the bonding process

Transparency 4.7.3





Ten steps to successful breastfeeding

Step 8. Encourage breastfeeding on demand.

A JOINT WHO/UNICEF STATEMENT (1989)

Transparency 4.8.1

Breastfeeding on demand:

Breastfeeding whenever the baby or mother wants, with no restrictions on the length or frequency of feeds.

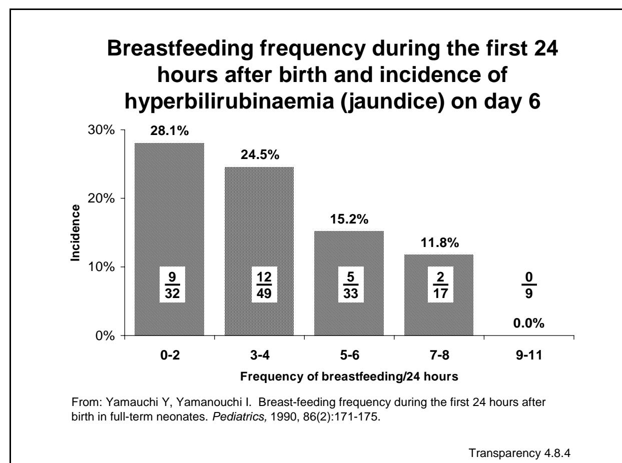
Transparency 4.8.2

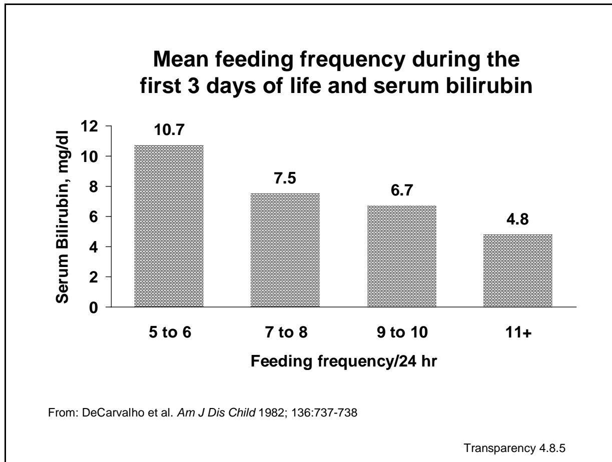
On demand, unrestricted breastfeeding *Why?*

- Earlier passage of meconium
- Lower maximal weight loss
- Breast-milk flow established sooner
- Larger volume of milk intake on day 3
- Less incidence of jaundice

From: Yamauchi Y, Yamanouchi I. Breast-feeding frequency during the first 24 hours after birth in full-term neonates. *Pediatrics,* 1990, 86(2):171-175.

Transparency 4.8.3





From: DeCarvalho et al. *Am J Dis Child* 1982; 136:737-738

Transparency 4.8.5

Ten steps to successful breastfeeding

Step 9. Give no artificial teats or pacifiers (also called dummies and soothers) to breastfeeding infants.

A JOINT WHO/UNICEF STATEMENT (1989)

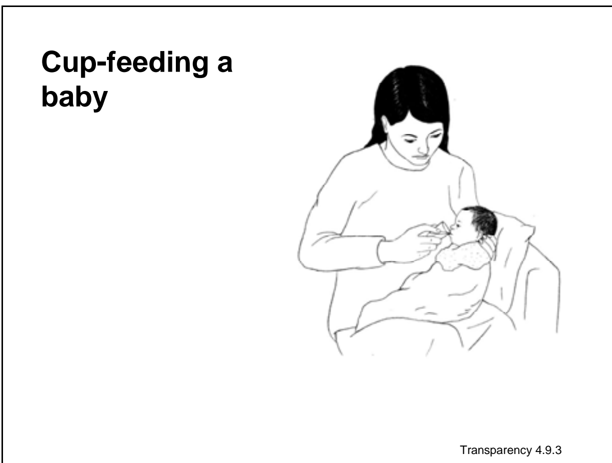
Transparency 4.9.1

Alternatives to artificial teats

- cup
- spoon
- dropper
- Syringe

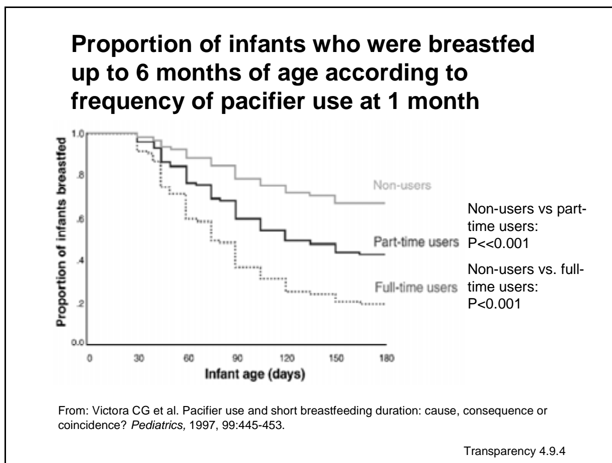
Transparency 4.9.2

Cup-feeding a baby



Transparency 4.9.3

Proportion of infants who were breastfed up to 6 months of age according to frequency of pacifier use at 1 month



Non-users vs part-time users: P<<0.001

Non-users vs. full-time users: P<0.001

From: Victora CG et al. Pacifier use and short breastfeeding duration: cause, consequence or coincidence? *Pediatrics,* 1997, 99:445-453.

Transparency 4.9.4

Ten steps to successful breastfeeding

Step 10. Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or clinic.

A JOINT WHO/UNICEF STATEMENT (1989)

Transparency 4.10.1

"The key to best breastfeeding practices is continued day-to-day support for the breastfeeding mother within her home and community."

From: Saadeh RJ, editor. *Breast-feeding: the Technical Basis and Recommendations for Action.* Geneva, World Health Organization, pp. 62-74, 1993.

Transparency 4.10.2

Support can include:

- Early postnatal or clinic checkup
- Home visits
- Telephone calls
- Community services
  - Outpatient breastfeeding clinics
  - Peer counselling programmes
- Mother support groups
  - Help set up new groups
  - Establish working relationships with those already in existence
- Family support system

Transparency 4.10.3

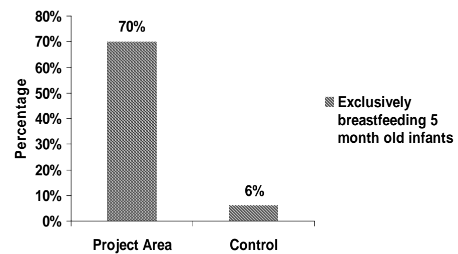
Types of breastfeeding mothers' support groups

- Traditional
  - extended family
  - culturally defined *doulas*
  - village women
- Modern, non-traditional
  - Self-initiated
    - by mothers
    - by concerned health professionals
  - Government planned through:
    - networks of national development groups, clubs, etc.
    - health services -- especially primary health care (PHC) and trained traditional birth attendants (TBAs)

From: Jelliffe DB, Jelliffe EFP. The role of the support group in promoting breastfeeding in developing countries. *J Trop Pediatr,* 1983, 29:244.

Transparency 4.10.4

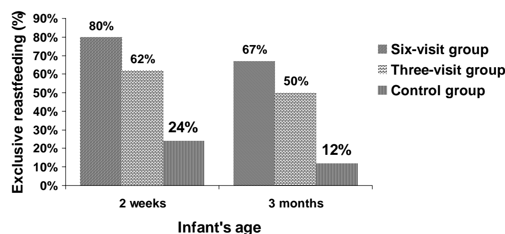
Step 10: Effect of trained peer counsellors on the duration of exclusive breastfeeding



Adapted from: Haider R, Kabir I, Huttly S, Ashworth A. Training peer counselors to promote and support exclusive breastfeeding in Bangladesh. *J Hum Lact,* 2002;18(1):7-12.

Transparency 4.10.5

Home visits improve exclusive breastfeeding



From: Morrow A, Guerrereo ML, Shultis J, et al. Efficacy of home-based peer counselling to promote exclusive breastfeeding: a randomised controlled trial. *Lancet,* 1999, 353:1226-31

Transparency 4.10.6

Combined Steps: The impact of baby-friendly practices: The Promotion of Breastfeeding Intervention Trial (PROBIT)

- **In a randomized trial in Belarus 17,000 mother-infant pairs, with mothers intending to breastfeed, were followed for 12 months.**
- **In 16 control hospitals & associated polyclinics that provide care following discharge, staff were asked to continue their usual practices.**
- **In 15 experimental hospitals & associated polyclinics staff received baby-friendly training & support.**

Adapted from: Kramer MS, Chalmers B, Hodnett E, et al. Promotion of breastfeeding intervention trial (PROBIT) A randomized trial in the Republic of Belarus. *JAMA*, 2001, 285:413-420.

Transparency 4.11.1

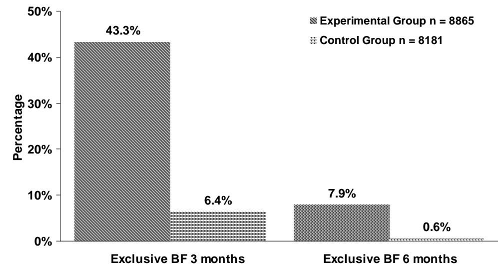
Differences following the intervention

Control hospitals:	Experimental hospitals:
▪ Routine separation of mothers & babies at birth	▪ Mothers & babies together from birth
▪ Routine tight swaddling	▪ No swaddling—skin-to-skin contact encouraged
▪ Routine nursery-based care	▪ Rooming-in on a 24-hr basis
▪ Incorrect latching & positioning techniques	▪ Correct latching & positioning techniques
▪ Routine supplementation with water & milk by bottle	▪ No supplementation
▪ Scheduled feedings every 3 hrs	▪ Breastfeeding on demand
▪ Routine use of pacifiers	▪ No use of pacifiers
▪ No BF support after discharge	▪ BF support in polyclinics

Communication from Chalmers and Kramer (2003)

Transparency 4.11.2

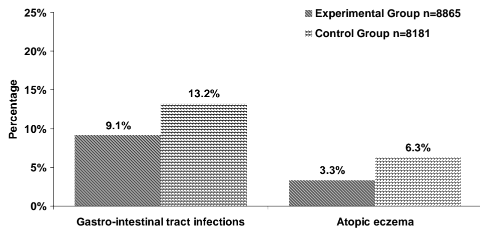
Effect of baby-friendly changes on breastfeeding at 3 & 6 months



Adapted from: Kramer et al. (2001)

Transparency 4.11.3

Impact of baby-friendly changes on selected health conditions



Note: Differences between experimental and control groups for various respiratory tract infections were small and statistically non-significant.

Adapted from: Kramer et al. (2001)

Transparency 4.11.4

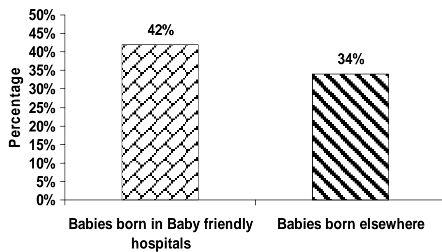
Combined Steps: The influence of Baby-friendly hospitals on breastfeeding duration in Switzerland

- Data was analyzed for 2861 infants aged 0 to11 months in 145 health facilities.
- Breastfeeding data was compared with both the progress towards Baby-friendly status of each hospital and the degree to which designated hospitals were successfully maintaining the Baby-friendly standards.

Adapted from: Merten S et al. Do Baby-Friendly Hospitals Influence Breastfeeding Duration on a National Level? *Pediatrics*, 2005, 116: e702 – e708.

Transparency 4.11.5

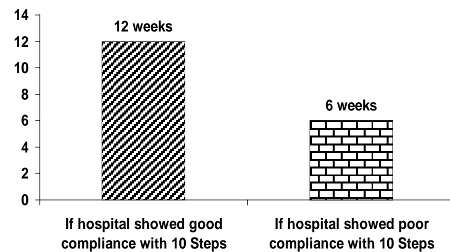
Proportion of babies exclusively breastfed for the first five months of life -- Switzerland



.Adapted from: Merten S et al. Do Baby-Friendly Hospitals Influence Breastfeeding Duration on a National Level? *Pediatrics*, 2005, 116: e702 – e708.

Transparency 4.11.6

Median duration of exclusive breastfeeding for babies born in Baby-friendly hospitals -- Switzerland



.Adapted from: Merten S et al. Do Baby-Friendly Hospitals Influence Breastfeeding Duration on a National Level? *Pediatrics*, 2005, 116: e702 – e708.

Transparency 4.11.7

Handout 4.2

Sultanate of Oman
Ministry of Health
Department of Nutrition

National policy on infant and young child feeding (for health facilities)

This policy is developed to ensure and improve the survival, health, nutritional status, growth and development of infants and young children through optimal feeding.
To ensure optimal infant and young child feeding, the following should be practiced by all health institutions:

1. Initiate breastfeeding within one hour from birth and promote exclusive breastfeeding for about the first 6 months of age.
2. Ensure timely introduction of complementary feeds at the end of the sixth month. If signs of hunger are observed earlier, complementary feeding could be started after completing four months.
3. Ensure that all children are fed adequate and hygienically prepared complementary foods.
4. Educate the mothers to increase food quality, quantity and frequency with a combination of meals and snacks, as the child gets older, with continued breastfeeding into the second year.
5. Encourage the mothers to diversity the diet to improve quality and micronutrients intake, satisfy protein, iron, vitamin A, and iodine requirements.
6. Encourage caregivers to practice active feeding, respond to motor development, and appropriate care practices.
7. During illness, advise the mother to increase frequency and quantity of meals, and continue breastfeeding.
8. Integration of the specific monitoring and evaluation system is an essential part of the implementation of this policy.
9. The implementation of the Oman Code 55/98 on the marketing of the breast-milk substitutes is the responsibility of all health personal at the health facility, wilayat, and regional levels.
10. Check baby's weight regularly as an indicator of adequate nutrition and refer malnourished children to the nutrition clinic in the health facility for management, counseling and follow up.
11. Train all health worker on the infant and young child feeding policy. Foster establishment of infant and young child feeding support groups in the health facilities and the communities.

HE – 49
First edition – November 2003

Handout 4.3

Baby and Mother Friendly Hospital Programme
Ministry of Health, Mexico

What are the 25 actions which the programme promotes?

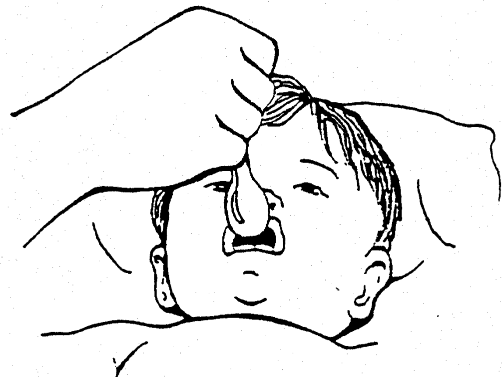
For a hospital to be considered BABY- AND MOTHER-FRIENDLY, it must implement the following 25-point programme:

Actions for the support and promotion of breast-feeding:

1. To have a written breast-feeding policy that is routinely communicated to all health care staff.
2. To train all health care staff in those skills necessary to implement this policy.
3. To practise rooming-in—allowing mothers and infants to remain together—24 hours a day.
4. To foster the establishment of breast-feeding support groups and refer mothers to them on discharge from the hospital or clinic.
5. To inform all pregnant women about the benefits and pratice of breast-feeding.
6. To practise skin to skin contact in the delivery room and to help mothers initiate breast-feeding within a half-hour of birth.
7. To show mothers how to breast-feed and how to maintain lactation even if they should be separated from their infants.
8. To encourage breast-feeding on demand.
9. To encourage mothers to give newborn infants no food or drink other than breast milk, unless MEDICALLY PRESCRIBED.
10. To give no ARTIFICIAL TEATS OR PACIFIERS to infants which might cause them to refuse the breast.

Actions aimed at protecting the health of the mother:

11. To carry out pre-natal care and immunise women against tetanus.
12. Early detection of high risk pregnancies.
13. To give orientation on nutrition to pregnant women.
14. To deliver all babies in health facilities.
15. To promote family planning.
16. Early detection of breast cancer.
17. Early detection of cancer of the womb.
18. To study and prevent peri-natal maternal mortality.



Actions for neo-natal and infant care:

19. Application of neo-natal vaccinations (Polio and tuberculosis).
20. To check the scheme of vaccinations of under-fives.
21. To monitor growth and development.
22. To control acute diarrhoeal diseases and to promote the use of oral rehydration salts.
23. To detect and control acute respiratory infections in under fives.

Research activities:

24. To investigate risk factors to identify and take advantage of lost opportunities.
25. To systematise all experience gained.

Handout 4.4

UNICEF UK Baby Friendly Initiative: Sample combined maternity/community services policy on breastfeeding[1]

PRINCIPLES

This facility believes that breastfeeding is the healthiest way for a woman to feed her baby and recognises the important health benefits now known to exist for both the mother and her child (1).

All mothers have the right to make a fully informed choice as to how they feed and care for their babies. The provision of clear and impartial information to all mothers at an appropriate time is therefore essential.

Health care staff will not discriminate against any woman in her chosen method of infant feeding and will fully support her when she has made that choice. This policy is designed to ensure good professional practice, not to dictate the choices of mothers.

AIMS

To ensure that the health benefits of breastfeeding and the potential health risks of formula feeding are discussed with all women and their families as appropriate, so that they can make an informed choice about how they will feed their babies.

To create an environment where more women choose to breastfeed their babies, and where more women are given sufficient information and support to enable them to breastfeed exclusively for at least 4 months (and preferably up to 6 months), and then as part of their infant's diet for as long as they both wish (2).

To enable all health care staff who have contact with breastfeeding women to provide full and competent support through specialised training in all aspects of breastfeeding management.

To encourage liaison with other health care facilities and delivery of a seamless service, together with the development of a breastfeeding culture throughout the local community.

IN SUPPORT OF THIS POLICY

Adherence to this policy is required for all staff. Any deviation from the policy must be justified and recorded in the mother's and/or baby's health care records. This should be done in the context of professional judgment and codes of conduct. The policy should be implemented in conjunction with both the facility's breastfeeding guidelines *[where these exist]* and the parents' guide to the policy *[where this exists]*.

It is the responsibility of all health care professionals to liaise with others should concerns arise about the baby's health. Any guidelines for the support of breastfeeding in special situations and the management of common complications will be drawn up and agreed by a multi-disciplinary team of professionals with clinical responsibility for the care of mothers and babies.

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[1] From http://www.babyfriendly.org.uk/pol-both.asp

The policy and guidelines will be reviewed annually. Compliance with the policy will be audited on an annual basis.

No advertising of breast-milk substitutes, feeding bottles, teats or dummies is permissible in this Trust/health centre. The display of logos of manufacturers of these products on such items as calendars and stationery is also prohibited (3).

No literature provided by manufacturers of breast-milk substitutes is permitted. Educational materials for distribution to women or their families must be approved by the lead professional.

Parents who have made a fully informed choice to feed their babies artificially should be shown how to prepare formula feeds correctly, either individually or in small groups, in the postnatal period. No routine group instruction on the preparation of artificial feeds will be given in the antenatal period, as this does not provide the information adequately and has the potential to undermine confidence in breastfeeding.

THE POLICY

Communicating the Breastfeeding Policy

1.1 This policy is to be communicated to all health care staff who have any contact with pregnant women and mothers, including those employed outside the facility. All staff will receive a copy of the policy.

1.2 All new staff will be orientated to the policy as soon as their employment begins.

1.3 The policy will be displayed in all areas of Trust premises/clinics/ parts of the health centre. *[Where appropriate]* The policy will also be accessible to women in other forms, for example on audio or video tapes and in appropriate languages.

Training Health Care Staff

2.1 Midwives and/or health visitors have the primary responsibility for supporting breastfeeding women and for helping them to overcome related problems.

2.2 All professional, clerical and ancillary staff who have contact with pregnant women and mothers will receive training in breastfeeding management at a level appropriate to their professional group. New staff will receive training within six months of taking up their posts.

2.3 The responsibility for providing training lies with the lead professional *[insert post]*, who will audit the uptake and efficacy of the training and publish results on an annual basis.

Informing Pregnant Women of the Benefits and Management of Breastfeeding

3.1 Every effort must be made to ensure that all pregnant women are aware of the benefits of breastfeeding and of the potential health risks of formula feeding.

3.2 All pregnant women should be given an opportunity to discuss infant feeding on a one-to-one basis with a midwife or health visitor. Such discussion should not solely be attempted during a group parentcraft class.

3.3 The physiological basis of breastfeeding should be clearly and simply explained to all pregnant women, together with good management practices and some of the common experiences they may encounter. The aim should be to give women confidence in their ability to breastfeed.

3.4 All materials and teaching should reflect the WHO/UNICEF Baby Friendly best practice standards.

Supporting the Initiation of Breastfeeding

4.1 All mothers should be encouraged to hold their babies in skin-to-skin contact as soon as possible after delivery in an unhurried environment, regardless of their intended feeding method.

4.2 All women should be encouraged to offer the first breastfeed when mother and baby are ready. Help must be available from a midwife if needed.

Showing Women how to Breastfeed and how to Maintain Lactation even if Mother and Baby are Separated

5.1 A midwife should be available to assist a mother if necessary at all breastfeeds during her hospital stay.

5.2 Midwives and health visitors should ensure that mothers are offered the support necessary to acquire the skills of positioning and attachment. They should be able to explain the necessary techniques to the mother, thereby helping her to acquire this skill for herself.

5.3 All breastfeeding mothers should be shown how to hand express their milk. A leaflet outlining the process should be provided for women to use for reference.

5.4 It is the responsibility of those health professionals caring for both mother and baby to ensure the mother is given help and encouragement to express her milk and to maintain her lactation during periods of separation from her baby.

5.5 Mothers who are separated from their babies should be encouraged to express milk at least six to eight times in a 24 hour period.

Supporting Exclusive Breastfeeding

6.1 For around the first 6 months, breastfed babies should receive no water or artificial feed except in cases of medical indication or fully informed parental choice. In hospital, no water or artificial feed should be given to a breastfed baby unless prescribed by a midwife or paediatrician who has been appropriately trained. Once home, no water or artificial feed is to be recommended for a breastfed baby by a member of staff unless s/he is trained in lactation management.

6.2 Parents should always be consulted if supplementary feeds are recommended and the reasons discussed with them in full.

6.3 Any supplements which are prescribed or recommended should be recorded in the baby's hospital notes or health record along with the reason for supplementation.

6.4 Parents who elect to supplement their baby's breastfeeds with formula milk or other foods or drinks should be made aware of the health implications and of the harmful impact supplementation may have on breastfeeding to allow them to make a fully informed choice.

6.5 All weaning information should reflect the aim of exclusive breastfeeding for around 6 months and partial breastfeeding for at least the first year (2).

6.6 Data on infant feeding showing the prevalence of both exclusive and partial breastfeeding will be collected at the following ages: *[for example: delivery, transfer home, 10 days, 6/8 weeks, 4 months, 1 year - we await national recommendations].*

6.7 Breast-milk substitutes will not be sold by facility staff or on health care premises. [Formula milk may be exchanged for welfare tokens (and sold to families in receipt of Working Families Tax Credit) if there is no other local outlet providing this facility].

Rooming-in

7.1 Mothers will normally assume primary responsibility for the care of their babies.

7.2 Separation of mother and baby while hospitalised will normally occur only where the health of either the mother or her infant prevents care being offered in the postnatal areas.

7.3 There is no designated nursery space in the hospital postnatal areas.

7.4 Babies should not be routinely separated from their mothers at night. This applies to babies who are being bottle fed as well as those being breastfed. Mothers who have delivered by Caesarean section should be given appropriate care, but the policy of keeping mother and baby together should normally apply.

7.5 Mothers will be encouraged to continue to keep their babies near them when they are at home. They will be given appropriate information about the benefits of and contraindications to bed-sharing.

Baby-led Feeding

8.1 Demand feeding should be encouraged for all babies unless clinically indicated. Hospital procedures should not interfere with this principle.

8.2 Mothers should be encouraged to continue to practise baby-led feeding throughout the time they are breastfeeding.

Use of Artificial Teats, Dummies and Nipple Shields

9.1 Health care staff should not recommend the use of artificial teats or dummies during the establishment of breastfeeding. Parents wishing to use them should be advised of the possible detrimental affects on breastfeeding to allow them to make a fully informed choice. The information given and the parents' decision should be recorded in the appropriate health record.

9.2 Nipple shields will not be recommended except in extreme circumstances and then only for as short a time as possible. Any mother considering using a nipple shield must have the disadvantages fully explained to her prior to commencing use. She should be under the care of a skilled practitioner whilst using the shield and should be given every help to discontinue use as soon as possible.

Breastfeeding Support Groups

10.1 This facility supports co-operation between health care professionals and voluntary support groups whilst recognising that health care facilities have their own responsibility to promote breastfeeding.

10.2 Telephone numbers (or other means of contact) for infant feeding advisors *[where these exist]*, community midwives, health visitors, and voluntary breastfeeding counsellors will be issued to all mothers and be routinely displayed in all areas relevant to maternity and child health. Details will be given of the times at which these advisors can be contacted.

10.3 Breastfeeding support groups will be invited to contribute to further development of the breastfeeding policy through involvement in appropriate meetings.

A Welcome for Breastfeeding Families

11.1 Breastfeeding will be regarded as the normal way to feed babies and young children. Mothers will be enabled and supported to feed their infants in all public areas of Trust premises/the health centre.

11.2 Comfortable facilities will be made available for mothers who prefer privacy.

11.3 Signs in all public areas of the facility will inform users of this policy.

Encouraging Community Support for Breastfeeding

12.1 Handover of care from midwife to health visitor will follow established procedure.

12.2 Health professionals should ask about the progress of breastfeeding at each contact with a breastfeeding mother. This will enable early identification of any potential complications and allow appropriate information to be given to prevent or remedy them.

12.3 Members of the health care team should use their influence wherever and whenever possible to encourage a breastfeeding culture in the local community.

12.4 Health care facilities will work with local breastfeeding support groups to raise society's awareness of the importance of breastfeeding and to encourage the provision of facilities for breastfeeding mothers and infants through liaison with local businesses, authorities, community groups and the media.

12.5 Opportunities to influence or take part in educational programmes in local schools (e.g. as part of the role of school nurses) will be explored.

1. Standing Committee on Nutrition of the British Paediatric Association (1994): Is breast feeding beneficial in the UK? *Arch Dis Child*, 71: 376-80.

2. The COMA Working Group on the Weaning Diet (1994) recommends that 'the majority of infants should not be given solid foods before the age of four months, and that a mixed diet should be offered by the age of six months'. The World Health Assembly (Resolution 47.5, 1994) recommends that babies should be exclusively breastfed until 'about 6 months'.

3. The Infant Formula and Follow-on Formula Regulations 1995 stipulate a legal requirement that infant formula advertising should be restricted to baby care publications distributed through the health care system. There is no legal requirement for facilities in the UK to comply with the International Code of Marketing of Breast-milk Substitutes (WHO, Geneva, 1981). However, the requirements of the Baby Friendly Initiative are based on the International Code, which aims 'to contribute to the provision of safe and adequate nutrition for infants, by the protection and promotion of breastfeeding, and by ensuring the proper use of breast-milk substitutes, when these are necessary, on the basis of adequate information and through appropriate marketing and distribution.' Articles 5 and 6 of the Code state that no promotion of breast-milk substitutes, bottles or teats should occur.

Handout 4.5

WHO/NMH/NHD/09.01
WHO/FCH/CAH/09.01

Acceptable medical reasons for use of breast-milk substitutes

World Health Organization

unicef

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Preface

A list of acceptable medical reasons for supplementation was originally developed by WHO and UNICEF as an annex to the Baby-friendly Hospital Initiative (BFHI) package of tools in 1992.

WHO and UNICEF agreed to update the list of medical reasons given that new scientific evidence had emerged since 1992, and that the BFHI package of tools was also being updated. The process was led by the departments of Child and Adolescent Health and Development (CAH) and Nutrition for Health and Development (NHD). In 2005, an updated draft list was shared with reviewers of the BFHI materials, and in September 2007 WHO invited a group of experts from a variety of fields and all WHO Regions to participate in a virtual network to review the draft list. The draft list was shared with all the experts who agreed to participate. Subsequent drafts were prepared based on three inter-related processes: a) several rounds of comments made by experts; b) a compilation of current and relevant WHO technical reviews and guidelines (see list of references); and c) comments from other WHO departments (Making Pregnancy Safer, Mental Health and Substance Abuse, and Essential Medicines) in general and for specific issues or queries raised by experts.

Technical reviews or guidelines were not available from WHO for a limited number of topics. In those cases, evidence was identified in consultation with the corresponding WHO department or the external experts in the specific area. In particular, the following additional evidence sources were used:

-*The Drugs and Lactation Database* (LactMed) hosted by the United States National Library of Medicine, which is a peer-reviewed and fully referenced database of drugs to which breastfeeding mothers may be exposed.

-*The National Clinical Guidelines for the management of drug use during pregnancy, birth and the early development years of the newborn*, review done by the New South Wales Department of Health, Australia, 2006.

The resulting final list was shared with external and internal reviewers for their agreement and is presented in this document.

The list of acceptable medical reasons for temporary or long-term use of breast-milk substitutes is made available both as an independent tool for health professionals working with mothers and newborn infants, and as part of the BFHI package. It is expected to be updated by 2012.

Acknowledgments

This list was developed by the WHO Departments of Child and Adolescent Health and Development and Nutrition for Health and Development, in close collaboration with UNICEF and the WHO Departments of Making Pregnancy Safer, Essential Medicines and Mental Health and Substance Abuse. The following experts provided key contributions for the updated list: Philip Anderson, Colin Binns, Riccardo Davanzo, Ros Escott, Carol Kolar, Ruth Lawrence, Lida Lhotska, Audrey Naylor, Jairo Osorno, Marina Rea, Felicity Savage, María Asunción Silvestre, Tereza Toma, Fernando Vallone, Nancy Wight, Anthony Williams and Elizabeta Zisovska. They completed a declaration of interest and none identified a conflicting interest.

Introduction

Almost all mothers can breastfeed successfully, which includes initiating breastfeeding within the first hour of life, breastfeeding exclusively for the first 6 months and continuing breastfeeding (along with giving appropriate complementary foods) up to 2 years of age or beyond.

Exclusive breastfeeding in the first six months of life is particularly beneficial for mothers and infants.

Positive effects of breastfeeding on the health of infants and mothers are observed in all settings. Breastfeeding reduces the risk of acute infections such as diarrhoea, pneumonia, ear infection, *Haemophilus influenza*, meningitis and urinary tract infection (1). It also protects against chronic conditions in the future such as type I diabetes, ulcerative colitis, and Crohn's disease. Breastfeeding during infancy is associated with lower mean blood pressure and total serum cholesterol, and with lower prevalence of type-2 diabetes, overweight and obesity during adolescence and adult life (2). Breastfeeding delays the return of a woman's fertility and reduces the risks of post-partum haemorrhage, pre-menopausal breast cancer and ovarian cancer (3).

Nevertheless, a small number of health conditions of the infant or the mother may justify recommending that she does not breastfeed temporarily or permanently (4). These conditions, which concern very few mothers and their infants, are listed below together with some health conditions of the mother that, although serious, are not medical reasons for using breast-milk substitutes.

Whenever stopping breastfeeding is considered, the benefits of breastfeeding should be weighed against the risks posed by the presence of the specific conditions listed.

INFANT CONDITIONS

Infants who should not receive breast milk or any other milk except specialized formula

- Infants with classic galactosemia: a special galactose-free formula is needed.
- Infants with maple syrup urine disease: a special formula free of leucine, isoleucine and valine is needed.
- Infants with phenylketonuria: a special phenylalanine-free formula is needed (some breastfeeding is possible, under careful monitoring).

Infants for whom breast milk remains the best feeding option but who may need other food in addition to breast milk for a limited period

- Infants born weighing less than 1500 g (very low birth weight).
- Infants born at less than 32 weeks of gestation (very preterm).
- Newborn infants who are at risk of hypoglycaemia by virtue of impaired metabolic adaptation or increased glucose demand (such as those who are preterm, small for gestational age or who have experienced significant intrapartum hypoxic/ischaemic stress, those who are ill and those whose mothers are diabetic (5) if their blood sugar fails to respond to optimal breastfeeding or breast-milk feeding.

MATERNAL CONDITIONS

Mothers who are affected by any of the conditions mentioned below should receive treatment according to standard guidelines.

Maternal conditions that may justify permanent avoidance of breastfeeding

- HIV infection2: if replacement feeding is acceptable, feasible, affordable, sustainable and safe (AFASS) (6). Otherwise, exclusive breastfeeding for the first six months is recommended.

Maternal conditions that may justify temporary avoidance of breastfeeding

- Severe illness that prevents a mother from caring for her infant, for example sepsis.
- Herpes simplex virus type 1 (HSV-1): direct contact between lesions on the mother's breasts and the infant's mouth should be avoided until all active lesions have resolved.
- Maternal medication:
  - sedating psychotherapeutic drugs, anti-epileptic drugs and opioids and their combinations may cause side effects such as drowsiness and respiratory depression and are better avoided if a safer alternative is available (7);
  - radioactive iodine-131 is better avoided given that safer alternatives are available - a mother can resume breastfeeding about two months after receiving this substance;
  - excessive use of topical iodine or iodophors (e.g., povidone-iodine), especially on open wounds or mucous membranes, can result in thyroid suppression or electrolyte abnormalities in the breastfed infant and should be avoided;
  - cytotoxic chemotherapy requires that a mother stops breastfeeding during therapy.

Maternal conditions during which breastfeeding can still continue, although health problems may be of concern

- Breast abscess: breastfeeding should continue on the unaffected breast; feeding from the affected breast can resume once treatment has started (8).
- Hepatitis B: infants should be given hepatitis B vaccine, within the first 48 hours or as soon as possible thereafter (9).
- Hepatitis C.
- Mastitis: if breastfeeding is very painful, milk must be removed by expression to prevent progression of the condition(8).
- Tuberculosis: mother and baby should be managed according to national tuberculosis guidelines (10).
- Substance use3 (11):
  - maternal use of nicotine, alcohol, ecstasy, amphetamines, cocaine and related stimulants has been demonstrated to have harmful effects on breastfed babies;
  - alcohol, opioids, benzodiazepines and cannabis can cause sedation in both the mother and the baby.

  Mothers should be encouraged not to use these substances, and given opportunities and support to abstain.

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2 The most appropriate infant feeding option for an HIV-infected mother depends on her and her infant's individual circumstances, including her health status, but should take consideration of the health services available and the counselling and support she is likely to receive. Exclusive breastfeeding is recommended for the first six months of life unless replacement feeding is AFASS. When replacement feeding is AFASS, avoidance of all breastfeeding by HIV-infected women is recommended. Mixed feeding in the first 6 months of life (that is, breastfeeding while also giving other fluids, formula or foods) should always be avoided by HIV-infected mothers.

3 Mothers who choose not to cease their use of these substances or who are unable to do so should seek individual advice on the risks and benefits of breastfeeding depending on their individual circumstances. For mothers who use these substances in short episodes, consideration may be given to avoiding breastfeeding temporarily during this time.

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(3) León-Cava N et al. *Quantifying the benefits of breastfeeding: a summary of the evidence.* Washington, DC, Pan American Health Organization, 2002 (http://www.paho.org/English/AD/FCH/BOB-Main.htm, accessed 26 June 2008).

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(9) *Hepatitis B and breastfeeding*. Geneva, World Health Organization, 1996. (Update No. 22).

(10) *Breastfeeding and Maternal tuberculosis*. Geneva, World Health Organization, 1998 (Update No. 23).

(11) *Background papers to the national clinical guidelines for the management of drug use during pregnancy, birth and the early development years of the newborn.* Commissioned by the Ministerial Council on Drug Strategy under the Cost Shared Funding Model. NSW Department of Health, North Sydney, Australia, 2006. http://www.health.nsw.gov.au/pubs/2006/bkg_pregnancy.html

Further information on maternal medication and breastfeeding is available at the following United States National Library of Medicine (NLM) website:
http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?LACT

For further information, please contact:

Department of Nutrition for Health and Development
E-mail: nutrition@who.int
Web: www.who.int/nutrition

Department of Child and Adolescent Health and Development
E-mail: cah@who.int
Web: www.who.int/child_adolescent_health

Address: 20 Avenue Appia, 1211 Geneva 27, Switzerland

Session 4:
The scientific basis for the "Ten steps to successful breastfeeding" for settings with high HIV prevalence

Note: This alternate Session 4 has been prepared for use in settings with high HIV prevalence. Some HIV-related content is included in the basic Session 4, since it is important to consider the effects of the epidemic in all settings. This version of the Session is identical to Session 4, except that additional content concerning HIV and infant feeding have been added, wherever useful.

Additional handouts, transparencies, and slides related to HIV and infant feeding have been prepared for this version of the Session. The additional handouts and transparencies are included with this version of the Session. The basic handouts and transparencies are presented with the basic Session and should be used with this one as well. The additional slides have been integrated into the basic slide set and included all together with this Session, for ease of use.

Objective

At the conclusion of this session, participants will be able to:

- Describe the scientific basis for the "Ten steps to successful breastfeeding".
- Discuss current scientific evidence concerning the advantages and risks of breastfeeding versus replacement feeding in settings with high HIV prevalence and how this should influence the approach to the "Ten steps".

Duration

Total: 90 minutes

Teaching methods

Lecture and discussion

Preparation for session

- Review the WHO document, *Evidence for the ten steps to successful breast-feeding*. Geneva, World Health Organization, 1998. http://www.who.int/nutrition/publications/infantfeeding/evidence_ten_step_eng.pdf
- Review all handouts and research summaries which follow the Session 4 outline as well as the additional handouts and summaries in this Session Plan (be sure to have the most up-to-date statement from the Joint United Nations Programme on HIV/AIDS (UNAIDS) on HIV and infant feeding).

- Review video, *Delivery, Self Attachment*. (time: 6 minutes). See the *Course Guide* for information on how to order the video.
- Review all PowerPoint slides and/or transparencies from both the basic Session Plan and this version and choose *for each step* about three slides or transparencies most appropriate for your audience. If desired, you may change the order of the slide/transparency presentation. Review the generic photo slides and use them and/or your own slides, to illustrate points as needed.
- Review locally available breastfeeding and HIV and infant feeding training courses and list them on an overhead or flipchart.
- If available, display poster of the Ten Steps where the speaker can easily refer to it.

Training materials

Summaries

Summaries of research studies

Note: Only the additional summaries of studies related to HIV are included with this session. The other summaries are included with the basic Session 4.

Handouts

Protecting, Promoting and Supporting Breast-feeding, The Special Role of Maternity Services, A Joint WHO/UNICEF Statement (booklet, same as Session 3).

4.1 (HIV) Presentation for Session 4 HIV.

4.2 National policy on infant and young child feeding (for health institutions), Sultanate of Oman.

4.3 Baby and Mother Friendly Hospital Programme, Ministry of Health, Mexico.

4.4 UNICEF UK Baby Friendly Initiative: Sample combined maternity/community services policy on breastfeeding.

4.5 Acceptable medical reasons for use of breast-milk substitutes.

4.6 (HIV) Infant and young child feeding in the context of HIV.

4.7 (HIV) Infant feeding policy: Rusape Hospital, Zimbabwe.

Slides/Transparencies

4.1.1-4.11.7 and photo slides 4.a-4.z.

4 Intro. 1 HIV, 4 Intro. 2 HIV, 4.3.5-11 HIV, and 4.6.10-14 HIV.

The website featuring this Course contains links to the slides and transparencies for this session in two Microsoft PowerPoint files. The photo slides are included in the “slides” file in the order in which they are listed in the Session Plan. When possible, trainers should substitute appropriate photos taken locally or in situations that are similar to local conditions. The slides (in colour) can be used with a laptop computer and LCD projector, if available.

Alternatively, the transparencies (in black and white) can be printed out and copied on acetates and projected with an overhead projector. The photos are not included in the transparency file, as they do

not reproduce well in black and white. The transparencies are also reproduced as the first handout for this session, with 6 transparencies to a page.

Other training materials

Flipchart
Video
Poster with the Ten Steps

References

Note: Some of the references related to HIV and infant feeding in the list below are included in the basic Session 4 reference list. Additional HIV-related references that have been added here are asterisked and have been placed at the beginning of this reference list.

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* *HIV in Pregnancy: A Review.* Geneva, World Health Organization, 1999 (WHO/CHS/RHR/99.15).

* *New data on the prevention of mother-to-child transmission of HIV and their policy implications: conclusions and recommendations. WHO Technical Consultation on Behalf of the UNFPA/ UNICEF/ WHO/ UNAIDS Interagency Task Force Team on Mother-to-Child transmission of HIV, Geneva, 11-13 October 2000*. Geneva, World Health Organization, 2001.

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Yamauchi Y, Yamanouchi I. Breast-feeding frequency during the first 24 hours after birth in full-term neonates. *Pediatrics,* 1990, 86 (2):171-175.

Yamauchi Y, Yamanouchi I. The relationship between rooming-in/not rooming-in and breast-feeding variables. *Acta Paediatr Scand,* 1990, 79:1017-1022.

Outline

Content	Trainer's Notes
	This session will review selected studies to illustrate the physiological and sociological basis for the Ten Steps. All steps are interrelated. The first 2 steps provide the foundation for implementing the remaining eight. Refer participants to the handout (booklet), "Promoting, Protecting, and Supporting Breast-feeding". Invite participants to comment or ask questions during the presentation. Write down problems, barriers or solutions that come up during the presentation so they can be addressed in Session 5 (HIV). Try to allow some discussion during this presentation but postpone major discussions until Session 5 (HIV) due to time constraints. Mention that a mini-version of the presentation is reproduced in Handout 4.1 (HIV) and included in the participants' folder. Begin the session by briefly presenting some background information related to HIV and infant feeding, tailoring your brief overview to the needs of the participants. Show and describe the data in slides 4 Intro 1 HIV, 4 Intro 2 HIV, and 4 Intro 3 HIV. Refer the participants to Handout 4.6 (HIV). Summarize the information in this handout and/or present information of your own concerning HIV and infant feeding.
1. Step 1: Have a written breastfeeding policy that is routinely communicated to all health-care staff.	***Slides*** 4.1.4 Step 1. 4.1.5 Why have a policy? 4.a Mention the "Joint Statement" and fact that it serves as the background document for BFHI and the "Ten Steps". 4.1.6 What should it cover? In some HIV prevalent countries there has been a shift to an "infant feeding policy" that includes breastfeeding as well as replacement feeding guidelines and a support framework. 4.1.7 How should it be presented? Pass out handout 4.7 (HIV) or your own

Content	Trainer's Notes
	policy example and discuss it. Policies need to be adapted to your own settings and should be based on the Ten Steps. Mention that issues related to development of appropriate policies for settings with high HIV prevalence will be discussed further in Session 5 (HIV). 4.b Show photo of health professionals consulting a written policy during on-the-job training (optional). 4.1.8 Graph: Rates of exclusive breast-milk feeds improved while in the birth hospital after implementing the Baby Friendly Hospital Initiative (*Philipp et al., see summary).*
2. Step 2: Train all health-care staff in the skills necessary to implement this policy.	***Slides*** 4.2.1 Step 2. 4.c Show photo of health professionals attending a classroom session (optional). 4.d. Show photo of group discussion during training (optional). 4.2.2 Areas of knowledge to be included in staff education (may ask participants to answer before showing). 4.2.3 Additional topics for training in the context of HIV. 4.2.4 Hospital staff breastfeeding training had a significant effect on exclusive breastfeeding rate at discharge, which increased from 41% to 77% *(Cattaneo et al., see summary).* 4.2.5 In several studies health professionals trained in breastfeeding counselling provided counselling and/or trained support groups to assist mothers in a variety of circumstances (prenatally, postnatally, after admission for diarrhoea). In each of the studies there was a significant increase in exclusive breastfeeding, when compared to the control group (*WHO/CAH, see summary).* 4.2.6 Ask participants to give examples of health professionals - other than perinatal staff - who influence breastfeeding success. Consider other staff in the

Content	Trainer's Notes
	institution coming into contact with mothers such as cleaning staff, clerks, or other specialty groups.
3. Step 3: Inform all pregnant women about the benefits and management of breastfeeding.	*Slides* 4.3.1 Step 3. 4.3.2 Antenatal education content (can be adapted to reflect individual country needs). In settings where there is high HIV there are additional considerations in the antenatal period including voluntary counselling and testing for HIV. After learning one's HIV status there are additional areas for counselling during pregnancy. 4.e-f Show photos of an antenatal group class and individual counselling (optional). 4.3.3 Antenatal care can significantly impact breastfeeding practices related to colostrum feeding and early breastfeeding initiation within 2 hours of birth *(Nielsen et al., see summary).* 4.3.4 Antenatal education can lead to significant increases in initiation rates (23%) and duration of short-term breastfeeding (up to 3 months) (39%), as shown by a meta-analysis of studies of education and support *(Guise et al., see summary).* 4.3.5 (HIV) Why test for HIV in pregnancy? There are several reasons why a woman may want to consider learning her HIV status. Mothers may want to be assured of privacy and confidentiality before testing as in some cases there is stigma associated with having a test. 4.3.6 (HIV) Replacement feeding. It's important to review the definition of "replacement feeding" in the context of HIV. 4.3.7 (HIV) Risk of mother-to-child transmission of HIV. This graphic illustrates the risk of mother-to-child transmission of HIV if there is a 20% prevalence of HIV infection among mothers, 20% transmission rate during pregnancy/delivery and 15% transmission rate during breastfeeding. With these rates, for every 100 mothers, 20

Content	Trainer's Notes
	would be HIV+, 4 of their babies infected during pregnancy and delivery, and 3 of their babies infected via breastfeeding. 4.3.8 (HIV) HIV positive mothers need to be counselled concerning the risks of breastfeeding versus replacement feeding. The WHO recommendations on infant feeding for HIV+ women presents key issues to consider. 4.3.9 11 (HIV) These slides summarize the key recommendations to give if a mother's HIV status is unknown, if her HIV status is negative, if her HIV status is positive, if her HIV status is positive and she decides to breastfeed, and if her HIV status is positive and she chooses replacement feeding. These recommendations can help guide health providers at the facility that counsel pregnant women facing decisions concerning how they will feed their infants. WHO has recently published a series of counseling cards that can be very useful in this process. Health providers need to receive special training through the WHO HIV and infant feeding course or something similar, to gain the knowledge and skills needed for this work.
4. Step 4: Help mothers initiate breastfeeding within a half-hour of birth.	***Slides*** 4.4.1 Step 4 (may have discussions relating to timing of first breastfeed. Could elaborate on issues relating to this step, i.e. drugs during delivery, cesarean sections, etc.). 4.4.2 The revised BFHI Global Criteria interpret this step as "Place babies in skin-to-skin contact with their mothers immediately following birth for at least an hour. Encourage mothers to recognize when their babies are ready to breastfeed and offer help if needed". Discuss reasons for this change, including research on the time it takes babies to start breastfeeding without assistance (see photos 4h-j and slide 4.4.8 below). 4.4.3 Why encourage early initiation? The points in this list are illustrated in the following transparencies.

Content	Trainer's Notes
	4.4.4 How to encourage early initiation? 4.g-j Show one or more photos illustrating early initiation. The first photo shows a nurse assisting a mother to position her baby just after delivery. The next three photos illustrate how the baby will find the mother's nipple and begin to suck on his own, if time is allowed for this process. 4.4.5 Graph: Study demonstrates how contact within the first hour after delivery increased duration of breastfeeding at 3 months *(DeChateau et al., see summary).* 4.4.6 Graph: Study concluded that skin-to-skin care as compared to care in a bed during the unique period just following birth is associated with higher body and skin temperatures and more rapid metabolic adaptation. Maternal body is an efficient heat source for the baby *(Christensson et al., see summary).* 4.4.7 Table: This summary of when immune factors are produced in the infant demonstrates the importance of colostrum and mature milk's role in compensating for the relative absence of immunity in the infant *(Worthington-Roberts).* 4.4.8 Graph: Study concluded that in order to promote successful suckling patterns naked infants should be left undisturbed on their mothers' abdomens until the first suckling is accomplished and the infants' efforts to take the breast actively should be promoted *(Righard et al., see summary).* Show *"Delivery, Self Attachment"* video if available, as an alternative to photo slides g, h, and i. Note the infant's suckling pattern when there is no interference with the mother and newborn.
5. Step 5: Show mothers how to breastfeed and how to maintain lactation even if they are separated from their infants.	***Slides*** 4.5.1 Step 5. 4.5.2 Quote (Woolridge). 4.k-l Show photos of staff showing mothers how to breastfeed (optional).

Content	Trainer's Notes
	4.5.3 Graph: Study demonstrates that if at hospital discharge a mother is breastfeeding her infant with good technique, or if 5-10 minutes of instruction time is spent correcting faulty technique, the duration of breastfeeding is almost doubled compared to mothers discharged with uncorrected faulty breastfeeding technique *(Righard et al., see summary).* 4.5.4 Graph: Breastfeeding initiation occurred among 75% of women who were encouraged to breastfeed compared to only 43% who were not encouraged to breastfeed by a health professional *(Lu et al., see summary).* 4.5.5 Graph: breastfeeding duration rates were significantly higher among mothers whose babies roomed in postpartum and whose mothers received breastfeeding guidance during the hospital stay compared to mothers whose babies did not room in and did not receive any breastfeeding guidance while in the hospital *(Perez-Escamilla et al., see summary).* 4.5.6 Supply and demand. 4.m Show photo of milk expression.
6. Step 6: Give newborn infants no food or drink other than breast milk unless *medically* indicated.	***Slides*** 4.6.1 Step 6. 4.n Show photo of breast-milk substitute and water bottles, <u>not</u> to be given unless medically indicated *(optional).* 4.o Show photo of nurse giving baby a bottle (<u>not</u> appropriate unless medically indicated) *(optional).* 4.6.2 Graph: This study suggests a correlation between a more "physiologic" start of breastfeeding and the overall duration of the lactation period *(Nylander et al., see summary).* 4.6.3 To address the concern that colostrum alone is "not enough", this graphic illustrates that newborn and infant stomach capacities are perfectly matched to the amount of colostrum (about 200 ml/24 hours at day two) and mature milk (about

Content	Trainer's Notes
	800-900 ml/24 hours at 1 year). 4.6.4 Impact of routine formula supplementation. 4.6.5 This study shows that early introduction of a bottle in inversely associated with breastfeeding duration *(Perez-Escamilla et al., see summary).* 4.6.6 The data in this table shows there is no need for water supplementation for infants exclusively breastfed no matter what temperature and humidity, as reflected in normal urine osmolarity. 4.6.7 There are rare exceptions during which infants may require other fluids or food in addition to, or in place of, breast milk. 4.6.8 - 4.6.10 Acceptable medical reasons for use of breast-milk substitutes (distribute Handout 4.5). If questions arise concerning HIV and breastfeeding refer participants to Handout 4.6 (HIV): Infant and young child feeding in the context of HIV. 4.6.11 (HIV) Risk factors for HIV transmission during breastfeeding. Review the risk factors for both mothers and infants that affect the likelihood of HIV transmission during breastfeeding. 4.6.12 (HIV) Graph *(Richardson et al., 2003)* One important maternal risk factor for HIV transmission through breastfeeding is maternal blood viral load. If the viral load is low the risk is 4 times less than if it is high. 4.6.13 (HIV) Graph *(Coutsoudis et al., 2001).* Shows the probability of an HIV positive test at various months of age among babies that were never breastfeed (always fed breast-milk substitutes), exclusively breastfed, and mixed fed. The probability of an HIV positive test is higher for mixed feeders at all months of age. It is lowest for babies exclusively breastfed until six months and then in lower for those never breastfed *(Coutsoudis et al., see summary).* 4.6.14 (HIV) *(Piwoz et al., 2005)* A recent HIV and infant feeding trial in Zimbabwe (ZVITAMBO) included an education and counseling program for new mothers in Harare. Mothers of unknown or negative

Content	Trainer's Notes
	HIV status or HIV positive mothers who chose to breastfeed were counseled to exclusively breastfeed and practice other elements of "safer breastfeeding". 4.6.15 (HIV) Graph *(Piwoz et al., 2005)* Exposure to the safer breastfeeding intervention in the above study in Zimbabwe was associated with reduced postnatal transmission (through breastfeeding) among mothers who did not know their status. The more educational exposures to the concepts of "safer breastfeeding" that the women received, the greater the likelihood that they followed the recommendations and the less chance of HIV transmission to their infants. This type of education and counseling can begin both during pregnancy and before discharge, as well as during postnatal contacts after the mothers return home.
7. Step 7: Practice rooming-in—allow mothers and infants to stay together—24 hours a day.	***Slides*** 4.7.1 Step 7. 4.7.2 Definition (Describe bedding-in if relevant. "Bedding-in" is when infant and mother stay in the same bed). 4.p-q Show one or more photos of rooming-in and bedding-in. 4.7.3 Why institute rooming-in? (points discussed in slides to follow). 4.7.4 Graph: Positive impact of rooming-in policy on prevention of infectious disease when infants rooming-in were compared to newborns not rooming-in with their mothers *(Soetjiningsih et al., see summary).* 4.7.5 Graph: Positive effect of infants rooming-in with their mothers on frequency of breastfeeding in the first 6 days of life compared to infants not rooming-in (*Yamauchi et al., see summary).*
8. Step 8: Encourage breastfeeding on demand.	***Slides*** 4.8.1 Step 8. 4.8.2 Definition of "on-demand".

Content	Trainer's Notes
	4.8.3 Why feed on demand? 4.r-s Show one or more photos of feeding on demand. 4.8.4 Table: Study demonstrates the positive impact of on-demand, frequent breastfeeding (number of times during the first 24 hours) on bilirubin levels of 6 day-old full-term healthy infants *(Yamauchi et al., see summary).* 4.8.5 This data shows that the greater the frequency of feeds, the lower the level of serum bilirubin *(DeCarvalho et al., see summary).*
9. Step 9: Give no artificial teats or pacifiers (also called dummies and soothers) to breastfeeding infants.	***Slides*** 4.9.1 Step 9. 4.t Show photo of various nipples/teats – should not be used (optional). 4.u Show photo of various pacifiers/dummies/ soothers – should not be used (optional). 4.9.2 Alternatives to artificial teats or pacifiers. 4.9.3 Illustration of cup feeding. It is recommended to use an ordinary small 50-100 ml glass or polypropylene plastic "cup". The rim of the "cup" should be smooth and not sharp and the "cup" should be boiled or sterilised. 4.v Show photo of cup feeding (optional). 4.9.4 Early weaning was associated with daily pacifier use even when confounding factors were accounted for *(Victora et al., see summary).* Stress the fact that no artificial teats or pacifiers are recommended for any babies, including those with HIV positive mothers who have chosen not to breastfeed.
10. Step 10: Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from hospital or clinic.	***Slides*** 4.10.1 Step 10. 4.10.2 Quote. 4.10.3 Examples of support.

Content	Trainer's Notes
	4.10.4 Summary of types of breastfeeding support. A "doula" is a woman caregiver of another woman who provides support during the perinatal period. HIV positive mothers need extra support. Health providers and volunteers need training in how to provide this support. If HIV+ mothers decided to breastfeed they must do so exclusively and safely. If they replacement feed this also must be done exclusively and safely. 4.w-z Show photos illustrating various types of mother support (home visiting by nurse, mother support groups, and mothers dancing in a community breastfeeding meeting). 4.10.5 Trained peer counselors positively effected the duration of exclusive breastfeeding *(Haider et al., see summary).* 4.10.6 Home visits improved exclusive breastfeeding at 2 weeks and 3 months *(Morrow et al., see summary).*
11. Effects of combined steps	In addition, it is highly effective to combine the steps since by applying all steps or some in combination the hospital and the administration obtain better results. This is illustrated in many of the previous studies presented above. To further elaborate on this point the following series of slides are presented. 4.11.1 In a randomised trial in Belarus 17,000 mother-infant pairs, with mothers intending to breastfeed, were followed for 12 months. In 15 control hospitals & associated polyclinics that provide care following discharge, staff members were asked to continue their usual practices. In 16 experimental hospitals & associated polyclinics staff received baby-friendly training & support *(Kramer et al., see summary.).* 4.11.2 Differences following intervention between control and intervention hospitals.

Content	Trainer's Notes
	4.11.3 Effect of baby-friendly changes on breastfeeding at 3 and 6 months. 4.11.4 Impact of baby-friendly changes on selected health conditions. 4.11.5 In a study in Switzerland, data was analyzed for 2861 infants aged 0 – 11 months in 145 health facilities. Breastfeeding data was compared with both the progress towards Baby-friendly status of each hospital and the degree to which designated hospitals were successfully maintaining the Baby-friendly standards *(Merten et al., see summary).* 4.11.6 The proportion of babies exclusively breastfed for 5 months for those born in Baby-friendly hospitals compared to those born elsewhere. 4.11.7 The median duration of exclusive breastfeeding for babies born in Baby-friendly hospitals if the hospital showed good compliance with the 10 steps, and if it did not. This result illustrates the importance of maintaining Baby-friendly standards.
12. Conclusion	Acknowledge differences in opinion, perceived barriers, and innovative solutions relating to this subject matter. These areas of interest will be covered in the remaining sessions.

Summaries of research studies presented during Session 4

Note: The summaries for the slides that are asterisked (featuring additional information related to HIV and infant feeding) are presented in this Session Plan. The summaries for the rest of the slides may be found in the basic Session Plan 4.

Slide:	*Study:*
4.1.5	Philipp BL, Merewood A, Miller LW et al. Baby Friendly Hospital initiative improves breastfeeding initiation rates in a US hospital setting. *Pediatrics,* 2001, 108:677-681.
4.2.4	Cattaneo A, Buzzetti R. Effect on rates of breast feeding of training for the Baby Friendly Hospital Initiative. *BMJ,* 2001, 323:1358-1362.
4.2.5	Albernaz E, Giugliani ERJ, Victora CG. Supporting breastfeeding: a successful experience. *Journal of human lactation,* 1998, 14(4):283-285.
	Haider R et al Breast-feeding counselling in a diarrhoeal disease hospital. *Bulletin of the World Health Organization*, 1996, 74(2):173-179.
4.3.3	Nielsen B, Hedegaard M, Thilsted S, Joseph A and Liliestrand J. Does antenatal care influence postpartum health behaviour? Evidence from a community based cross-sectional study in rural Tamil Nadu, South India. *British Journal of Obstetrics and Gynaecology,* 1998, 105:697-703.
4.3.4	Guise, J-M, Palda V, Westhoff C, Chan BKS, Helfand M, and Lieu T. The effectiveness of primary care-based interventions to promote breastfeeding: Systematic evidence review and meta-analysis for the US preventive services task force. *Annals of Family Medicine,* 2003, 1(2):70-78.
*4.3.7 (HIV)	WHO. HIV and infant feeding counselling: A training course. Participants' Manual. Geneva, Switzerland, 2000 (WHO/FCH/CAH/00.4).
4.4.4	DeChateau P and Wiberg B. Long term effect on mother-infant behavior of extra contact during the first hour postpartum. *Acta Paediatr,* 1977, 66:145-151.
4.4.5	Christensson K, Siles C, Moreno L, Belaustequi A, De La Fuente P, Lagercrantz H, Puyol P, and Winberg J. Temperature, metabolic adaptation and crying in health full-term newborns cared for skin-to-skin or in a cot. *Acta Paediatr,* 1992, 81:488-93.
4.4.7	Righard L and Alade MO. Effect of delivery room routines on success of first breastfeed. *Lancet,* 1990, 336:1105-1107.
4.5.3	Righard L & Alade O. Sucking technique and its effect on success of breastfeeding. *Birth*, *1992,* 19(4):185-189.
4.5.4	Lu M, Lange L, Slusser W et al. Provider encouragement of breast-feeding: Evidence from a national survey. *Obstetrics and Gynecology,* 2001, 97:290-295.
4.5.5	Perez-Escamilla R, Segura-Millan S, Pollitt E, Dewey KG. Effect of the maternity ward system on the lactation success of low-income urban Mexican women. *Early Hum Dev*, 1992, 31(1): 25-40.
4.6.2	Nylander G, Lindemann R, Helsing E, Bendvold E Unsupplemented breastfeeding in the maternity ward. *Acta Obstet Gynecol Scand,* 1991, 70: 205-209.

4.6.5 Perez-Escamilla, Sergura-Millan S, Pollitt E, Dewey KG. Determinants of lactation performance across time in an urban population from Mexico. *Soc Sci Med,* 1993, 37(8):1069-1078.

*4.6.12 (HIV) Richardson BA, John-Stewart GC, Hughes JP, Nduati R, Mbori-Ngacha D, Overbaughh J and Kreiss JK, Breast-milk Infectivity in Human Immunodeficiency Virus Type 1 – Infected Mothers. *JID*, 2003, 187:736-740.

*4.6.13 (HIV) Coutsoudis A, Kubendran P, Kuhn L, Spooner, E, Tsai W, Coovadia HM.; South African Vitamin A Study Group. Method of feeding and transmission of HIV-1 from mothers to children by 15 months of age: prospective cohort study from Durban, South Africa. *AIDS,* 2001, Feb 16, 15(3):379-87.

*4.6.14 (HIV)
*4.6.15 (HIV) Piwoz EG, Lliff PJ, Tavengwa N, Gavin L, Marinda E, Lunney K, Zunguza C, Nathoo KJ, the ZVITAMBO Study Group, and Humphrey JH, An Education and Counseling Program for Preventing Breast-Feeding-Associated HIV Transmission in Zimbabwe: Design and Impact on Maternal Knowledge and Behavior. *J Nutr.* 2005, Apr, 135(4):950-5.

4.7.4 Soetjiningsih and Suraatmaja S. The advantages of rooming-in. *Pediatrica Indonesia,* 1986, 26:229-235.

4.7.5 Yamauchi Y and Yamanouchi I. The relationship between rooming-in/not rooming-in and breast-feeding variables. *Acta Paediatr Scan,* 1990, 1017-1022.

4.8.4 Yamauchi Y and Yamanouchi I. Breast-feeding frequency during the first 24 hours after birth in full-term neonates. *Pediatrics,* 1990*,* 86(2);171-175.

4.8.5 De Carvalho M, Klaus MH, Merkatz RB. Frequency of breast-feeding and serum bilirubin concentration. *Am J Dis Child,* 1982, Aug;136(8):737-8.

4.9.4 Victora C, Behague D, Barros F et al. Pacifier use and short breastfeeding duration: cause, consequence, or coincidence? *Pediatrics,* 1997, 99:445-453.

4.10.5 Haider R, Kabir I, Huttly S and Ashworth. Training peer counselors to promote and support exclusive breastfeeding in Bangladesh. *J Hum Lact*, 2002, 18:7-12.

4.10.6 Morrow A, Guerrereo ML, Shultis J, et al. Efficacy of home-based peer counselling to promote exclusive breastfeeding: a randomised controlled trial*. Lancet,* 1999, 353:1226-31.

4.11.1-4 Kramer MS, Chalmers B, Hodnett ED et al. Promotion of Breastfeeding Intervention Trial (PROBIT): a randomized trial in the Republic of Belarus. *JAMA,* 2001, Jan 24-31; 285(4):413-20.

4.11.5-7 Merten S et al. Do Baby-Friendly Hospitals Influence Breastfeeding Duration on a National Level? *Pediatrics,* 2005, 116:e702 – e708.

Risk of mother-to-child transmission of HIV

Refers to slide 4.3.7 (HIV)

Reference: WHO, UNICEF, USAID. *HIV and infant feeding counselling tools: Reference guide.* Geneva, World Health Organization, 2005.

The explanation of the data presented in this slide is summarized from page 14 of this reference.

- This example assumes that the prevalence of HIV infection among women is 20% (or 20 out of 100 women).
- The mother-to-child transmission rate during pregnancy and delivery is about 20-25%. A rate of 20% is used in this example. Thus about 4 of the infants of the 20 HIV-positive mothers are likely to be infected during pregnancy or delivery.
- The transmission rate through breastfeeding is about 5-20% of the infants who are breastfed by mothers who are HIV-positive. For this example we use a rate of 15%, taken as an average. 15% of 20 is 3. Thus about 3 of the infants of HIV-positive mothers are likely to be infected by breastfeeding.

In summary:

- In a group of 100 mothers in an area with a 20% prevalence of HIV infection among mothers, only about 3 babies are likely to be infected with HIV through breastfeeding.
- 97% of the babies would not get HIV in this way.

Risk factor: Maternal blood viral load

Refers to Slide 4.6.12 (HIV)

Reference: Richardson BA, John-Stewart GC, Hughes JP, Nduati R, Mbori-Ngacha D, Overbaugh J, Kreiss JK. Breast-milk Infectivity in Human Immunodeficiency Virus Type 1 – Infected Mothers. *JID*, 2003, 187:736-740.

Method: Human immunodeficiency virus type 1 (HIV-1) is transmitted through blood, genital secretions, and breast milk. The probability of heterosexual transmission of HIV-1 per sex act is .0003-.0015, but little is known regarding the risk of transmission per breast-milk exposure. The researchers evaluated the probability of breast-milk transmission of HIV-1 per litre of breast milk ingested and per day of breast-feeding in a study of children born to HIV-1-infected mothers.

Findings: The probability of breast-milk transmission of HIV-1 was .00064 per litre ingested and .00028 per day of breast-feeding. Breast-milk infectivity was significantly higher for mothers with more advanced disease, as measured by prenatal HIV-1 RNA plasma levels and CD4 counts.

Conclusion: The study provides the first quantitative estimates of breast-milk infectivity per litre of milk ingested. The probability of HIV-1 infection per litre of breast milk ingested by an infant is similar in magnitude to the lowest probability of heterosexual transmission of HIV-1 per unprotected sex act in adults.

Feeding pattern and risk of HIV transmission

Refers to Slide 4.6.13 (HIV)

Reference: Coutsoudis A, Kubendran P, Kuhn L, Spooner, E, Tsai W, Coovadia HM. South African Vitamin A Study Group. Method of feeding and transmission of HIV-1 from mothers to children by 15 months of age: prospective cohort study from Durban, South Africa. *AIDS*, 2001, Feb 16: 15(3):379-87.

Objective: To determine the risk of HIV transmission by infant feeding modality.

Design and setting: A prospective study in two hospitals in Durban, South Africa.

Participants: A total of 551 HIV-infected pregnant women enrolled in a randomized trial of vitamin A.

Interventions: Women self-selected to breastfeed or formula feed after being counselled. Breastfeeders were encouraged to practice exclusive breastfeeding for 3-6 months.

Main outcome measures: Cumulative probabilities of detecting HIV over time were estimated using Kaplan-Meier methods and were compared in three groups: 157 formula-fed (never breastfed); 118 exclusively breastfed for 3 months or more; and 276 mixed breastfed.

Results: The three feeding groups did not differ in any risk factors for transmission, and the probability of detecting HIV at birth was similar. Cumulative probabilities of HIV detection remained similar among never and exclusive breastfeeders up to 6 months: 0.194 (95% CI 0.136-0.260) and 0.194 (95% CI 0.125-0.274), respectively, whereas the probabilities among mixed breastfeeders soon surpassed both groups reaching 0.261 (95% CI 0.205-0.319) by 6 months. By 15 months, the cumulative probability of HIV infection remained lower among those who exclusively breastfed for 3 months or more than among other breastfeeders (0.247 versus 0.359).

Conclusion: Infants exclusively breastfed for 3 months or more had no excess risk of HIV infection over 6 months than those never breastfed. These findings, if confirmed elsewhere, can influence public health policies on feeding choices available to HIV-infected mothers in developing countries.

HIV & infant feeding study in Zimbabwe

Refers to Slides 4.6.14 and 4.6.15 (HIV)

Reference: Piwoz EG, Lliff PJ, Tavengwa N, Gavin L, Marinda E, Lunney K, Zunguza C, Nathoo KJ, the ZVITAMBO Study Group, Humphrey JH. An Education and Counseling Program for Preventing Breast-Feeding-Associated HIV Transmission in Zimbabwe: Design and Impact on Maternal Knowledge and Behavior. *J Nutr.* 2005, 135(4):950-5.

Method: International guidance on HIV and infant feeding has evolved over the last decade. In response to these changes, the researchers designed, implemented, and evaluated an education and counseling program for new mothers in Harare, Zimbabwe. The program was implemented within the ZVITAMBO trial, in which 14,110 mother-baby pairs were enrolled within 96 hours of delivery and were followed at 6 weeks, 3 months and then 3-month intervals. Mothers were tested for HIV at delivery but were not required to learn their test results. Infant feeding patterns were determined using data provided up to 3 months. Formative research was undertaken to guide the design of the program that included group education, individual counselling, videos and brochures. The program was introduced over a 2-month period: 11,362, 1311, and 1437 women were enrolled into the trial before, during and after this period. Exclusive breastfeeding was recommended for mothers of unknown or negative HIV status, and for HIV-positive mothers who chose to breastfeed. A questionnaire assessing HIV knowledge and exposure to the program was administered to 1996 mothers enrolling after the program was initiated.

Findings: HIV knowledge improved with increasing exposure to the program. Mothers who enrolled when the program was being fully implemented were 70% more likely to learn their HIV status early (<3 months) and 8.4 times more likely to exclusively breastfeed than mothers who enrolled before the program began.

Conclusion: Formative research aided in the design of a culturally sensitive intervention. The intervention increased relevant knowledge and improved feeding practices among women who primarily did not know their HIV status.

Handout 4.1 (HIV)

Presentation for Session 4 (HIV):

The scientific basis for the "Ten steps" for settings with high HIV prevalence

Global summary of the HIV & AIDS epidemic, December 2007

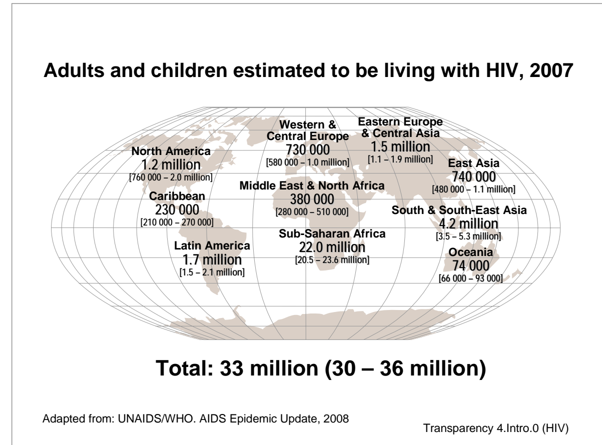
Number of people living with HIV/AIDS in 2007	Total	33 million (30-36 million)
	Adults	30.8 million (28.2 – 34.0 million)
	Women	15.5 million (14.2 – 16.9 million)
	Children under 15	2.0 million (1.9 – 2.3 million)
People newly infected with HIV in 20076	Total	2.7 million (2.2 – 3.2 million)
	Adults	2.3 million (1.9 – 2.8 million)
	Children under 15	370 000 (330 000 - 410 000)
AIDS deaths in 2007	Total	2.0 million (1.8 - 2.3 million)
	Adults	1.8 million (1.6 - 2.1 million)
	Children under 15	270 000 (250 000 - 290 000)

The ranges around the estimates in this table define the boundaries within which the actual numbers lie, based on the best available information.

From: UNAIDS/WHO. AIDS Epidemic Update, 2008.

Transparency 4.Intro.0 (HIV)

Adults and children estimated to be living with HIV, 2007



Total: 33 million (30 – 36 million)

Adapted from: UNAIDS/WHO. AIDS Epidemic Update, 2008

Transparency 4.Intro.0 (HIV)

Regional HIV statistics for women, 2006

Region	# of women (15+) living with HIV	% of HIV+ adults who are women (15+)
Sub-Saharan Africa	13.3 million	59%
N. Africa & Middle East	200,000	48%
S. & S.A. Asia	2.2 million	29%
East Asia	210,000	29%
Oceania	36,000	47%
Latin America	510,000	31%
Caribbean	120,000	50%
Eastern Europe & Central Asia	510,000	30%
W. & C. Europe	210,000	28%
North America	350,000	26%
TOTAL:	17.7 million	48%

From: UNAIDS/WHO. AIDS Epidemic Update, 2006.

Transparency 4.Intro.3 (HIV)

Ten steps to successful breastfeeding

Step 1. Have a written breastfeeding policy that is routinely communicated to all health care staff.

A JOINT WHO/UNICEF STATEMENT (1989)

Transparency 4.1.4

Breastfeeding policy
Why have a policy?

- Requires a course of action and provides guidance
- Helps establish consistent care for mothers and babies
- Provides a standard that can be evaluated

Transparency 4.1.5

Breastfeeding policy
What should it cover?

- At a minimum, it should include:
  - The 10 steps to successful breastfeeding
  - An institutional ban on acceptance of free or low cost supplies of breast-milk substitutes, bottles, and teats and its distribution to mothers
  - A framework for assisting HIV positive mothers to make informed infant feeding decisions that meet their individual circumstances and then support for this decision
- Other points can be added

Transparency 4.1.6

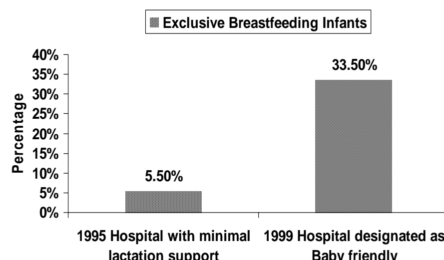
Breastfeeding policy
How should it be presented?

It should be:

- Written in the most common languages understood by patients and staff
- Available to all staff caring for mothers and babies
- Posted or displayed in areas where mothers and babies are cared for

Transparency 4.1.7

Step 1: Improved exclusive breast-milk feeds while in the birth hospital after implementing the Baby-friendly Hospital Initiative



Adapted from: Philipp BL, Merewood A, Miller LW et al. Baby-friendly Hospital Initiative improves breastfeeding initiation rates in a US hospital setting. *Pediatrics*, 2001, 108:677-681.

Transparency 4.1.8

Ten steps to successful breastfeeding

Step 2. Train all health-care staff in skills necessary to implement this policy.

A JOINT WHO/UNICEF STATEMENT (1989)

Transparency 4.2.1

Areas of knowledge

- Advantages of breastfeeding
- Risks of artificial feeding
- Mechanisms of lactation and suckling
- How to help mothers initiate and sustain breastfeeding
- How to assess a breastfeed
- How to resolve breastfeeding difficulties
- Hospital breastfeeding policies and practices
- Focus on changing negative attitudes which set up barriers

Transparency 4.2.2

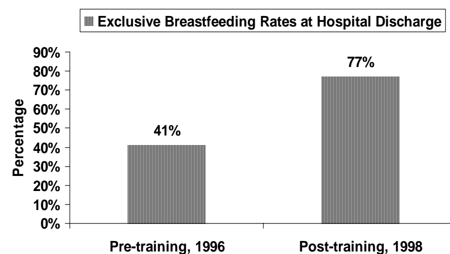
Additional topics for BFHI training in the context of HIV

Train all staff in:

- Basic facts on HIV and on Prevention of Mother-to-Child Transmission (PMTCT)
- Voluntary testing and counselling (VCT) for HIV
- Locally appropriate replacement feeding options
- How to counsel HIV + women on risks and benefits of various feeding options and how to make informed choices
- How to teach mothers to prepare and give feeds
- How to maintain privacy and confidentiality
- How to minimize the “spill over” effect (leading mothers who are HIV - or of unknown status to choose replacement feeding when breastfeeding has less risk)

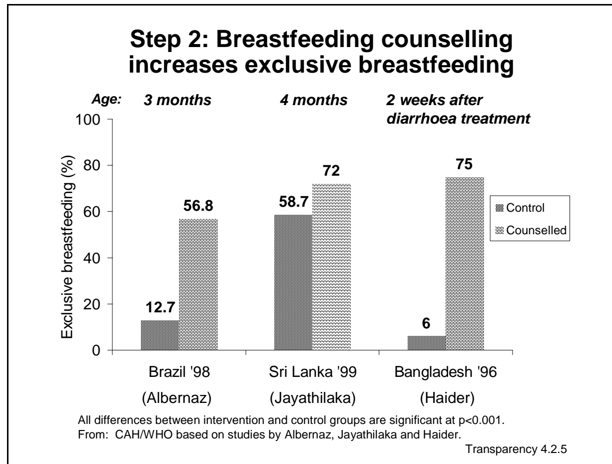
Transparency 4.2.3

Step 2: Effect of breastfeeding training for hospital staff on exclusive breastfeeding rates at hospital discharge



Adapted from: Cattaneo A, Buzzetti R. Effect on rates of breast feeding of training for the Baby Friendly Hospital Initiative. *BMJ*, 2001, 323:1358-1362.

Transparency 4.2.4



Which health professionals other than perinatal staff influence breastfeeding success?

Transparency 4.2.6

Ten steps to successful breastfeeding

Step 3. Inform all pregnant women about the benefits of breastfeeding.

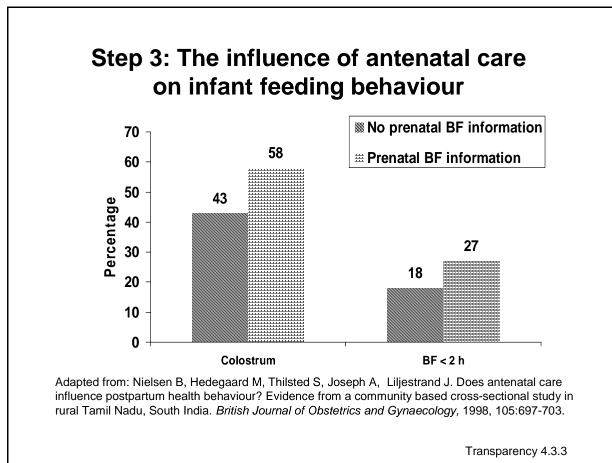
A JOINT WHO/UNICEF STATEMENT (1989)

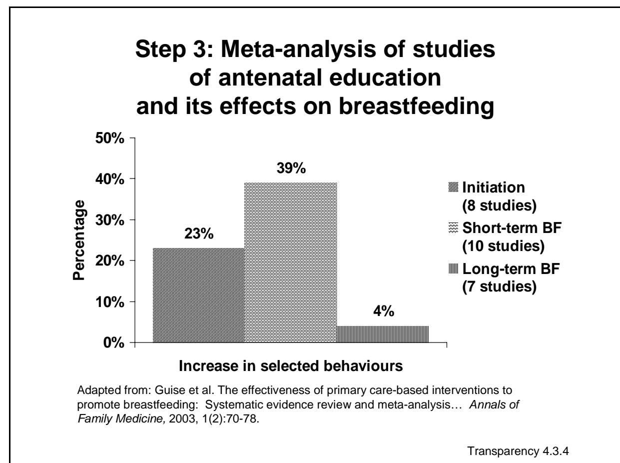
Transparency 4.3.1

Antenatal education should include:

- Benefits of breastfeeding
- Early initiation
- Importance of rooming-in (if new concept)
- Importance of feeding on demand
- Importance of exclusive breastfeeding
- How to assure enough breastmilk
- Risks of artificial feeding and use of bottles and pacifiers (soothers, teats, nipples, etc.)
- Basic facts on HIV
- Prevention of mother-to-child transmission of HIV (PMTCT)
- Voluntary testing and counselling (VCT) for HIV and infant feeding counselling for HIV+ women
- Antenatal education should not include group education on formula preparation

Transparency 4.3.2





Why test for HIV in pregnancy?

- **If HIV negative**
  - **Can be counseled on prevention and risk reduction behaviors**
  - **Can be counseled on exclusive breastfeeding**
- **If HIV positive**
  - **Can learn ways to reduce risk of MTCT in pregnancy, at delivery and during infant feeding**
  - **Can better manage illnesses and strive for "positive" living**
  - **Can plan for safer infant feeding method and follow-up for baby**
  - **Can decide about termination (if a legal option) and future fertility**
  - **Can decide to share her status with partner /family for support**

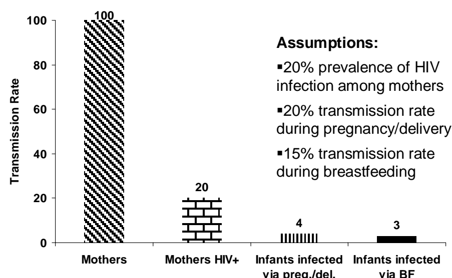
Transparency 4.3.5 (HIV)

Definition of replacement feeding

- The process, in the context of HIV/AIDS, of feeding a child who is not receiving any breast milk with a diet that provides all the nutrients the child needs.
- During the first six months this should be with a suitable breast-milk substitute, usually commercial formula.
- After six months it should preferably be with a suitable breast-milk substitute, and complementary foods made from appropriately prepared and nutrient-enriched family foods, given three times a day. If suitable breast-milk substitutes are not available, appropriately prepared family foods should be further enriched and given five times a day.

Transparency 4.3.6 (HIV)

Risk of mother-to-child transmission of HIV



Based on data from *HIV & infant feeding counselling tools: Reference Guide.* Geneva, World Health Organization, 2005.

Transparency 4.3.7 (HIV)

WHO recommendations on infant feeding for HIV+ women

Exclusive breastfeeding is recommended for HIV-infected mothers for the first six months of life unless replacement feeding is acceptable, feasible, affordable, sustainable and safe for them and their infants before that time.

When replacement feeding is acceptable, feasible, affordable, sustainable and safe, avoidance of all breastfeeding by HIV-infected mothers is recommended.

WHO/UNICEF/UNAIDS/UNFPA, *HIV and Infant Feeding Update. Based on the Technical Consultation held on behalf of the IATT on Prevention of HIV Infection in Pregnant Women, Mothers and their Infants. Geneva 25-27 October 2006.* Geneva, World Health Organization, 2007.

Transparency 4.3.8 (HIV)

HIV & infant feeding recommendations

If the mother's HIV status is unknown:

- Encourage her to obtain HIV testing and counselling
- Promote optimal feeding practices (exclusive BF for 6 months, introduction of appropriate complementary foods at about 6 months and continued BF to 24 months and beyond)
- Counsel the mother and her partner on how to avoid exposure to HIV

Adapted from WHO/Linkages, *Infant and Young Child Feeding: A Tool for Assessing National Practices, Policies and Programmes. Geneva,* World Health Organization, 2003 (Annex 10, p. 137).

Transparency 4.3.9 (HIV)

If the mother's HIV status is negative:

- Promote optimal feeding practices (see above)
- Counsel her and her partner on how to avoid exposure to HIV

If the mother's HIV status is positive:

- Provide access to anti-retroviral drugs to prevent MTCT and refer her for care and treatment for her own health
- Provide counselling on the risks and benefits of various infant feeding options, including the acceptability, feasibility, affordability, sustainability and safety (AFASS) of the various options.
- Assist her to choose the most appropriate option
- Provide follow-up counselling to support the mother on the feeding option she chooses

Ibid.

Transparency 4.3.10 (HIV)

If the mother is HIV positive and chooses to breastfeed:

- Explain the need to exclusively breastfeed for the first six months with cessation when replacement feeding is AFASS
- Support her in planning and carrying out a safe transition
- Prevent and treat breast conditions and thrush in her infant

If the mother is HIV positive and chooses replacement feeding:

- Teach her replacement feeding skills, including cup-feeding and hygienic preparation and storage, away from breastfeeding mothers

Ibid.

Slide 4.3.11 (HIV)

Ten steps to successful breastfeeding

Step 4. Help mothers initiate breastfeeding within a half-hour of birth.

A JOINT WHO/UNICEF STATEMENT (1989)

Transparency 4.4.1

New interpretation of Step 4 in the revised BFHI Global Criteria (2007):

"Place babies in skin-to-skin contact with their mothers immediately following birth for at least an hour. Encourage mothers to recognize when their babies are ready to breastfeed and offer help if needed."

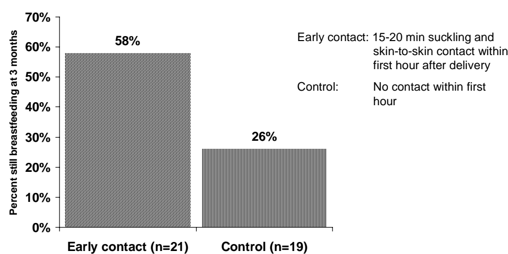
Transparency 4.4.2

Early initiation of breastfeeding for the normal newborn
Why?

- Increases duration of breastfeeding
- Allows skin-to-skin contact for warmth and colonization of baby with maternal organisms
- Provides colostrum as the baby's first immunization
- Takes advantage of the first hour of alertness
- Babies learn to suckle more effectively
- Improved developmental outcomes

Transparency 4.4.3

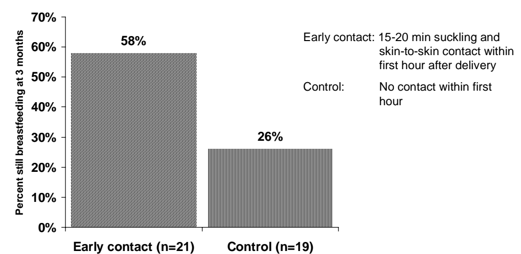
Impact on breastfeeding duration of early infant-mother contact



Adapted from: DeChateau P, Wiberg B. Long term effect on mother-infant behavior of extra contact during the first hour postpartum *Acta Peadiatr*, 1977, 66:145-151.

Transparency 4.4.5

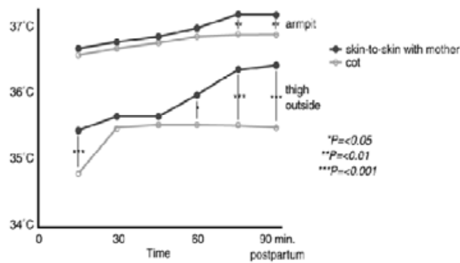
Impact on breastfeeding duration of early infant-mother contact



Adapted from: DeChateau P, Wiberg B. Long term effect on mother-infant behavior of extra contact during the first hour postpartum *Acta Peadiatr*, 1977, 66:145-151.

Transparency 4.4.5

Temperatures after birth in infants kept either skin-to-skin with mother or in cot



Adapted from: Christensson K et al. Temperature, metabolic adaptation and crying in healthy full-term newborns cared for skin-to-skin or in a cot. *Acta Paediatr*, 1992, 81:490.

Transparency 4.4.6

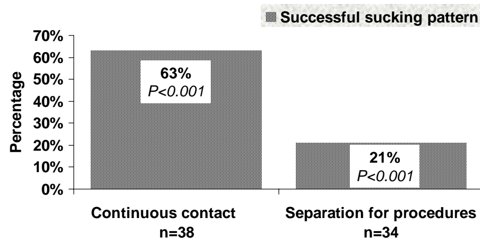
Protein composition of human colostrum and mature breast milk (per litre)

Constituent	Measure	Colostrum (1-5 days)	Mature Milk (>30 days)
Total protein	G	23	9-10.5
Casein	mg	1400	1870
α-Lactalbumin	mg	2180	1610
Lactoferrin	mg	3300	1670
IgA	mg	3640	1420

From: Worthington-Roberts B, Williams SR. *Nutrition in Pregnancy and Lactation, 5th ed.* St. Louis, MO, Times Mirror/Mosby College Publishing, p. 350, 1993.

Transparency 4.4.7

Effect of delivery room practices on early breastfeeding



Adapted from: Righard L , Alade O. Effect of delivery room routines on success of first breastfeed. *Lancet*, 1990, 336:1105-1107.

Transparency 4.4.8

Ten steps to successful breastfeeding

Step 5. Show mothers how to breastfeed and how to maintain lactation, even if they should be separated from their infants.

A JOINT WHO/UNICEF STATEMENT (1989)

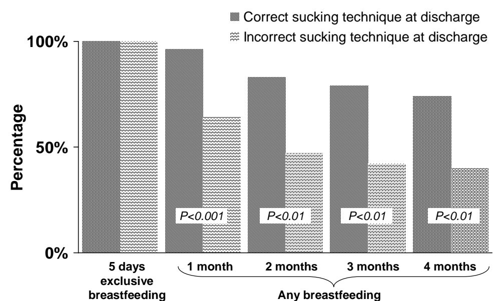
Transparency 4.5.1

" Contrary to popular belief, attaching the baby on the breast is not an ability with which a mother is [born…]; rather it is a learned skill which she must acquire by observation and experience."

From: Woolridge M. The "anatomy" of infant sucking. *Midwifery*, 1986, 2:164-171.

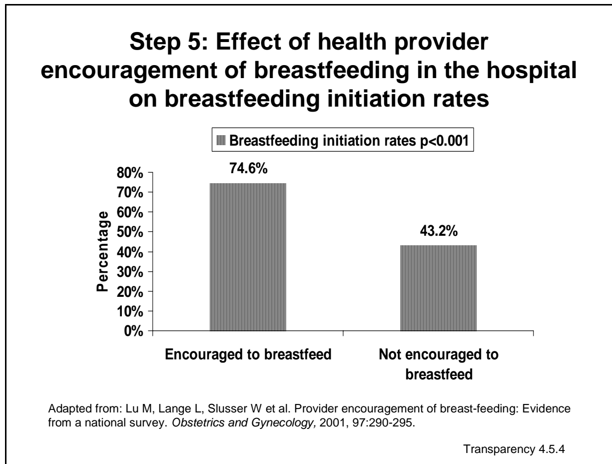
Transparency 4.5.2

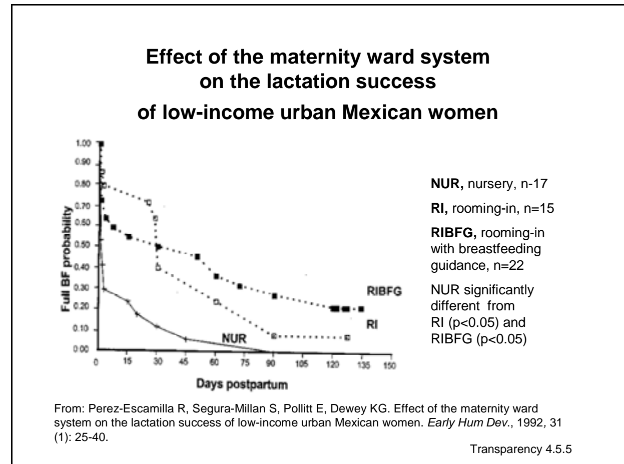
Effect of proper attachment on duration of breastfeeding



Adapted from: Righard L , Alade O. (1992) Sucking technique and its effect on success of breastfeeding. *Birth* 19(4):185-189.

Transparency 4.5.3





Supply and demand

- Milk removal stimulates milk production.
- The amount of breast milk removed at each feed determines the rate of milk production in the next few hours.
- Milk removal must be continued during separation to maintain supply.

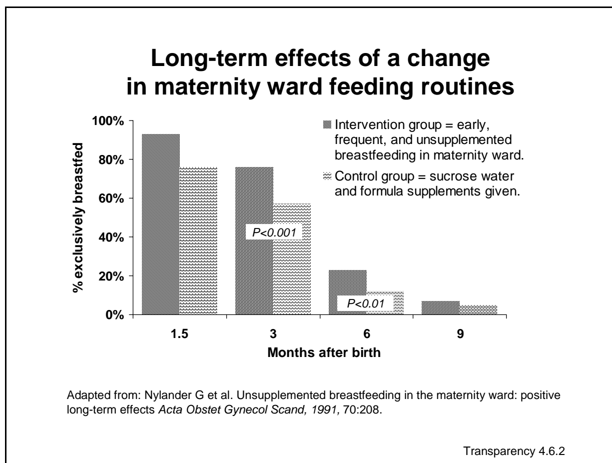
Transparency 4.5.6

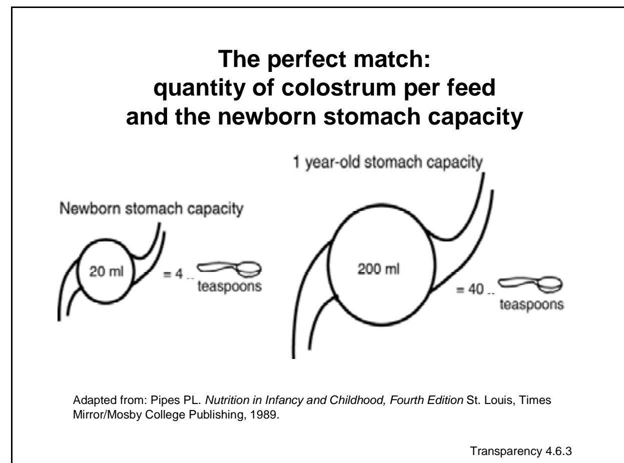
Ten steps to successful breastfeeding

Step 6. Give newborn infants no food or drink other than breast milk unless *medically* indicated.

A JOINT WHO/UNICEF STATEMENT (1989)

Transparency 4.6.1





Impact of routine formula supplementation

Decreased frequency or effectiveness of suckling

Decreased amount of milk removed from breasts

Delayed milk production or reduced milk supply

Some infants have difficulty attaching to breast if formula given by bottle

Transparency 4.6.4

Determinants of lactation performance across time in an urban population from Mexico

- Milk came in earlier in the hospital with rooming-in where formula was not allowed
- Milk came in later in the hospital with nursery ($p<0.05$)
- Breastfeeding was positively associated with early milk arrival and inversely associated with early introduction of supplementary bottles, maternal employment, maternal body mass index, and infant age.

From: Perez-Escamilla et al. Determinants of lactation performance across time in an urban population from Mexico. *Soc Sci Med,* 1993, (8):1069-78.

Transparency 4.6.5

Summary of studies on the water requirements of exclusively breastfed infants

Country	Temperature °C	Relative Humidity %	Urine osmolarity (mOsm/l)
Argentina	20-39	60-80	105-199
India	27-42	10-60	66-1234
Jamaica	24-28	62-90	103-468
Peru	24-30	45-96	30-544

Note: Normal range for urine osmolarity is from 50 to 1400 mOsm/kg.

From: *Breastfeeding and the use of water and teas.* Division of Child Health and Development Update No. 9. Geneva, World Health Organization, reissued, Nov. 1997.

Transparency 4.6.6

Medically indicated

There are rare exceptions during which the infant may require other fluids or food in addition to, or in place of, breast milk. The feeding programme of these babies should be determined by qualified health professionals on an individual basis.

Transparency 4.6.7

Acceptable medical reasons for use of breast-milk substitutes

Infant conditions:

Infants who should not receive breast milk or any other milk except specialized formula:

- Classic galactosemia: A special galactose-free formula is needed.
- Maple syrup urine disease: A special formula free of leucine, isoleucine and valine is needed.
- Phenylketonuria: A special phenylalanine free formula is required (some BF is possible, under careful monitoring).

Infants for whom breast milk remains the best feeding option but may need other food in addition to breast milk for a limited period:

- Very low birth weight infants (less than 1500g)
- Very preterm infants (less than 32 weeks gestational age)
- Newborn infants at risk of hypoglycaemia.

Transparency 4.6.8

Maternal conditions:

Mothers who may need to avoid BF permanently:

- HIV infection – if replacement feeding is AFASS.

Mothers who may need to avoid BF temporarily:

- Severe illness that prevents a mother from caring for her infant
- Herpes simplex virus type 1. (If lesions on breasts, avoid BF until active lesions have resolved.)
- Maternal medications – sedating psychotherapeutic drugs; radioactive iodine – 131 better avoided given that safer alternatives are available; excessive use of topical iodine; cytotoxic chemotherapy usually requires mother to stop BF permanently.

Transparency 4.6.9

Mothers who can continue breastfeeding:

- Breast abscess
- Hepatitis B – infants should get vaccine.
- Hepatitis C
- Mastitis – if painful, remove milk by expression
- TB – manage together following national guidelines
- Substance use: maternal use of nicotine, alcohol, ecstasy, amphetamines, cocaine and related stimulants have harmful effects on BF babies; alcohol, opioids, benzodiazepines and cannabis can cause sedation in mother and baby

WHO/UNICEF, Acceptable Medical Reasons for use of BMS, 2009

Transparency 4.6.10

Risk factors for HIV transmission during breastfeeding*

Mother

- Immune/health status
- Plasma viral load
- Breast milk virus
- Breast inflammation (mastitis, abscess, bleeding nipples)
- New HIV infection

Infant

- Age (first month)
- Breastfeeding duration
- Non-exclusive BF
- Lesions in mouth, intestine
- Pre-maturity, low birth weight
- Genetic factors – host/virus

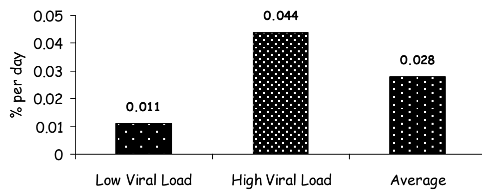
* *Also referred to as postnatal transmission of HIV (PNT)*

HIV transmission through breastfeeding: A review of available evidence. Geneva, World Health Organization, 2004 (summarized by Ellen Piwoz).

Transparency 4.6.11 (HIV)

Risk factor: Maternal blood viral load

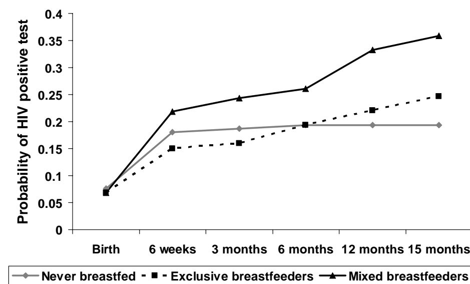
Risk of HIV transmission per day of BF in Nairobi, Kenya (%)



From: *Richardson et al, Breast-milk Infectivity in Human Immunodeficiency Virus Type 1 – Infected Mothers, JID, 2003 187:736-740 (adapted by Ellen Piwoz)*

Transparency 4.6.12 (HIV)

Feeding pattern & risk of HIV transmission



From: Coutsoudis et al. Method of feeding and transmission of HIV-1 from mothers to children by 15 months of age: prospective cohort study from Durban, South Africa. *AIDS*, 2001 Feb 16: 15(3):379-87.

Transparency 4.6.13 (HIV)

HIV & Infant feeding study in Zimbabwe

Elements of safer breastfeeding:

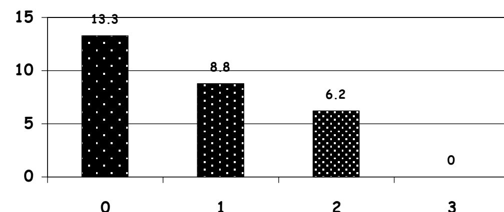
- Exclusive breastfeeding
- Proper positioning & attachment to the breast to minimize breast pathology
- Seeking medical care quickly for breast problems
- Practicing safe sex

Piwoz et al. An education and counseling program for preventing breastfeeding-associated HIV transmission in Zimbabwe: Design & Impact on Maternal Knowledge & Behavior *Amer. Soc. for Nutr Sci* 950-955 (2005)

Transparency 4.6.14 (HIV)

Exposure to safer breastfeeding intervention was associated with reduced postnatal transmission (PNT) by mothers who did not know their HIV status

Cumulative PNT HIV transmission (%) according to reported exposure to SBF program



N=365; p=0.04 in test for trend. Each additional intervention contact was associated with a 38% reduction in PNT after adjusting for maternal CD4

Piwoz et al. in preparation, 2005.

Transparency 4.6.15 (HIV)

Ten steps to successful breastfeeding

Step 7. Practice rooming-in — allow mothers and infants to remain together — 24 hours a day.

A JOINT WHO/UNICEF STATEMENT (1989)

Transparency 4.7.1

Rooming-in

A hospital arrangement where a mother/baby pair stay in the same room day and night, allowing unlimited contact between mother and infant

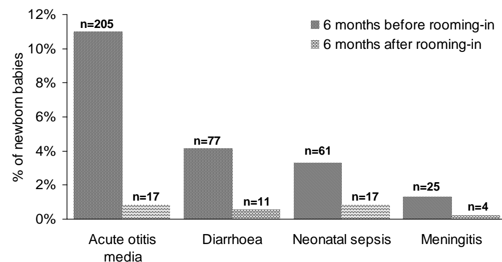
Transparency 4.7.2

Rooming-in
Why?

- Reduces costs
- Requires minimal equipment
- Requires no additional personnel
- Reduces infection
- Helps establish and maintain breastfeeding
- Facilitates the bonding process

Transparency 4.7.3

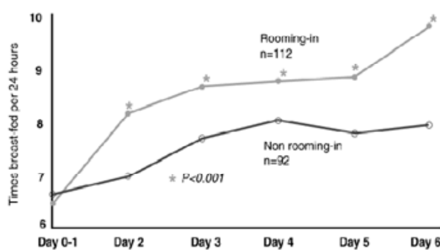
Morbidity of newborn babies at Sanglah Hospital before and after rooming-in



Adapted from: Soetjiningsih, Suraatmaja S. The advantages of rooming-in. *Pediatrica Indonesia*, 1986, 26:231.

Transparency 4.7.4

Effect of rooming-in on frequency of breastfeeding per 24 hours



Adapted from: Yamauchi Y, Yamanouchi I . The relationship between rooming-in/not rooming-in and breastfeeding variables. *Acta Paediatr Scand*, 1990, 79:1019.

Transparency 4.7.5

Ten steps to successful breastfeeding

Step 8. Encourage breastfeeding on demand.

A JOINT WHO/UNICEF STATEMENT (1989)

Transparency 4.8.1

Breastfeeding on demand:

Breastfeeding whenever the baby or mother wants, with no restrictions on the length or frequency of feeds.

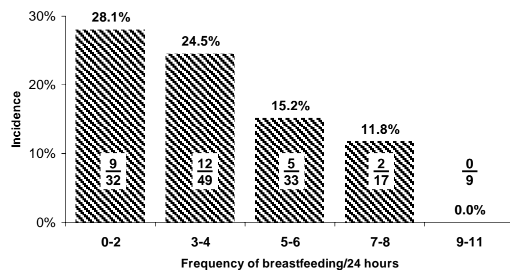
Transparency 4.8.2

On demand, unrestricted breastfeeding
Why?

- Earlier passage of meconium
- Lower maximal weight loss
- Breast-milk flow established sooner
- Larger volume of milk intake on day 3
- Less incidence of jaundice

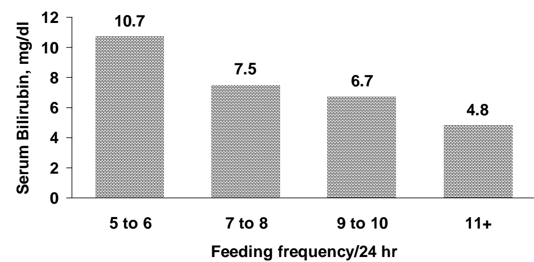
From: Yamauchi Y, Yamanouchi I. Breast-feeding frequency during the first 24 hours after birth in full-term neonates. *Pediatrics,* 1990, 86(2):171-175.

Transparency 4.8.3



From: Yamauchi Y, Yamanouchi I. Breast-feeding frequency during the first 24 hours after birth in full-term neonates. *Pediatrics,* 1990, 86(2):171-175.

Transparency 4.8.4



From: DeCarvalho et al. *Am J Dis Child* 1982; 136:737-738

Transparency 4.8.5

Ten steps to successful breastfeeding

Step 9. Give no artificial teats or pacifiers (also called dummies and soothers) to breastfeeding infants.

A JOINT WHO/UNICEF STATEMENT (1989)

Transparency 4.9.1

Alternatives to artificial teats

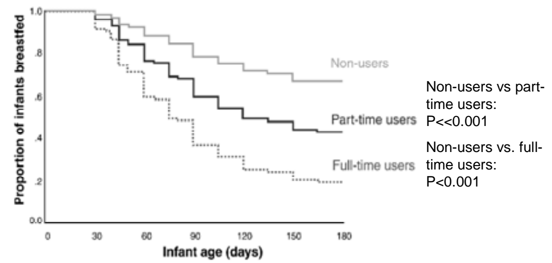
- cup
- spoon
- dropper
- Syringe

Transparency 4.9.2

Cup-feeding a baby

Transparency 4.9.3

Proportion of infants who were breastfed up to 6 months of age according to frequency of pacifier use at 1 month



Non-users vs part-time users: P<<0.001

Non-users vs. full-time users: P<0.001

From: Victora CG et al. Pacifier use and short breastfeeding duration: cause, consequence or coincidence? *Pediatrics,* 1997, 99:445-453.

Transparency 4.9.4

Ten steps to successful breastfeeding

Step 10. Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or clinic.

A JOINT WHO/UNICEF STATEMENT (1989)

Transparency 4.10.1

"The key to best breastfeeding practices is continued day-to-day support for the breastfeeding mother within her home and community."

From: Saadeh RJ, editor. *Breast-feeding: the Technical Basis and Recommendations for Action.* Geneva, World Health Organization, pp. 62-74, 1993.

Transparency 4.10.2

Support can include:

- Early postnatal or clinic checkup
- Home visits
- Telephone calls
- Community services
  - Outpatient breastfeeding clinics
  - Peer counselling programmes
- Mother support groups
  - Help set up new groups
  - Establish working relationships with those already in existence
- Family support system

Transparency 4.10.3

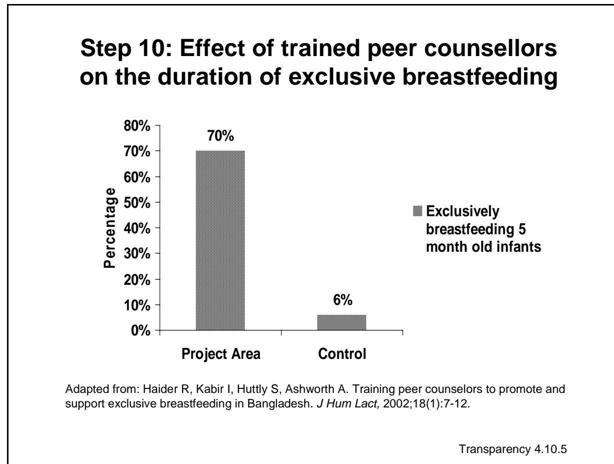
Types of breastfeeding mothers' support groups

- Traditional
  - extended family
  - culturally defined *doulas*
  - village women
- Modern, non-traditional
  - Self-initiated
    - by mothers
    - by concerned health professionals
  - Government planned through:
    - networks of national development groups, clubs, etc.
    - health services -- especially primary health care (PHC) and trained traditional birth attendants (TBAs)

From: Jelliffe DB, Jelliffe EFP. The role of the support group in promoting breastfeeding in developing countries. *J Trop Pediatr,* 1983, 29:244.

Transparency 4.10.4

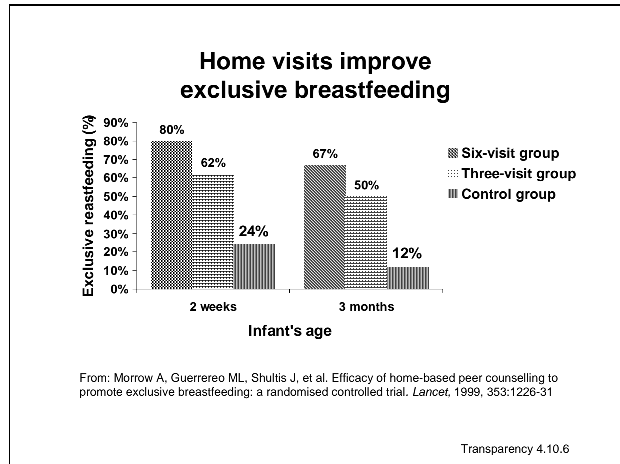
Step 10: Effect of trained peer counsellors on the duration of exclusive breastfeeding



Adapted from: Haider R, Kabir I, Huttly S, Ashworth A. Training peer counselors to promote and support exclusive breastfeeding in Bangladesh. *J Hum Lact,* 2002;18(1):7-12.

Transparency 4.10.5

Home visits improve exclusive breastfeeding



From: Morrow A, Guerrereo ML, Shultis J, et al. Efficacy of home-based peer counselling to promote exclusive breastfeeding: a randomised controlled trial. *Lancet,* 1999, 353:1226-31

Transparency 4.10.6

Combined Steps: The impact of baby-friendly practices: The Promotion of Breastfeeding Intervention Trial (PROBIT)

- **In a randomized trial in Belarus 17,000 mother-infant pairs, with mothers intending to breastfeed, were followed for 12 months.**
- **In 16 control hospitals & associated polyclinics that provide care following discharge, staff were asked to continue their usual practices.**
- **In 15 experimental hospitals & associated polyclinics staff received baby-friendly training & support.**

Adapted from: Kramer MS, Chalmers B, Hodnett E, et al. Promotion of breastfeeding intervention trial (PROBIT) A randomized trial in the Republic of Belarus. *JAMA*, 2001, 285:413-420.

Transparency 4.11.1

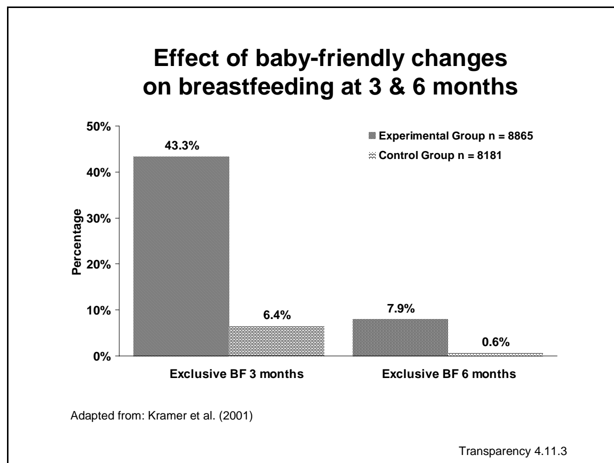
Differences following the intervention

Control hospitals:	Experimental hospitals:
▪ Routine separation of mothers & babies at birth	▪ Mothers & babies together from birth
▪ Routine tight swaddling	▪ No swaddling—skin-to-skin contact encouraged
▪ Routine nursery-based care	▪ Rooming-in on a 24-hr basis
▪ Incorrect latching & positioning techniques	▪ Correct latching & positioning techniques
▪ Routine supplementation with water & milk by bottle	▪ No supplementation
▪ Scheduled feedings every 3 hrs	▪ Breastfeeding on demand
▪ Routine use of pacifiers	▪ No use of pacifiers
▪ No BF support after discharge	▪ BF support in polyclinics

Communication from Chalmers and Kramer (2003)

Transparency 4.11.2

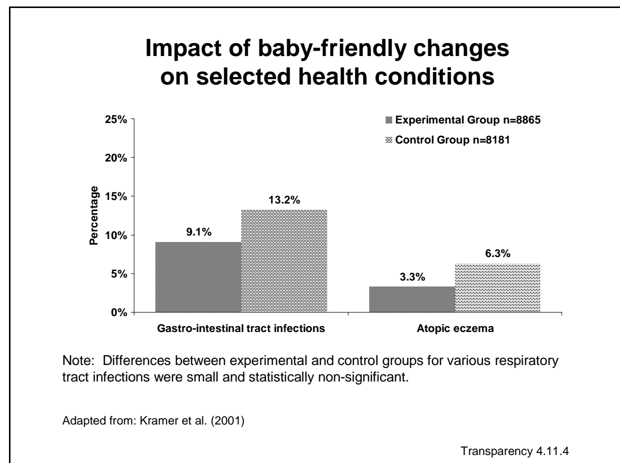
Effect of baby-friendly changes on breastfeeding at 3 & 6 months



Adapted from: Kramer et al. (2001)

Transparency 4.11.3

Impact of baby-friendly changes on selected health conditions



Note: Differences between experimental and control groups for various respiratory tract infections were small and statistically non-significant.

Adapted from: Kramer et al. (2001)

Transparency 4.11.4

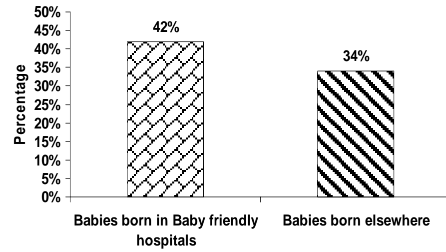
Combined Steps:
The influence of Baby-friendly hospitals on breastfeeding duration in Switzerland

- Data was analyzed for 2861 infants aged 0 to11 months in 145 health facilities.
- Breastfeeding data was compared with both the progress towards Baby-friendly status of each hospital and the degree to which designated hospitals were successfully maintaining the Baby-friendly standards.

Adapted from: Merten S et al. Do Baby-Friendly Hospitals Influence Breastfeeding Duration on a National Level? Pediatrics, 2005, 116: e702 – e708.

Transparency 4.11.5

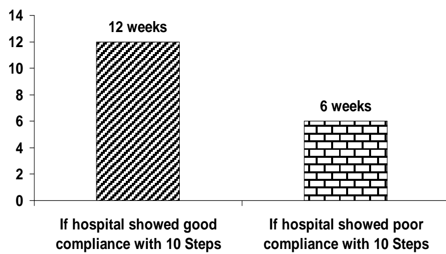
Proportion of babies exclusively breastfed for the first five months of life -- Switzerland



.Adapted from: Merten S et al. Do Baby-Friendly Hospitals Influence Breastfeeding Duration on a National Level? *Pediatrics,* 2005, 116: e702 – e708.

Transparency 4.11.6

Median duration of exclusive breastfeeding for babies born in Baby-friendly hospitals -- Switzerland



.Adapted from: Merten S et al. Do Baby-Friendly Hospitals Influence Breastfeeding Duration on a National Level? *Pediatrics,* 2005, 116: e702 – e708.

Transparency 4.11.7

Handout 4.6 (HIV)

Infant and young child feeding in the context of HIV[1]

Background

Breastfeeding by HIV-positive women is a major means of HIV transmission, but not breastfeeding carries significant health risks to infants and young children. Breastfeeding is vital to the health of children, reducing the impact of many infectious diseases, and preventing some chronic diseases. In the face of this dilemma, the objective of health services should be to protect, promote and support breastfeeding as the best infant-feeding choice for all women in general, while giving special advice and support to HIV-positive women and their families so that they can make decisions about how best to feed infants in relation to HIV.

Achieving this objective requires the organization of services that:

- recognize the need to protect child survival and development, and not only to prevent HIV transmission;
- incorporate the interventions of the Global Strategy on Infant and Young Child Feeding (see section 2.1 and Annex 3);
- prevent HIV infection in women and their partners by providing information and promoting safer and responsible sexual behaviour and practices, including as appropriate, delaying the onset of sexual activity, practising abstinence, reducing the number of sexual partners and using condoms, and the early detection and treatment of sexually transmitted infections (STIs);
- encourage use of pre-conception, family planning and antenatal care (ANC) services by women of reproductive age, including, in particular, women and their partners in relationships in which one or both partners are HIV-infected;
- include the following services as part of the basic package of ANC:
  - provision of information about breastfeeding and complementary feeding
  - prevention of HIV infection
  - STI management
  - counselling on safer sex practices
  - HIV testing and counselling
  - other interventions to reduce HIV transmission
- provide and promote HIV testing and counselling for the whole population;

[1] Adapted from WHO/UNICEF/UNFPA/UNAIDS. HIV and infant feeding: A guide for health-care managers and supervisors (revised). Geneva, World Health Organization, 2003, pp 3-7.

- for HIV-positive women, provide ongoing counselling and support to help them make their infant-feeding decisions and to carry them out;
- for HIV- negative women and women of unknown status, provide support to exclusively breastfeed for the first six months, with continued breastfeeding for up to two years and beyond, with adequate and appropriate complementary feeding from age six months;
- prevent any spillover effect of replacement feeding;
- observe, implement and monitor the Code of Marketing of Breast-milk Substitutes. The Code is relevant to, and fully covers the needs of, mothers who are HIV-positive;
- consider support for infant and young child feeding as part of a continuum of care and support services for all women, especially HIV-positive women, taking into account the critical importance of the mother as a caregiver for her child;
- provide care and support for pregnant women, mothers and their infants;
- promote an enabling environment for women living with HIV by strengthening community support and by reducing stigma and discrimination.

Protect, respect and fulfil human rights

Protecting, respecting and fulfilling human rights in relation to HIV implies that:

- All women and men, irrespective of their HIV status, have a right to determine the course of their sexual and reproductive lives and to have access to information and services that allow them to protect their own and their family's health
- Children have a right to survival, development and health
- A woman has a right to make decisions about infant feeding, on the basis of full information, and to receive support for the course of action she chooses
- Women and girls have a right to information about HIV/AIDS and to access to the means to protect themselves against HIV infection
- Women have the right to have access to voluntary and confidential HIV testing and counselling and to know their HIV status
- Women have a right to choose not to be tested or to choose not to be told the result of an HIV test

These principles are derived from international human rights instruments, including the Convention on the Elimination of All Forms of Discrimination Against Women (1979) and the Convention on the Rights of the Child.

Overview

Adopted in 2002, the Global Strategy on Infant and Young Child Feeding (Annex 3) clearly sets out that, as a public health recommendation, infants should be exclusively breastfed for the first six months of life to achieve optimal growth, development and health. Afterwards, infants should receive nutritionally adequate and safe complementary food while breastfeeding continues for up to two years of age and beyond. However, the feeding of children living in the exceptionally difficult circumstances of being born to an HIV-positive woman merits special consideration and support.

This section sets out information on the risks of HIV transmission through breastfeeding, the risks of not breastfeeding, and goals and current approaches for the prevention of HIV infection in infants and young children. On the basis of this information managers should:

- be fully aware of the population benefits and risks of all infant-feeding options for HIV-positive women
- take into account the global goals and approaches related to the prevention of HIV infection in infants and young children
- apply these in programme planning and implementation
- keep in mind that the ultimate objective is to reduce infant and young child morbidity and mortality in the general population and specifically in the HIV-infected population.

1.1 Risk of HIV infection in infants and young children

By far the principal source of HIV infection in young children is mother-to-child transmission. The virus may be transmitted during pregnancy, labour or delivery, or through breastfeeding.

About two-thirds of infants born to HIV-infected mothers will not be infected, even with no intervention, such as anti-retroviral prophylaxis or caesarean section. About 15–30% of infants of HIV-infected women will be infected during pregnancy or during delivery, and an additional 5–20% may become infected during breastfeeding[2] (see table).

Estimated risk and timing of mother-to-child transmission of HIV in the absence of interventions[3]

Timing	Transmission rate
During pregnancy	5–10%
During labour and delivery	10–20%
During breastfeeding	5–20%
Overall without breastfeeding	15–30%
Overall with breastfeeding to 6 months	25–35%
Overall with breastfeeding to 18 to 24 months	30–45%

[2] Few studies give information on the mode of breastfeeding (exclusive or mixed). In most cases, mixed feeding may be assumed.

[3] Adapted from De Cock KM, Fowler MG, Mercier E, et al. Prevention of mother-to-child HIV transmission in resource-poor countries – Translating research into policy and practice. *JAMA,* 2000, 283: 1175-82.

Evidence for HIV transmission through breast milk:

- The virus has been found in breast milk, and women with detectable virus are more likely to transmit infection compared to women who do not have detectable virus.
- HIV infection has occurred in breastfed infants of mothers who were not infected with HIV during pregnancy or at delivery but who became infected while breastfeeding, from either an infected blood transfusion or through sexual transmission.
- Infants born to HIV-uninfected mothers have been infected by breast milk from HIV-infected wet-nurses or by breast milk from unscreened donors.
- Infants born without infection to HIV-infected women, and who were diagnosed as HIV-uninfected at six months of age, have been found to be infected after this age, with breastfeeding as the only concurrent risk factor**.**

1.2 Risk factors for HIV transmission through breastfeeding

A number of factors increase the risk of HIV transmission through breastfeeding:

- **Recent infection with HIV** – a woman who has been infected with HIV during delivery or while breastfeeding is more likely to transmit the virus to her infant
- **HIV disease progression** – as measured by low CD4 count or high RNA viral load in plasma, with or without severe clinical symptoms
- **Breast conditions** – sub-clinical or clinical mastitis, cracked or bleeding nipples, or breast abscess
- **Oral thrush** – in the infant
- **Longer duration of breastfeeding** – infants continue to be at risk of infection as long as they are exposed to HIV-contaminated milk
- **Micronutrient deficiencies in the mother** – although evidence on this point is weak.

Mode of breastfeeding may also affect the risk of HIV transmission: exclusive breastfeeding may be less likely to transmit HIV than mixed feeding

1.3 Health risks to non-breastfed infants

The risks associated with not breastfeeding vary with the environment – for example, with the availability of suitable replacement feeds and safe water. It varies also with the individual circumstances of the mother and her family, including her education and economic status.

Lack of breastfeeding compared with any breastfeeding has been shown to expose children to increased risk of malnutrition and life-threatening infectious diseases other than HIV, especially in the first year of life, and exclusive breastfeeding appears to offer greater protection against disease than any breastfeeding. This is especially the case in developing countries, where over one-half of all under-five deaths are associated with malnutrition. Not breastfeeding during the first two months of life is also associated, in poor countries, with a six fold increase in mortality from infectious diseases. This risk drops to less than threefold by six months, and continues to decrease with time.

1.4 Current approaches to prevention of HIV transmission in pregnant women, mothers and their children

Reducing HIV transmission to pregnant women, mothers and their children, including transmission by breastfeeding, should be part of a comprehensive approach both to HIV prevention, care and support, and to antenatal, perinatal and postnatal care and support. Policies should serve the best interests of the mother and infant as a pair, in view of the critical link between survival of the mother and that of the infant. These policies should reflect government commitments made in the UN General Assembly Declaration of Commitment on HIV/AIDS, which set the goal: "By 2005, reduce the proportion of infants infected with HIV by 20 per cent, and by 50 per cent by 2010", and at the UN General Assembly Special Session for Children, which set a goal of reduction in the infant and under-five mortality rates by at least one third by 2010.

The UN strategic approach to prevention of HIV transmission in pregnant women, mothers and their children has four parts: 1) prevention of HIV infection in general, especially in young women, and pregnant women; 2) prevention of unintended pregnancies among HIV-infected women; 3) prevention of HIV transmission from HIV-infected women to their infants; and 4) provision of care, treatment and support to HIV-infected women, their infants and families. Parts 3 and 4 concern the prevention of transmission through breastfeeding.

Programmes for prevention of HIV infection in pregnant women, mothers and their children, including infection through breastfeeding, directed primarily at part 3 may have a variety of components, but generally include:

- the incorporation of HIV testing and counselling into routine antenatal care;
- ensuring that antenatal care includes management of sexually transmitted infections and counselling for safer sex, including promotion of faithfulness or reducing the number of sexual partners and provision of condoms;
- prophylaxis with antiretroviral drugs to HIV-positive women and, in some regimens, to their babies;
- safer obstetric practices;
- infant-feeding counselling and support, including promotion of exclusive breastfeeding by HIV-negative women and by women unaware of their status; and
- follow-up care and support to HIV-positive women, their infants and families.

Handout 4.7 (HIV)

Infant feeding policy: Rusape Hospital, Zimbabwe[4]

AIM

To protect, promote and support infant feeding practices at Rusape Hospital.

POLICY

TRAINING ALL HEALTH WORKERS AT RUSAPE HOSPITAL

- All health workers should be trained on the importance of breastfeeding and its advantages.
- All health workers should be trained on:
  (a) Lactation Management (22 hours with 3 hours clinical practice)
  (b) Prevention of Mother to Child Transmission
  (c) Breastfeeding, HIV and Infant Feeding Counselling (44-hour course with 8 hours clinical practice and 4 hours practicals on milk measurements, preparation, use and costing).

- All health workers should be knowledgeable about the infant feeding policy.

HEALTH EDUCATION DURING PREGNANCY

- Educate mothers on:
  a) Nutrition
  b) Importance of exclusive breastfeeding in the first six months of life
  c) Dangers of mixed feeding
  d) Advantages and benefits of breastfeeding and breast milk
  e) Timely introduction of complementary feeding
  f) Positioning and attachment at the breast
  g) Manual expression of breast milk
  h) Prevention of Mother to Child Transmission
     Mode of transmission of HIV
     Voluntary Confidential Counselling and Testing
     Antiretroviral
     Infant feeding options
  i) Nutrition and HIV/AIDS
  j) Side effects of drugs, smoking and drinking alcohol

- Documentation:
  a) Document what has been taught pertaining to infant feeding to mothers on the ANC cards.

  b) Provide clients with leaflets and handouts.

PROMOTION OF INFANT FEEDING

- Initiate infant feeding to all newborn babies within 1-hour post delivery depending on the condition of both mother and baby.
- All mothers regardless of their HIV status should be supported and assisted to bond skin-to-skin immediately after delivery depending on the condition of the mother and baby (Caesar).
- Health workers should give assistance where necessary.

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[4] Used with permission from Rufaro Madzima, Head of Nutrition, Ministry of Health and Child Welfare, Zimbabwe.

- Breastfeeding mothers are encouraged to feed their babies with colostrums, which is rich in nutrients required by the baby.

POSITIONING, ATTACHMENT AND MAINTANANCE OF LACTATION

Good positioning and attachment of baby to the breast is important in prevention of breast conditions such as cracked or sore nipples, assuring enough milk and other breast conditions.

- Breastfeeding mothers should be in a comfortable position either sitting or sleeping.
- All breastfeeding babies should be breastfed on demand. The pre-term and the ill babies should be given expressed breast milk by cup or nasogastric tube.
- Individual needs of babies not breastfed should be respected and responded to.
- Cup feeding should also be encouraged for non-breastfeeding babies.

EXCLUSIVE BREASTFEEDING

- All babies below the age of six months (6/12) should be exclusively breastfed, - i.e. giving breast milk only without any other food or fluids even water- unless medically indicated.
- Those babies not breastfed should be exclusively fed for the first six months with the chosen replacement feed /option.

ROOMING IN

- All mothers regardless of their HIV status should be allowed rooming-in / bedding-in with their babies for 24 hours a day.
- Mothers of admitted babies should be admitted to facilitate continuous breastfeeding except when the mother is critically ill.
- Avoid unnecessary separations of mother and baby except when medically indicated or during hospital procedures.

TIMELY INTRODUCTION OF COMPLEMENTARY FEEDING

- Mothers should be taught to prepare soft and nutritious foods which are locally available and given to the infants gradually in addition to breast milk or other forms of milk, from six months (6/12) of birth.
- Health education on complementary feeding should start at ANC.

SUPPLY OF BREAST-MILK SUBSTITUTES (Code of Marketing of Breast-milk Substitutes)

- All health workers should refuse free and low cost free supply of breast-milk substitutes, bottles, teats and pacifiers/dummies/soothers from manufacturers.
- Should the hospital require any breast-milk substitutes, including special formulae, which are used in the health facility, these should be purchased in the same way as other foods and medicines.
- Feeding bottles, teats, pacifiers/dummies/soothers should not be given to infants.
- Advertising of artificial products is not allowed within the health facilities.

FOLLOW-UP SUPPORT

- Infant feeding mothers and their babies should be supported and followed-up.
- The existing community based support groups and systems should be strengthened, supported and involved in PMTCT and infant feeding follow-up.
- Networking amongst existing support groups and systems should be promoted.

WORKING MOTHERS

- Working mothers should be encouraged to express breast milk in clean containers. This milk is to be given to the babies during their absence by cup.

Session 5: Becoming “Baby-friendly”

Objective

At the conclusion of this session, participants will be able to:

- Develop a plan for building staff enthusiasm and consensus for working to become “Baby-friendly”.
- Identify actions necessary to implement at least four of the “Ten steps to successful breastfeeding” in their health facilities.
- Identify at least five common concerns related to instituting the Ten Steps and practical solutions for addressing them.

Duration

Discussion and brainstorming: 15 minutes
Introduction to group work: 5 minutes
Group work: 30-45 minutes
Presentations and discussion: 40-55 minutes

Total: 1½ to 2 hours

Teaching methods

Small group work
Presentations in plenary
Discussion

Preparation for session

- Review the WHO document, *Evidence for the ten steps to successful breastfeeding*. Geneva, Switzerland, 1998.
  http://www.who.int/nutrition/publications/infantfeeding/evidence_ten_step_eng.pdf
- Read the section on “combined interventions” (pp. 93-99) that gives evidence that the *Ten Steps* should be implemented as a package. Also review the WHO/UNICEF document, *Global Strategy for Infant and Young Child Feeding*. Geneva, Switzerland, 2003.
  http://www.who.int/nutrition/publications/infantfeeding/gs_infant_feeding_eng.pdf
- Read in particular sections 30, 31 and 34, pages 13-19, which focus on the importance of continuing to support the *Baby-friendly Hospital Initiative* and implementation of the *Ten Steps to Successful Breastfeeding*, as well as monitoring and reassessing facilities that are already designated.

- If possible, the group work for this session should be scheduled as the last activity for the first day of the course. Since it involves active participation by course participants, it is more likely to keep their attention than a lecture-type session at the end of an intensive day. If this plan is followed, the group reports and discussion can come first on the schedule the next day, giving participants the flexibility to do some final work, if necessary, to prepare for their reports the evening before.
- The group work for this session should focus only on four to five of the *Ten Steps* since there is not enough time during either the group work or the reporting and discussion period to adequately cover the concerns and solutions for all Ten Steps. Preparation for this session should include an analysis, by the trainers, of which steps tend to be most difficult to implement and thus on which it would be most important to focus in a session of this type. Indications of which steps need the most work may come from trainers' experience with BFHI assessments and training. A review of the forms participants were asked to complete prior to arriving at the course, indicating what difficulties they have had, or think they will have, in assisting their institutions to become baby-friendly, should also be helpful. Consider including "Step Ten" as one of the steps chosen for group work, since it appears to be a challenge for health facility personnel almost everywhere.
- Before the session, the trainers also need to organize the working groups and assign facilitators to each of them. Consideration should be given during the formation of working groups to insuring that each group includes some participants who are good at problem solving and supportive of BFHI. Facilitators should be made aware that their role is not to "lead" the working groups but rather to make sure the groups understand the assignment, offer help if the group is having difficulty, and make suggestions if there are important issues the group hasn't considered. The facilitators should review the sections of Handout 5.3 which deal with the steps the groups will be working on, as they may provide ideas on important points the facilitators should mention, if they are not discussed, during the group work or the group reports.
- Once the four or five Steps have been selected for the group work, it would be useful to make enough copies of the Handout 5.2 "sample sheet" for each of the groups, with one of the Steps and wording for the Step inserted on each of the four or five sheets.
- Consider whether participants should be provided with copies of the completed Handout 5.2 sheets developed by the working groups, so they can refer to them for ideas as they implement their action plans on their return home. The completed sheets can be copied "as is" or, if there is time, the course secretary can be asked to prepare typed versions for copying.
- Review Handout 5.3 and decide whether to distribute it at the end of the session. If the Course will be given a number of times, consider adapting this Handout to the country situation, eliminating concerns and solutions that aren't applicable and possibly adding others.

Training materials

Handouts

5.1 Presentation for session 5

5.2 The Ten Steps to Successful Breastfeeding: Actions, Concerns and Solutions – Sample Worksheet

5.3 The Ten Steps to Successful Breastfeeding: Summary of Experiences

Slides/Transparencies

5.1-2 The Ten Steps to Successful Breastfeeding: Actions, concerns, and solutions -- Worksheet, example for Step 1: Have a written breastfeeding policy (blank copy)

5.3-7 The Ten Steps to Successful Breastfeeding: Actions, concerns, and solutions -- Worksheet, example for Step 7: Practice rooming-in (filled in)

The website featuring this Course contains links to the slides and transparencies for this session in two Microsoft PowerPoint files. The slides (in colour) can be used with a laptop computer and LCD projector, if available. Alternatively, the transparencies (in black and white) can be printed out and copied on acetates and projected with an overhead projector. The transparencies are also reproduced as the first handout for this session, with 6 transparencies to a page.

References

US Committee for UNICEF, *Barriers and Solutions to the Global Ten Steps to Successful Breastfeeding:* Washington D.C., 1994 (to obtain a copy, send $9.00 US to Baby-Friendly USA, 327 Quaker Meeting House Road, E. Sandwich, MA 02537, USA (Tel. 508-888-8092, Fax. 508-888-8050, e-mail: info@babyfriendlyusa.org, http://www.babyfriendlyusa.org/

- *Evidence for the ten steps to successful breastfeeding.* Geneva, World Health Organization, 1998. http://www.who.int/nutrition/publications/infantfeeding/evidence_ten_step_eng.pdf

- WHO/UNICEF. *Global Strategy for Infant and Young Child Feeding.* Geneva, World Health Organization, 2003. http://www.who.int/nutrition/publications/infantfeeding/gs_infant_feeding_eng.pdf

- UNAIDS, FAO, UNHCR, UNICEF, WHO, WFP, World Bank, UNFPA, IAEA. *HIV and infant feeding: Framework for priority action*. Geneva, World Health Organization, 2003. http://www.who.int/nutrition/publications/hiv_infantfeed_framework_en.pdfhttp://whqlibdoc.who.int/publications/2003/9241590777_eng.pdf

Outline

Content	Trainer's Notes
1. Discussion on building consensus for "Becoming Baby-friendly"	Mention that a mini-version of the slides is reproduced in Handout 5.1 and included in the participants' folder.
■ Discussion and brainstorming session on strategies for gaining support within the health facility for becoming Baby-friendly and drafting a policy and plan of action. ▪ The importance of "thinking strategically". ▪ How best to gain support within the participants' culture and institutional administrative system for a policy and plan of action. ▪ How best to convince those staff members likely to be most resistant.	***Discussion: 15 minutes*** Discuss the importance for health facility administrators and policy-makers of "thinking strategically" about how best to gain support within the health facility for making the changes necessary to become Baby-friendly. Ask the participants to brainstorm concerning how, within their culture and institutional administrative system, they can best work to gain the support needed to develop a breastfeeding policy and plan. Before the session starts, review the "Actions" suggested for "Step 1" in Handout 5.3 and, if necessary, mention the strategies suggested under the first four bullets as examples, to help get the participants thinking about what would work best in their own settings. Record the suggestions made by the participants either on a flip chart or board or on transparencies 5.1 and 5.2. Emphasize that these strategies are part of the actions needed to successfully implement "Step 1" in a way that is most likely to have full administrative and staff support.
2. Group work on implementing the Ten Steps ■ Small group work to identify actions necessary to implement four or five of the most challenging of the Ten Steps and address common concerns.	***Introduction: 5 minutes*** Describe the group work, explaining that participants will be divided into four or five small groups, with each group assigned one of the Ten Steps that experience has shown can be a challenge, as health facilities work to become Baby-friendly. For the step it is assigned, each group should identify: 1) common concerns or problems related to instituting the step and possible solutions, and then, if they have time, 2) actions necessary to implement the step. (The worksheet for each step starts with "Actions Necessary to Implement the Step", but ask the groups first to identify "Concerns and Solutions" and record them on the back of the worksheet, as some of the "solutions" may

Content	Trainer's Notes
	be useful to include in their list of "actions". If it seems necessary to use an example to show participants how to complete the group work, display transparencies showing how to complete Handout 5.2 for one of the steps that will not be assigned to the working groups. Transparencies (5.3-5) have been prepared using "Step 7" (rooming-in) as an example. If necessary, the trainer can prepare other transparencies, focusing on a different step. Use the transparencies to explain how to complete the worksheet for both sections on "Concerns and Solutions" and "Actions". Emphasize that during this session the groups won't be making "Action Plans" for their own health facilities, but will be working to identify common concerns and solutions and then, if they have time, possible actions to address them.. Later in the course the participants from the same facility will work together to develop specific "Action Plans" that identify the activities needed for BFHI in their own facilities. Ask if there are any questions. ***Group work: 30-45 minutes*** *Divide participants into four or five working groups, assigning a facilitator to each group, if possible. Assign each working group one of the Ten Steps to work on. Distribute one of the Handout 5.2 worksheets (with "Concerns and Solutions" on one side and "Actions" on the other) to each group, with the Step and the wording for the Step that the group will be working on inserted at the top.* Ask each group to record its work on the worksheet and summarize results on transparencies or flip charts, and to assign one of its members to present the work during the reporting and discussion period to follow.
3. Presentations and discussion ■ Presentation of group work. ■ Discussion of issues raised after each group's presentation.	***Presentations and discussion: 40-55 minutes*** Ask each group to present its work. Lead a discussion on each presentation, making sure major points are covered. Collect the group work on each step at the end of the session. If feasible and not too costly, make copies and distribute them to all participants before the course is over. In addition, include copies of this group work in

Content	Trainer's Notes
	the course report. Distribute Handout 5.3, which summarizes experience in a number of countries at the end of the session as a "reference document". Explain that since the material in this handout comes from many countries not all the concerns and solutions will be relevant. The handout may be helpful, however, as its review of experience worldwide in implementing the Ten Steps may give participants some new and creative ideas concerning what to do in their own situations.

Handout 5.1

Presentation for session 5:
Becoming "Baby-friendly"

The Ten Steps to successful breastfeeding: Actions, concerns and solutions - worksheet Example

STEP 1: Have a written breast-feeding policy that is routinely communicated to all health care staff

Actions necessary to implement the step

Transparency 5.1

STEP 1: Have a written breast-feeding policy that is routinely communicated to all health care staff

Common concerns and solutions

Concerns	Solutions

Transparency 5.2

The Ten Steps to successful breastfeeding: Actions, concerns and solutions - worksheet Example

STEP 7: Practice rooming-in.

Common concerns and solutions

Concern	Solutions
It's difficult to supervise the condition of a baby who is rooming-in. In the nursery one staff member is sufficient to supervise several babies.	▪ Assure staff that babies are better off rooming-in with their mothers, with the added benefits of security, warmth, and feeding on demand. ▪ Stress that 24-hour supervision is not needed. Periodic checks and availability of staff to respond to mothers' needs are all that are necessary.

Transparency 5.3

Concern	Solutions
Infection rates will be higher when mothers and babies are together than when they are in a nursery.	▪ Stress that danger of infection is reduced when babies remain with mothers than when in a nursery and exposed to more caretakers. ▪ Provide staff with data showing that infection rates are lower with rooming-in and breastfeeding, for example, from diarrhoeal disease, neonatal sepsis, otitis media, and meningitis.

Transparency 5.4

Concern	Solutions
Babies will fall off their mothers' beds.	▪ Emphasize that newborns don't move. ▪ If mothers are still concerned, arrange for beds to be put next to the wall or, if culturally acceptable, for beds to be put in pairs, with mothers placing babies in the centre.

Transparency 5.5

Concern	Solutions
Full rooming-in, without more than half-hour separations, seems unfeasible because some procedures need to be performed on the babies outside their mothers' rooms.	▪ Study these procedures well. Some are not needed. (Example: weighing baby before and after breastfeeding.) Other procedures can be performed in the mothers' rooms. ▪ Review advantages to mother and time saved by physician when infant is examined in front of mother.

Transparency 5.6

The Ten Steps to successful breastfeeding: Actions, concerns and solutions - worksheet Example

STEP 7: Practice rooming-in.

Actions necessary to implement the step

- Make needed changes in physical facility. Discontinue nursery. Make adjustments to improve comfort, hygiene, and safety of mother and baby.
- Require and arrange for cross training of nursery and postpartum personnel so they all have the skills to take care of both baby and mother.
- Institute individual or group education sessions for mothers on mother-baby postpartum care. Sessions should include information on how to care for babies who are rooming-in.

Transparency 5.7

Handout 5.2

The Ten Steps to Successful Breastfeeding
Worksheet: Concerns and Solutions

STEP ____:	
Concerns **(list concerns, problems or challenges your maternity services face in implementing this Step)**	**Solutions** **(list possible solutions to each of the concerns, including both actions that have been successful and other approaches you think might be useful)**

The Ten Steps to Successful Breastfeeding
Worksheet: Actions necessary to implement the step

STEP ____:
(list key actions you think are necessary to successful implement this Step within maternity services that do not yet follow the Step)

Handout 5.3

The Ten Steps to Successful Breastfeeding Summary of experiences[1]

STEP 1:	**Have a written breastfeeding policy that is routinely communicated to all health care staff.**

Actions necessary to implement the step

- Identify a core group of people who will provide the primary source of support for developing a hospital breastfeeding policy and plan.
- Ask the core group to develop a rough first draft of a breastfeeding policy and a plan for making the necessary changes to implement it. Work with the group as they develop the first draft, providing whatever guidance is needed.
- Establish a multi-disciplinary in-house committee or task force to whom the policy and plan will be presented for input. Include representatives from all appropriate units or departments. When the policy and plan are discussed, ask committee members to identify barriers to implementing specific policies, as well as potential solutions. If necessary, form smaller working groups to work on specific barriers or problems.
- Finalize and display written hospital breastfeeding policy and work with designated staff to initiate changes needed to implement it.
- Policy may include guidelines on topics such as:

1. How the “Ten steps to successful breastfeeding” will be implemented;
2. Maternal nutrition issues that should be addressed;
3. Breastfeeding of low-birth-weight infants and infants delivered by C-section;
4. Purchase and use of breast-milk substitutes;
5. Acceptable medical reasons for supplementation (see WHO/UNICEF list);
6. Hazards of bottle-feeding education. How to provide counselling for women who choose to formula-feed without lessening hospital support for breastfeeding;
7. Code related issues (e.g., prohibiting donations of free and low-cost [under 80% of retail price] breast-milk substitutes, distribution of samples of breast-milk substitutes, gifts or coupons, use of materials distributed by formula companies);
8. Prohibiting the practice, if it exists, of giving names of pregnant or recently delivered mothers to companies producing or distributing breast-milk substitutes;
9. Storing any necessary hospital supplies of breast-milk substitutes, bottles, etc., out of view;

[1] This handout summarizes experiences from a variety of countries.

10. Allocating staff responsibilities and time related to the implementation of the breastfeeding policy.

- Work with designated staff to develop plans for monitoring implementation of the policy and the effects of the initiative on staff knowledge and practices, patient satisfaction and quality of care. Publicize positive results to reinforce support for changes made, and use information concerning problem areas to assist in determining whether further adjustments are needed.

STEP 1: Have a written breastfeeding policy that is routinely communicated to all health care staff.

Common concerns and solutions

Concerns	Solutions
Resistance to introducing new breastfeeding policies. Concern that policies will be inappropriate, dangerous to infant health, difficult to implement considering other tasks, etc.	▪ Provide scientific evidence of the soundness of the new policies through presentations such as one on “The Scientific Basis of the Ten Steps” or shorter session on key concerns (see Session 4). ▪ Organize a task force to develop the policies, including representatives of all the departments that will be affected. If necessary, provide orientation for the task force so it is well informed about potential policies, their scientific basis, and how they will affect hospital practices before beginning work. ▪ Arrange for presentations by administrators or department heads from hospitals that have model breastfeeding policies or have key staff visit other institutions with good policies in place. ▪ As the policies are being developed, make sure that input is obtained from all influential parties, even if opposition is anticipated, so that plans can be made to address concerns identified. ▪ Present the new policies as the “current state of the art” and highlight other hospitals in the country or region that have already successfully implemented the BFHI. ▪ If resistance is high, make just a few changes at a time, starting with those for which support is greatest. Consider addressing just a few of the “steps” at a time to prevent staff from becoming overwhelmed.
Economic concerns related to potential costs of policy changes (e.g. costs of conversion to rooming-in, loss of formula company support, cessation of free and low-cost supplies).	▪ Work with key staff to identify both the costs and savings to hospital and larger health system that will result from the changes and weigh the trade-offs (see Session 6).

The Ten Steps to Successful Breastfeeding Summary of experiences

STEP 2: Train all health care staff in skills necessary to implement this policy.

Actions necessary to implement the step

- Identify who will be responsible for planning and implementing an on-going training program for breastfeeding and lactation management. Work with the designated individual or group to develop a training strategy which will include:

11. Identifying who needs to be trained in departments providing maternal/infant services and what their training needs are (both knowledge and clinical skills).
12. Identifying the types and content of training for each target group.

- Obtaining existing training materials. Available courses include, for example:

13. WHO and UNICEF breastfeeding courses:

"Breastfeeding Promotion and Support in a Baby-friendly Hospital: A 20-hour Course for Maternity Staff" (Section 3 of the revised BFHI documents), New York, UNICEF, 2006.

"Breastfeeding Counselling: A Training Course" (40 hours), Geneva, World Health Organization, 1993.

"Infant and Young Child Feeding Counselling: An Integrated Course" (5 days), Geneva, World Health Organization, 2006.

14. Other training materials developed within the country or region.

- Selecting appropriate training materials and making any necessary adaptations to them.
- Identifying trainers with the help of appropriate government breastfeeding, nutrition and MCH authorities.
- Developing a training schedule, considering the need for initial training, refresher training and training of new staff, as well as for training of trainers.
- Allot the necessary budget and staff time.

STEP 2: Train all health care staff in skills necessary to implement this policy.

Common concerns and solutions

Concerns	Solutions
Little or no time for training.	■ Reassess priorities. ■ Consider time saved by staff in the long run if breastfeeding problems are prevented and health of infants improved, thus decreasing time and resources necessary for caring for sick infants. ■ Consider scheduling breastfeeding-related training in conjunction with staff meetings or other on going training activities or integrating training into daily routines through apprenticeships or on-the-job training when appropriate. ■ Consider requiring staff to read selected materials or complete a self-guided course and then test their knowledge. Combine with clinical practice sessions and performance assessment. ■ Provide a resource collection where staff can borrow books, articles, and videos on breastfeeding, lactation management, and related topics.
Lack of faculty/trainers/resources.	■ Identify training resources. Contact national, regional, or international organizations such as UNICEF; WHO; IBFAN; LINKAGES, Wellstart and its Associate network; Institute of Child Health, University of London; La Leche League International, ILCA, WABA, etc., for assistance, if necessary (see list of addresses on page 5-17). ■ Consider initiating a training strategy in which key health staff members are first trained as trainers and then used to train the rest of the staff. Choose strong candidates to be the trainers, if possible including staff from the various service units and shifts. ■ Ask the training coordinator to identify good training videos already prepared or videotape training sessions and have new employees view the tapes. Supplement with clinical practice sessions.
Staff members do not understand the importance of breastfeeding support and thus see little need for training in this area.	■ Consider holding an orientation or advocacy session for staff before the training cycle begins. Introduce the hospital's breastfeeding policy and review evidence of the importance of breastfeeding support, linking the policies with increased breastfeeding and lowered morbidity and mortality.

Concerns	Solutions
	▪ Identify times when staff can gather for informal reviews of case studies of mothers with breastfeeding problems and how they were resolved. Follow by discussion on how to address similar situations in the future. ▪ Arrange for bulletin board displays or include items in newsletters featuring BFHI progress, new articles, letters from patients, results from surveys, etc. ▪ Establish an employee breastfeeding support program to increase the number of staff members with positive personal breastfeeding experiences.
Attendance at training sessions is low or health staff members are pulled out of the training to go back to the unit.	▪ Stress the importance of breastfeeding support skills along with other areas of expertise and require attendance at training sessions. ▪ Bring the training to staff on each shift. ▪ Offer continuing education credits for the training or other incentives such as recognition for new skills. ▪ Arrange for several hospitals to sponsor joint training in an attractive site. ▪ Work with hospital management to insure that training is considered a priority.
Hospital and its health staff members rely on funding from companies selling breast-milk substitutes for training activities, conference attendance, etc.	▪ Convince staff of the hidden agenda of the formula industry and the moral issues involved in accepting its funding. ▪ Calculate the cost to hospital and families of illnesses due to feeding breast-milk substitutes. ▪ Search for alternative sources of funding.

List of training resources

Institute of Child Health
University of London
30 Guilford Street
London WCN 1EH
United Kingdom
Tel.: +44 171-242-9789
Fax: +44 171-404-2062

International Baby Food Action Network
(IBFAN)
P.O. Box 781
Mbabane
Swaziland
Tel: [268] 45006
Fax: [268] 44246

International Lactation Consultant Association
(ILCA)
1500 Sunday Drive, Suite 102
Raleigh, North Carolina, 27607, USA
Tel.:+1 919-861-5577
Fax: +1 919-787-4916
E-mail: info@ilca.org

La Leche League International
1400 N. Meacham Road
P.O. Box 4079
Schaumburg, IL 60173-4809
USA
Tel.: +1 847-592-7570
Fax: +1 847-969-0460

LINKAGES Project
Academy for Educational Development
1825 Connecticut Avenue, N.W.
Washington, DC. 20009
Website: http://www.linkagesproject.org/
(note: The LINKAGES Project ended
December 2006. Publications are still
available on the LINKAGES website)

Infant and Young Child Nutrition Project
PATH
1800 K Street, NW, Suite 800
Washington, DC 20006

UNICEF Headquarters
3 United Nations Plaza
44th Street Between1st and 2nd,
New York, NY 10017
USA
Tel.: +1 212-326-7000
Fax: +1 212-887-7465
Website: http://www.unicef.org/

Wellstart International
E-mail: info@wellstart.org
Website: www.wellstart.org

World Alliance for Breastfeeding Action
PO Box 1200
19850 Penang, Malaysia.
Tel.: +60 4-658-4816
Fax: +60 4-657-2655
E-mail: waba@streamyx.com
Websites: http://www.waba.org.my/
www.waba.org.br

World Health Organization
Department of Nutrition for Health and
Development
20, Avenue. Appia
CH-1211 Geneva 27
Switzerland
Tel.: +41 22-791-3315
Fax: +41 22-791-4156
E-mail: nutrition@who.int
Website: http://www.who.int/nutrition/en/

World Health Organization
Department of Child and Adolescent
Health and Development
20, Avenue. Appia
CH-1211 Geneva 27
Switzerland
Tel.: +41 22-791-3281
Fax: +41 22-791-4853
E-mail: cah@who.int
Website:
http://www.who.int/child_adolescent_health/en/

The Ten Steps to Successful Breastfeeding
Summary of experiences

STEP 3: Inform all pregnant women about the benefits and management of breastfeeding.

Actions necessary to implement the step

- Insure routine scheduling of prenatal classes that cover essential topics related to breastfeeding. Ask the staff to keep records of the classes held and their content.
- Review (or prepare) written guidelines for individual prenatal counselling to insure that key breastfeeding topics are covered and time is allowed to address concerns of individual mothers.

  Essential topics that are important to address during prenatal education and counselling include:

- benefits of breastfeeding;
- early initiation;
- importance of rooming-in (if new concept);
- importance of feeding on demand;
- how to assure enough milk;
- positioning and attachment;
- importance of exclusive breastfeeding;
- Risks of artificial feeding and use of bottles and pacifiers;

  (prenatal education should **not** include group education on formula preparation).

- Determine if any special strategies are needed to encourage women to attend prenatal classes or counselling sessions (for example, holding late-evening classes for working mothers, providing special incentives for attendance, etc.).
- Take away all literature and posters about bottle-feeding and promotion of breast-milk substitutes.
- Ensure that formula companies do not provide breastfeeding promotion materials.
- Discontinue distribution in prenatal clinics of samples of breast-milk substitutes or coupons.

STEP 3: Inform all pregnant women about the benefits and management of breastfeeding.

Common concerns and solutions

Concerns	Solutions
Promotional materials are free from the formula industry. It's difficult to find replacement materials and the funds to purchase them.	▪ Determine what promotional materials are available free or at low cost from the government, NGOs or other agencies. If there is a BFHI national authority, ask what materials it has available. ▪ Pressure local and national health authorities to make materials available. ▪ Ask the health facility staff to develop low-cost promotional materials with appropriate breastfeeding messages, adapting materials from elsewhere, when appropriate. ▪ Seek other sources of support, including donations from local businesses and volunteer organizations to support the development and production of educational materials.
There's no staff time in busy prenatal clinics for individual counselling or group sessions related to breastfeeding.	▪ Convince staff of importance of such sessions. ▪ Show how this will save time in the future, due to fewer breastfeeding problems and reduction in levels of illness. ▪ Seek volunteer help from local NGOs, mother-support groups etc., for conducting classes or providing counselling. ▪ Integrate breastfeeding material into other prenatal classes such as those on childbirth education, infant care, and nutrition.
Promotional and educational materials are often not well adapted to different educational, cultural and language groups.	▪ Ask the staff to produce or adapt promotional or educational materials to meet local needs, as necessary. ▪ Form a network with other health facilities in the area and share materials or work together to develop them.
Busy mothers are reluctant to spend time to receive information or instructions, or don't know the information is available.	▪ Ask the staff to arrange group counselling while mothers are waiting to be seen. ▪ Ask the receptionist or registrar at the health facility to encourage participation in breastfeeding classes. ▪ Obtain support of clinical staff in assuring time allocation for counselling and stressing its importance during consultations. ▪ Ask the staff to prepare written materials that mothers can take with them when they leave the health facility. Include breastfeeding guidelines,

Concerns	Solutions
	overview of the "Ten steps" and hospital breastfeeding support services, invitation/announcement of breastfeeding classes, list of mother-support groups and other community resources etc. ■ Hold an extra prenatal class in late evening for working women. ■ Arrange for a resource centre or area where mothers can look at or borrow breastfeeding-related books, articles, videos, or other materials, at their own convenience. ■ Hold a "breastfed baby parade" or a "beautiful breastfed baby contest" at a park, marketplace, or other public area. ■ Ask private practitioners to refer their clients to breastfeeding classes and other support services.

The Ten Steps to Successful Breastfeeding
Summary of experiences

STEP 4:	**Help mothers initiate breastfeeding within a half-hour of birth.**

Actions necessary to implement the step

- Work with staff to reprioritise perinatal routines for infant care immediately after birth to allow time for immediate mother/baby contact.
- Institute temperature control in labour, delivery, and recovery areas to insure infant temperature regulation.
- Arrange for continuous mother/baby contact after delivery.
- Assign staff responsibility for seeing that early initiation occurs for mothers who have chosen to breastfeed and insure that staff has the skills to give mothers required support.
- Train staff in the importance of suctioning a normal newborn only if necessary (if initial assessment [APGAR] are good and baby is crying lustily it is NOT necessary). If necessary to suction, do so gently as micro trauma to the mucus membranes of the newborn's throat and upper airway (oropharynx) can interfere with breastfeeding.
- Allot staff time if necessary for breastfeeding support.
- Allow support person (family member, "doula" etc.) to stay with the mother during and immediately after delivery and participate in providing breastfeeding, as appropriate.

When reviewing delivery-room policies, consider issues such as the mother/baby pair's need for privacy, a tranquil environment, subdued lighting, a minimal number of health personnel in room, reduced reliance on sophisticated technology for low-risk births etc.

STEP 4: Help mothers initiate breastfeeding within a half-hour of birth.

Common concerns and solutions

Concerns	Solutions
It is routine to suction all babies immediately after delivery and this is what health staff learned in school.	■ Discuss the anatomic and physiologic reasons for why a normal, crying, newborn will clear its own airway. ■ Review with the head of the maternity, what the current protocol is for babies who do need suctioning and what equipment is used. Suggest that a mucus "bulb" (ear) syringe, may be the cheapest, most effective and least traumatic to use for this purpose.
Not enough staff or personnel time to assist with breastfeeding initiation, considering number of deliveries and other procedures scheduled immediately after birth. Prescribed duration of skin-to-skin contact (at least 30 minutes) is of special concern.	■ Ask key staff to reassess which procedures are necessary immediately after birth. Reorganize "standing orders" to allow time for immediate contact and breastfeeding for mothers who have chosen to breastfeed. For example, review with staff the 5 Steps of the WHO "Warm Chain" recommendations for newborn care that include "immediate drying, skin-to-skin contact, breastfeeding, and postponing weighing and bathing". ■ Reinforce the positive aspects of this change: time savings, no need to warm infant up, minimal separation of the mother and infant etc. ■ Arrange for staff to be taught how to examine the baby right on the mother's chest. ■ Arrange for a voluntary breastfeeding counsellor to help mothers to breastfeed right after birth, if staff is too busy. The mother and baby can be left by themselves, part of the time, to get to know each other, while the staff continues its work. ■ If space in labour and delivery is needed right away for another birth, determine if staff can move mother and baby to a nearby empty room and have nurse do charting and exam there, if necessary.
Mother is too tired after delivery to feed infant.	■ Explain that this is often a misconception. If the mother is given her baby to hold, and encouraged, she will almost always become engaged. ■ Arrange to have a breastfeeding support person help her. ■ Ensure that breastfeeding mothers receive instruction during pregnancy about the importance of early feeds and the fact that mother and baby usually remain alert during this period.

Concerns	Solutions
The beds in the delivery room are too narrow. If the infant is placed with the mother (who may be very tired) and there is not constant supervision, the infant may fall.	▪ Place the infant on the mother's chest. Elevate the mother's head with pillow, blanket or even her own clothing. If there is danger of the infant falling from a narrow bed, consider wrapping the mother and baby together, lightly, with a sheet or cloth. ▪ Alternatively, roll the mother on her side and tuck the newborn next to her to breastfeed.
Need to monitor mothers and babies -- therefore need light, personnel, equipment.	▪ Ask that delivery room staff consider clustering procedures, for example, assessing maternal and infant condition and vital signs all at the same time and then leaving mother and infant alone.
If the delivery room is cold, it is too chilly for immediate breastfeeding and the baby must be transferred either to the nursery or mother's room for the first feeding.	▪ Review with staff the 5 Steps of the WHO "Warm Chain" recommendations (see Step 4 above). ▪ Show staff, by using a thermometer under the baby's arm, that skin-to-skin contact with the mother provides enough heat to keep baby warm. ▪ If the delivery room is cold, consider whether it is possible to raise the temperature.
Perinatal personnel think that breastfeeding within 30 to 60 minutes after birth is a lower priority than other procedures.	▪ Briefly review with the staff the key research on WHY the very early first breastfeeds are linked to ongoing breastfeeding success (i.e., baby is awake, alert state in first hour, baby's keen sense of smell and crawling reflexes, mother's readiness in first hour, etc.). ▪ Convince delivering physicians to routinely suggest to mothers "Let's get you started with breastfeeding right now". ▪ Ask the staff responsible to add "time of breastfeeding initiation" to the baby's chart. ▪ Make sure that the physiologic and psychological advantages of early breastfeeding are stressed during staff training. When labour and delivery staff are trained, emphasize their critical link to breastfeeding management and that the first hour is a very important and special time in this connection.

The Ten Steps to Successful Breastfeeding
Summary of experiences

STEP 5:	**Show mothers how to breastfeed and maintain lactation even if they should be separated from their infants.**

Actions necessary to implement the step

- Train staff on milk-expression techniques and safe handling and storage of breast milk.
- Designate staff time for individual or group counselling of mothers on breastfeeding management and maintenance of lactation when mother and baby are separated.
- Designate areas for mothers to breastfeed and for milk expression and milk storage. Purchase equipment (e.g. milk-storage containers, cups and spoons).
- Facilitate sleeping accommodations that allow mothers to stay with their babies if hospitalised. Likewise, allow healthy breastfed babies to stay with hospitalised breastfeeding mothers.

STEP 5: Show mothers how to breastfeed and maintain lactation even if they should be separated from their infants.

Common concerns and solutions

Concerns	Solutions
In hospitals where the postpartum stay is very short or staffing is minimal, there's very little time for counselling.	▪ Emphasize counselling during prenatal period. ▪ Reassign nursery staff to do counselling. ▪ If minimal time is available for individual counselling, arrange that most of the instruction is provided through group classes. ▪ Require that hospital staff members observe at least one breastfeed before discharging each mother/baby pair. ▪ Use volunteers to make rounds and provide advice. Arrange to train volunteers and provide them with guidelines concerning their roles and any restrictions. ▪ Have breastfeeding education handouts available after delivery. ▪ Have the staff arrange to show videos to reinforce proper breastfeeding techniques if the time for classes or bedside instruction is limited.
Reluctance on the part of staff to provide breastfeeding counselling because of lack of competence.	▪ Provide short instruction sheets concerning what advice to give for common breastfeeding problems. ▪ Post a list of staff members that have completed breastfeeding practicums. Encourage other health personnel that ask for their assistance to watch as these experienced staff members give mothers advice. ▪ Make sure an integral part of training includes clinical experience in working with breastfeeding mothers and dealing with common problems.
Lack of understanding among staff of the importance of breastfeeding in the immediate postpartum period and the problems caused by inaccurate or inconsistent messages.	▪ In discussions with staff, emphasize the importance of patient-centred care and the role breastfeeding education plays in this connection. ▪ Encourage trainers, first, to conduct focus groups with nursing staff on what they were taught and why they do what they do, and then to tailor training to address identified problems.
Fear on the part of staff and mothers of wet-nursing and use of stored breast milk for feeding other babies because of HIV transmission.	▪ Wet nursing and using breast milk from other mothers is acceptable in some settings and not acceptable in others. Local formative research will show whether or not mothers will choose these as alternative feeding methods.

Concerns	Solutions
	▪ Expressed breast milk from a donor will need to be heat treated per most current WHO recommendations. ▪ Generally wet nursing is no longer encouraged as a feeding option, although there are exceptions to this in the case of a family member who is known to be HIV negative.
Lack of milk storage area and equipment.	▪ No sophisticated equipment is needed for milk storage. Only a refrigerator and clean collection containers for expressed milk are required. ▪ Milk storage may not be needed if mothers have day-and-night access to their hospitalised infants for breastfeeding.
Healthy infants will get sick if kept with their mothers when their mothers become sick and are admitted to the hospital.	▪ Offer information regarding the protective effects of breastfeeding and the health risks to newborns if not kept with their mothers and breastfed.
Mothers who are sick in the hospital will not be able to take care of their newborn infants who room in with them.	▪ Ask the staff to evaluate this problem case by case. Perhaps a relative or friend will need to room-in to care for the infant in some situations.

The Ten Steps to Successful Breastfeeding
Summary of experiences

STEP 6:	**Give newborn no other food or drink other than breast milk unless medically indicated.**

Actions necessary to implement the step

- Examine routine policies concerning the use of breast-milk substitutes. Make sure they conform with the WHO/UNICEF list of "acceptable medical reasons for supplementation" (should be included in hospital policy, see Step # 1).
- Arrange that small amounts of breast-milk substitutes be purchased by the hospital for use if medically indicated.
- Store breast-milk substitutes and related equipment and supplies out of sight.
- Develop policies that facilitate early breastfeeding of low-birth-weight infants and infants delivered by C-section, when there are no medical contraindications (can be included in hospital policy, see Step # 1).

Ensure that adequate space and equipment is available for milk expression and storage (see Step # 5)

STEP 6: Give newborn no other food or drink other than breast milk unless medically indicated.

Common concerns and solutions

Concerns	Solutions
Staff members or mothers worry that mothers' milk is insufficient for babies in the first few hours or days after birth because of delay in the "true milk" coming in.	■ Make sure that staff and mothers are provided information about the sufficiency and benefits of colostrums and the fact that nothing else is needed (e.g. water, tea, or infant formula) in addition to breast milk. Include the fact that it is normal for a baby's weight to drop during the first 48 hours.
Staff members or mothers fear that babies will become dehydrated or hypoglycaemic if given only breast milk.	■ Establish a literature review committee and present findings related to this issue at a staff meeting. ■ Make sure that staff members are reminded of the signs that babies are getting all they need from breastfeeding, and encourage them to pass on this information to mothers who are worried that their milk is insufficient. ■ Consider arranging for brief in-service training sessions to demonstrate how to assess the effectiveness of a breastfeed and give nurses supervised practice in making their own assessments. ■ Remove glucose water from the unit, so it is more difficult to use routinely.
Mothers request supplements.	■ Arrange for mothers to be informed during the prenatal and early postpartum period concerning the problems that arise from supplementation.
Some mothers are too malnourished to breastfeed.	■ Make sure that staff members realize that even malnourished mothers produce enough milk for their infants if their infants feed on demand. ■ In cases where the family provides food for the mother while she is in the hospital, use the opportunity to inform family members about the importance of sound nutrition for the mother and inexpensive, nutritious dietary choices.
The counselling and support necessary to achieve exclusive breastfeeding is too expensive.	■ Stress that costs will be more than offset by savings to the hospital when purchase, preparation and provision of breast-milk substitutes is minimized. Emphasize that savings will also accrue from reduction in neonatal infections, diarrhoea etc.
Medications are being given to the mother that are considered contraindications to breastfeeding.	■ Ensure that staff members are familiar with the list of acceptable medical reasons for supplementation that are included in the revised Annex to the Global Criteria for the Baby-friendly Hospital

Concerns	Solutions
	Initiative and as Handout 4.5 in Session 4 of this course. ▪ Ask the pharmaceutical department to prepare a list of drugs that are compatible and incompatible with breastfeeding.
Mothers will feel they have been denied something valuable if distribution of samples or discharge packs is discontinued.	▪ Consider replacing samples of breast-milk substitutes with a “breastfeeding pack”, which includes information on breastfeeding and where to get support and may include samples of products that don’t discourage breastfeeding.

The Ten Steps to Successful Breastfeeding: Summary of experiences

STEP 7:	Practice rooming-in – allow mothers and infants to remain together – 24 hours a day.

Actions necessary to implement the step

- Make needed changes in physical facility. Discontinue nursery for normal newborns. Make adjustments to improve comfort, hygiene, and safety of mother and baby.
- Require and arrange for cross training of nursery and postpartum personnel so they all have the skills to care for both baby and mother (see Step # 2).

Institute individual or group education sessions for mothers on mother-baby postpartum care. Sessions should include information on how to care for baby who is rooming-in.

STEP 7: Practice rooming-in – allow mothers and infants to remain together – 24 hours a day.

Common concerns and solutions

Concerns	Solutions
It is difficult to supervise the condition of a baby who is rooming-in. In the nursery one staff member is sufficient to supervise a number of babies.	■ Assure staff that babies are better off close to their mothers, with the added benefits of security, warmth, and feeding on demand. "Bedding-in", if culturally acceptable, provides the best situation for gaining all these benefits and eliminates the need to purchase bassinets or cots. Mothers can provide valuable assistance when their infants are rooming-in or bedding-in, alerting staff if problems arise. ■ Stress that 24-hours supervision is not needed. Periodic checks and availability of staff to respond to mothers' needs are all that is necessary.
Mothers need to get some rest after delivery (especially at night) and babies still need to eat. Especially after caesarean sections, mothers need time to recuperate. Babies should be fed breast-milk substitutes during this period.	■ Ask staff to assure mothers that by "rooming-in" they are doing the best for their babies, that not much extra work is involved, and that health workers are available in the unit to assist them if needed. ■ Ask staff to discuss with mothers the fact that the more babies are with them the more they'll understand what is normal and abnormal and how to provide good care. It is best to practice being with their babies (even during the night) while still in the hospital, when staff is around to help if necessary. ■ Suggest to the staff that after good breastfeeds mothers may even sleep better when their babies are with them. ■ Make sure that staff knows how to help mothers who have had Caesarean sections choose breastfeeding techniques and positions that are comfortable and effective. ■ If regional or local anaesthesia is used during Caesarean sections, early breastfeeding will be less of a problem. However, a mother who has had general anaesthesia can breastfeed as soon as she is conscious if a staff member supports her.
Infection rates will be higher when mothers and babies are together than in a nursery.	■ Stress that the danger of infection is less when babies remain with their mothers than when in the nursery and exposed to more caretakers. ■ Provide staff with data that show that with rooming-in and breastfeeding, infection rates are lower, for example, from diarrhoeal disease, neonatal sepsis, otitis media, and meningitis.

Concerns	Solutions
If visitors are allowed in the rooming-in wards, danger of infection and contamination will increase. In situations where visitors are allowed to smoke, it is a health hazard to mother and baby. Some mothers feel they need to entertain their visitors and that they will have time for their babies after discharge.	■ Emphasize that babies receive immunity to infection from colostrum, and that studies show infection is actually less in rooming-in wards than in nurseries. ■ To support mothers further in doing the best for their babies, limit visiting hours and the number of visitors, and prohibit smoking.
The rooms are too small.	■ No need to have bassinets for infants. No extra space is necessary for "bedding-in".
Babies will fall off the mothers' beds.	■ Emphasize that newborns don't move. If mothers are still concerned, arrange for the beds to be put next to the wall or, if culturally acceptable, for the beds to be put in pairs, with mothers keeping their babies in the centre.
Full rooming-in, without more than half hour separations, seems unfeasible because some procedures and routines need to be performed on the babies outside their mothers' rooms.	■ Study these procedures well. Some are not needed (e.g. weighing baby before and after breastfeeding.) Other procedures can be performed in the mother's room. ■ Review advantages to mother and time saved by physician when he examines the infant in front of the mother.
Private patients feel they have the privilege to keep their babies in nurseries and feed them breast-milk substitutes, receive expert help from nursery staff etc.	■ Whatever is best for public patients is also best for private patients. ■ Consider pilot projects to "test" rooming-in in private as well as public wards.
Some private hospitals make money from nursery charges and thus are reluctant to disband these units.	■ Explore the compensatory savings from rooming-in due to less frequent use of breast-milk substitutes, less staff time for bottle preparation and nursery care, less infant illness etc. ■ Consider continuing to charge the same fees when the nursery is disbanded, reallocating the charges for mother/baby care on the wards.
Babies more easily kidnapped when rooming-in than in the nursery.	■ Suggest to the staff that they ask mothers to request that someone (e.g. other mothers, family members, or staff members) watch their babies if they go out of the room. ■ Mothers need to know that there is no reason a baby should be removed without the mother's knowledge.

The Ten Steps to Successful Breastfeeding
Summary of experiences

STEP 8: Encourage breastfeeding on demand.

Actions necessary to implement the step

- Introduce rooming-in (see Step # 7).
- Examine routine policies concerning infant procedures (e.g. blood drawing, physical examination, weighing, bathing, circumcision, cleaning of rooms etc.) that separate mother and baby; conduct the procedures on the ward, whenever possible.

Ensure that staff training includes the definition and benefits of on-demand feeding and key messages concerning this issue that mothers should receive during breastfeeding counselling (see Step # 2).

STEP 8: Encourage breastfeeding on demand.

Common concerns and solutions

Concerns	Solutions
On-demand feeding is good, but does not provide enough milk for the baby. Colostrum is insufficient and supplementation is necessary.	▪ Remind staff that the infant's stomach capacity is 10 - 20 ml at birth and the quantity of colostrum is physiologically matched.
In situations where rooming-in is not practised, it saves on staff time and effort if babies are fed in the nursery instead of taking babies to mothers to breastfeed at unpredictable times.	▪ Consider rooming-in, which will take less staff time than keeping babies in the nursery and feeding them breast-milk substitutes or transporting them back and forth for breastfeeding.
When babies are taken out of the rooms for exams, lab tests, and measurement procedures this interferes with feeding on demand.	▪ Encourage physicians to examine babies in mothers' rooms. Emphasize that it is a time-saver since mothers' questions can be answered and any education provided at the same time. Stress that patient satisfaction also increases as a result. ▪ Arrange for staff to complete other procedures in mothers' rooms, when feasible (e.g. the weighing scale might be wheeled from room to room). ▪ Ask the staff to try to schedule after feedings procedures that must be performed outside the rooms, or allow mothers to accompany their babies so they can breastfeed when required. ▪ Inform the staff that babies are not to be supplemented while they are away for procedures. If necessary, mothers should be called to breastfeed.
Visiting hours that are too long or unrestricted interfere with breastfeeding on demand. Mothers may be embarrassed to breastfeed in front of visitors, may be too busy entertaining visitors, or may be too exhausted afterwards to feed their babies.	▪ Shorten visiting hours or limit them (i.e. 2 visitors per patient or only immediate family and grandparents). ▪ Arrange for the staff to provide mothers with signs they can place on their doors (if they have private rooms) to ask that they not be disturbed if resting or feeding their babies. ▪ Ask instructors in prenatal classes to emphasize the importance of limited visiting hours to allow more time for mother/baby learning, feeding and rest.

The Ten Steps to Successful Breastfeeding
Summary of experiences

STEP 9: Give no artificial teats or pacifiers.

Actions necessary to implement the step

- Examine routine policies. Hospital policies should:

15. Discourage mothers or family members from bringing pacifiers from outside for their babies' use.
16. Prohibit use of bottles and teats or nipples for infant feeding within the hospital.
17. Provide guidance for use of alternative feeding methods, for example, use of cups and spoons if breast-milk substitutes are used.

Purchase supplies (e.g. cups, syringes, spoons) for use in feeding breast-milk substitutes to infants (without using teats or bottles) in cases where there are acceptable medical reasons for supplementation (see Step # 5).

STEP 9: Give no artificial teats or pacifiers.

Common concerns and solutions

Concerns	Solutions
When infants are upset, pacifiers will help quiet them. Also, infants may not be hungry, but still need to suck.	■ Babies may cry for a variety of reasons. Ask staff to explore alternatives to pacifiers (e.g. encouraging mother to hold baby, offering the breast, checking for soiled diaper), possibly through a group discussion.
The nursing staff and/or mothers do not believe that pacifier use causes any problems.	■ Make sure that staff and mothers are educated concerning problems with pacifier use (e.g. interferes with oral motor response involved in breastfeeding, easily contaminated). ■ Establish an ad hoc committee to review the literature and make a presentation to the administrative and medical staff on issues related to pacifier use. ■ Post a notice visible to both staff and patients -- "no more pacifiers for breastfed infants" -- and list the reasons why. ■ If the mother requests a pacifier, have staff discuss with her the problems it may cause. Consider asking her to sign a written informed consent form that discusses the risks of nipple confusion, impaired milk supply and contamination. ■ In settings where contamination of pacifiers can lead to diarrhoea and other illness, it is best to encourage calming the bay in other ways or to use a mother's or family member's washed finger as a pacifier.
Pacifiers are provided free of charge for mothers requesting them.	■ Calculate the savings to the hospital from not buying pacifiers or artificial teats. ■ Establish a policy stating that the hospital will not supply free pacifiers and mothers, if they wish to use them, must bring their own.
Infants may aspirate if fed by cup.	■ Provide the staff with examples (through video, slides, or visit) of infants being successfully fed by cup in other health facilities. ■ Emphasize the feasibility and safety of cup feeding.
Purchasing cups, syringes, and spoons may be expensive.	■ Special types of cups, syringes and spoons are not necessary. They just need to be clean.

The Ten Steps to Successful Breastfeeding
Summary of experiences

STEP 10: Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or clinic.

Actions necessary to implement the step

- Work with key hospital staff to identify hospital and community resources for breastfeeding mother support.
- Make sure that the hospital provides follow-up support for breastfeeding, for example, through a postnatal clinic, and schedules the first visit within a week of discharge and insures that breastfeeding is assessed and any problems are identified and addressed.
- Explore ways to link mothers with community-level breastfeeding support resources, such as health centres, MCH clinics, and breastfeeding support groups (NGOs such as local La Leche League groups). One means would be to send a discharge/referral slip to the community clinic where the mother can go for postnatal care and at the same time tell the mother where she can receive breastfeeding support.
- Consider arranging for mother-support groups to make contact with mothers while still in the hospital. For example, volunteers can offer refreshments to mothers on the wards and at the same time provide information on where to go for breastfeeding support. Volunteers can help conduct hospital lactation clinics, give breastfeeding advice on wards etc.
- Consider asking hospital personnel to organize breastfeeding support groups for which, at least initially, hospital staff serve as facilitators. Arrange training for hospital staff on organizing and facilitating mother-support groups and consider similar training for other potential mother-support group leaders.

Make information (verbal and written) on breastfeeding support resources available to mother, family and community.

STEP 10: Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or clinic.

Common concerns and solutions

Concerns	Solutions
The hospital staff members are unfamiliar with good sources of breastfeeding support to which they can refer mothers.	■ Form an ad hoc group with a representative from the hospital, the local MCH clinics, and any mother support groups that can be identified. Ask groups to develop a resource list and make it available to hospital staff, local physicians and mothers. ■ Encourage local mother-support groups to meet occasionally at the hospital, which can provide space and publicity free of charge. ■ Arrange for community breastfeeding support groups to provide a mini-training session to the staff on the services they offer.
There is a mistaken impression that health professionals aren't supposed to be involved in organizing or facilitating mother-support groups.	■ If lay leaders are not available to organize and facilitate mother-support groups, explore using health staff for this purpose. If health staff members are involved, they need to be trained not to direct or dominate the groups, but to facilitate sharing and support among mothers. As lay leaders come forward, they can receive additional training and take over the group work.
Lay group leaders and their members may provide incorrect information.	■ Make sure that potential mother-support group leaders are provided with adequate training and that the mothers themselves receive accurate prenatal and postnatal education on breastfeeding from the hospital staff.
Hospital administrators and staff already have too much to do; organizing support groups would be a serious imposition.	■ Explore whether knowledgeable volunteer groups or individuals can help in, or even take full responsibility for, this activity.
Mother-to-mother support doesn't work in the local culture.	■ Explore culturally appropriate support mechanisms for breastfeeding mothers. ■ For example: ■ Involving traditional or religious organizations for women in providing breastfeeding or more general mother support. ■ Reinforcing the extended family role in supporting breastfeeding by providing updated information on breastfeeding to family members most likely to provide advice.

Concerns	**Solutions**
Post-discharge hospital follow-up is too costly. Home visits are either impossible or only possible in emergencies or for very high-risk patients. Phone contact is either not possible or, at best, unreliable.	▪ Examine what follow-up mechanisms are most feasible in the local situation, considering constraints. For example: ▪ Arranging for breastfeeding assessment and support during postnatal visits. ▪ Arranging home visits at least for the mother at highest risk of breastfeeding failure. ▪ Referring mothers to community health centres, outreach workers, and/or volunteer groups that can provide support.

Session 5:
Becoming "baby-friendly" in settings with high HIV prevalence

Note: This alternate Session 5 has been prepared for use in settings with high HIV prevalence. This version of the Session is identical to Session 5, except that additional content concerning HIV and infant feeding have been added, wherever useful.

Since the launch of the Baby-friendly Hospital Initiative in 1991 the growing HIV/AIDS pandemic, especially in sub-Saharan Africa and parts of Asia, has raised concerns and questions about promoting protecting and supporting breastfeeding where HIV is prevalent. These concerns arise because breastfeeding is known to be one of the routes for infecting infant and young children with HIV. This session, revised in order to address these concerns, provides guidance on how to implement the Ten Steps to Successful Breastfeeding and the BFHI in settings where HIV is a major public health concern.

Objective

At the conclusion of this session, participants will be able to:

- Develop a plan for building staff enthusiasm and consensus for working to become "Baby-friendly".
- Identify actions necessary to implement at least four of the "Ten steps to successful breastfeeding" in their health facilities.
- Identify at least five common concerns related to instituting the Ten Steps and practical solutions for addressing them.
- Identify at least five challenges to baby-friendly hospital promotion in a setting where there is a high prevalence of HIV/AIDS and how to overcome them.
- Describe the usefulness/need for counselling to help the HIV-infected mother to choose an infant feeding method of her choice which best suits her personal setting and circumstances.

Duration

Presentation/discussion: 20-30 minutes
Discussion and brainstorming: 15 minutes
Introduction to group work: 5 minutes
Group work: 30-45 minutes
Presentations and discussion: 40-55 minutes

Total: 2 to 2½ hours

Teaching methods

Small group work
Presentations in plenary
Discussion

Preparation for session

- Review the WHO document, *Evidence for the ten steps to successful breastfeeding*. Geneva, World Health Organization, 1998.
http://www.who.int/nutrition/publications/infantfeeding/evidence_ten_step_eng.pdf

  Read the section on "combined interventions" (pp. 93-99) that gives evidence that the *Ten Steps* should be implemented as a package. Also review the WHO/UNICEF document, *Global Strategy for Infant and Young Child Feeding*. Geneva, Switzerland, 2003. http://www.who.int/nutrition/publications/infantfeeding/gs_infant_feeding_eng.pdf..

  Read in particular sections 30, 31 and 34, pages 13-19, which focus on the importance of continuing to support the *Baby-friendly Hospital Initiative* and implementation of the *Ten Steps to Successful Breastfeeding*, as well as monitoring and reassessing facilities that are already designated.

- If possible, the group work for this session should be scheduled as the last activity for the first day of the course. Since it involves active participation by course participants, it is more likely to keep their attention than a lecture-type session at the end of an intensive day. If this plan is followed, the group reports and discussion can come first on the schedule the next day, giving participants the flexibility to do some final work, if necessary, to prepare for their reports the evening before.

- The group work for this session should focus only on four to five of the *Ten Steps* since there is not enough time during either the group work or the reporting and discussion period to adequately cover the concerns and solutions for all Ten Steps. Preparation for this session should include an analysis, by the trainers, of which steps tend to be most difficult to implement and thus on which it would be most important to focus in a session of this type. Indications of which steps need the most work may come from trainers' experience with BFHI assessments and training. A review of the forms participants were asked to complete prior to arriving at the course, indicating what difficulties they have had, or think they will have, in assisting their institutions to become Baby-friendly, considering HIV prevalence, should also be helpful. The steps most needing consideration in light of HIV and infection of infants and young children with HIV are Steps 1, 2, 3, 5, 6 and 10. Steps 3 and 5 may present the greatest challenges in that they may require changes in care routines and protocols. Step 10, community follow-up support, poses challenges for the original BFHI and will continue to be a challenge for BFHI in light of HIV.

- Countries (or hospitals) which have already implemented BFHI but who are now rethinking their strategies in light of providing care to HIV infected women, may need guidance by a master trainer who is experienced with BFHI in HIV-prevalent areas. It may be helpful to guide decision-making on which steps should be tackled in-group work based on what other countries have found most challenging in implementing BFHI in HIV-prevalent areas.

- Before the session, the trainers also need to organize the working groups and assign facilitators to each of them. Consideration should be given during the formation of working groups to insuring that each group includes some participants who are good at problem solving and supportive of BFHI. Facilitators should be made aware that their role is not to “lead” the working groups but rather to make sure the groups understand the assignment, offer help if the group is having difficulty, and make suggestions if there are important issues the group hasn’t considered. The facilitators should review the sections of Handout 5.6 HIV which deal with the steps the groups will be working on, as they may provide ideas on important points the facilitators should mention, if they are not discussed, during the group work or the group reports.

- Once the four or five Steps have been selected for the group work, it would be useful to make enough copies of the Handout 5.5 HIV “sample sheet” for each of the groups, with one of the Steps and wording for the Step inserted on each of the four or five sheets.

- Consider whether participants should be provided with copies of the completed Handout 5.5 HIV sheets developed by the working groups, so they can refer to them for ideas as they implement their action plans on their return home. The completed sheets can be copied “as is” or, if there is time, the course secretary can be asked to prepare typed versions for copying.

- Review Handout 5.6 HIV and decide whether to distribute it at the end of the session. If the Course will be given a number of times, consider adapting this Handout to the country situation, eliminating concerns and solutions that aren’t applicable and possibly adding others.

Training materials

Handouts

5.1 HIV Slide Presentation Handout – Session 5 HIV

5.2 HIV The ten steps to successful breastfeeding for settings where HIV is prevalent: Issues to consider

5.3 HIV Applying the Ten Steps in facilities with high HIV prevalence 5.4 HIV The ten steps to successful breastfeeding for settings where HIV is prevalent: Actions, concerns and solutions – Sample Worksheet

5.5 HIV The ten steps to successful breastfeeding for settings where HIV is prevalent: Summary of experiences

Slides/Transparencies

5.1-13 HIV The ten steps to successful breastfeeding for settings where HIV is prevalent –Issues to consider

5.14-15 HIV The ten steps to successful breastfeeding for settings where HIV in prevalent: Actions, concerns and solutions – Worksheet, Example for Step 1: Have a written breastfeeding policy (blank copy)

5.16-21 HIV The ten steps to successful breastfeeding for settings where HIV in prevalent: Example for Step 7: Practice rooming-in

The website featuring this Course contains links to the slides and transparencies for this session in two Microsoft PowerPoint files. The slides (in colour) can be used with a laptop computer and LCD projector, if available. Alternatively, the transparencies (in black and white) can be printed out and copied on acetates and projected with an overhead projector. The transparencies are also reproduced as the first handout for this session, with 6 transparencies to a page.

Note: The slides for the basic Session 5 have been integrated with the additional HIV-related slides and included all together in both the slide and transparency files for this session, for ease of use.

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Outline

Content	Trainer's Notes
1. Discussion on building consensus for "Becoming Baby-friendly"	Mention that a mini-version of the slides is reproduced in Handout 5.1 HIV and included in the participants' folder. Indicate that finding ways of balancing BFHI, its original aims and goals with the threats from HIV and AIDS is crucial for the successful implementation of the Global Strategy for infant and young child feeding, especially as countries develop comprehensive policies. It is also important for the facilities to continue protecting, promoting and supporting breastfeeding while helping HIV-positive mothers to implement the infant feeding methods that they chose. Introduce the "Ten steps to successful breastfeeding in the context of HIV", using slides 5.1-9 HIV. Go through the 10 steps briefly, discussing what key issues administrators and policy makers need to consider. Pass out Handout 5.2 HIV as a reference.
■ Discussion and brainstorming session on strategies for gaining support within the health facility for becoming Baby-friendly and drafting a policy and plan of action. ▪ The importance of "thinking strategically" ▪ How best to gain support within the participants' culture and institutional administrative system for a policy and plan of action ▪ How best to convince those staff members likely to be most resistant ▪ The special concerns about HIV and breastfeeding promotion in this setting	***Discussion: 15 minutes*** Discuss the importance for health facility administrators and policy-makers of "thinking strategically" about how best to gain support within the health facility for making the changes necessary to become baby-friendly. (Note: if the facilities are already baby-friendly, concentrate on how support can be gained for adjusting the policy and BFHI approach to be most appropriate in facilities where mothers who may be HIV infected receive care). Ask the participants to brainstorm concerning how, within their culture and institutional administrative system, they can best work to gain the support needed to develop a breastfeeding policy and plan (or to adjust the existing policy and plan in the light of high HIV prevalence). Before the session starts, review the "Actions" suggested for "Step 1" in Handout 5.5 HIV and, if necessary, mention the strategies suggested under the first four bullets as examples, to help get the participants thinking about what would work best in their own settings. Record the suggestions made by the participants either on a flip chart or board or on Transparencies 5.14-15 HIV. Emphasize that these strategies are part of the Actions needed to

Content	Trainer's Notes
	successfully implement "Step 1" in a way that is most likely to have full administrative and staff support. Briefly mention the importance of developing hospital infant feeding policies that provide guidance for applying the Ten Steps in facilities with high HIV prevalence. Pass out Handout 5,3 HIV, which can provide the initial guidance for developing policies appropriate to the participants' particular settings and challenges. Emphasize that the Ten Steps remain "as is", but that it is essential that policies provide additional guidance for implementing each of them, and that both this Handout and Handout 5.2 HIV can provide useful technical information to use in their development. Also mention the policy developed for Rusape Hospital in Zimbabwe serving a population with high risk of HIV as another example – Handout 4.7 HIV distributed during Session 4-HIV.
2. Group work on implementing the Ten Steps ■ Small group work to identify actions necessary to implement four or five of the most challenging of the Ten Steps in the context of HIV and address common concerns.	***Introduction: 5 minutes*** Describe the group work, explaining that participants will be divided into four or five small groups, with each group assigned one of the Ten Steps that experience has shown can be a challenge, as health facilities work to become baby-friendly in the context of HIV. (Note: Steps 1, 2, 3, 5, 6 and 10 are most challenging in the context of HIV. Steps 3 and 5 in particular present the challenges in that they may require changes in care routines and protocols. Step 10, community follow-up support, posed challenges for the original BFHI and will continue to be a challenge for BFHI in light of HIV. Thus the Steps to use in group work could be selected from among these, unless the facilitators feel that other Steps should be chosen because they are particularly challenging in general for the health facilities represented). For the step it is assigned, each group should identify:1) common concerns or problems related to instituting the step and possible solutions, and then, if they have time, 2) actions necessary to implement the step. (the worksheet for each step starts with "Actions necessary to implement the step", but ask the groups first to identify "Concerns and Solutions" and record them on the back of the worksheet, as

Content	Trainer's Notes
	some of the "Solutions" may be useful to include in their list of "Actions"). If it seems necessary to use an example to show participants how to complete the group work, display transparencies showing how to complete Handout 5.2 HIV for one of the steps that will not be assigned to the working groups. Transparencies (5.16-20 HIV) have been prepared using "Step 7" (rooming-in) as an example, including concerns and solutions related to HIV. Then present Transparency 5.21 HIV that provides an example of "Actions" that could be taken to implement this Step in settings with high HIV prevalence. If necessary, the trainer can prepare other transparencies, focusing on a different step. Use the transparencies to explain how to complete the worksheet for both sections on "Concerns and Solutions" and "Actions". Emphasize that during this session the groups won't be making "Action plans" for their own health facilities, but will be working to identify common concerns and solutions and then, if they have time, possible actions to address them. Later in the course the participants from the same facility will work together to develop specific "Action plans" that identify the activities needed for BFHI in their own facilities. Ask if there are any questions. ***Group work: 30-45 minutes*** Divide participants into four or five working groups, assigning a facilitator to each group, if possible. Assign each working group one of the Ten Steps to work on. Distribute one of the Handout 5.4 HIV worksheets (with "Concerns and Solutions" on one side and "Actions" on the other) to each group, with the Step and the wording for the Step that the group will be working on inserted at the top. Ask each group to record its work on the worksheet and summarize results on transparencies or flip charts, and to assign one of its members to present the work during the reporting and discussion period to follow.

Content	Trainer's Notes
3. Presentations and discussion ■ Presentation of group work. ■ Discussion of issues raised after each group's presentation.	***Presentations and discussion: 40-55 minutes*** Ask each group to present its work. Lead a discussion on each presentation, making sure major points are covered. Collect the group work on each step at the end of the session. If feasible and not too costly, make copies and distribute them to all participants before the course is over. In addition, include copies of this group work in the course report. Distribute Handout 5.5 HIV, which summarizes experience in a number of countries at the end of the session as a "reference document". Explain that since the material in this handout comes from many countries not all the concerns and solutions will be relevant. The handout may be helpful, however, as its review of experience worldwide in implementing the Ten Steps in settings where HIV is prevalent may give participants some new and creative ideas concerning what to do in their own situations.

Handout 5.1 (HIV)

Presentation for session 5 (HIV): Becoming "baby-friendly" in settings with high HIV prevalence

The ten steps to successful breastfeeding for settings where HIV is prevalent: Issues to consider

STEP 1: Have a written breastfeeding policy that is routinely communicated to all health care staff

- The hospital policy should promote, protect and support breastfeeding irrespective of the HIV infection rate within the population.
- The policy will need to be adapted so that providing appropriate support in the context of HIV is addressed.
- The policy should require the training of staff in HIV and infant feeding counselling.

Slide 5.1 (HIV)

STEP 1 (continued): Have a written breastfeeding policy that is routinely communicated to all health care staff

- The policy should include a recommendation that all pregnant and lactating women be offered or referred for HIV testing & counselling.
- The policy should require that the hospital offer counselling for HIV-positive pregnant women about feeding options.
- The policy should stress that full compliance with the "Code of Marketing of Breast-milk Substitutes" or a similar national measure is essential.
- The issue of confidentiality should be addressed in the policy.
- If there is a national level policy on infant feeding in the context of HIV the hospital policy should incorporate the national guidelines.

Slide 5.2 (HIV)

Step 2: Train all health care staff in skills necessary to implement this policy.

- Staff training needs may vary from facility to facility.
- If the hospital is already a baby-friendly hospital, then emphasis should be placed on refresher training related to HIV and infant feeding.
- If the facility has never implemented the BFHI then BFHI training will need to include guidance related to HIV and infant feeding, or additional training on this topic will need to be organized,requiring more time and training resources.
- Training may require a multi-sectoral training team from nutrition, HIV/AIDS and other MCH sections.
- If there are no master trainers available locally with experience in implementing BFHI in settings where HIV-positive mothers receive care, external trainers may be needed.

Slide 5.3 (HIV)

Step 3: Inform all pregnant women about the benefits and management of breastfeeding.

- WHO/UNAIDS recommends that pregnant women be offered VCT during antenatal care.
- Where VCT services do not yet exist, this will involve additional equipment, space, reagents, and staff time.
- Mothers may be HIV-infected but not know their status. They need to know their HIV status in order to make informed infant feeding choices.
- Pregnant women who are HIV-positive should be counselled about the benefits and risks of locally appropriate infant feeding options so they can make informed decisions on infant feeding.

Slide 5.4 (HIV)

Step 3 (continued): Inform all pregnant women about the benefits and management of breastfeeding.

- Mothers have to weigh the balance of risks: Is it safer to exclusively breastfeed for a period of time or to replacement feed, given the possibility of illness or death of a baby if not breastfed.
- Counsellors must be knowledgeable about the local situation relative to what replacement feeds are locally appropriate. They should be able to help mothers assess their own situations and choose feeding options.
- Counsellors need to recognize that the social stigma of being labelled as being "HIV-positive or having AIDS" may affect some mothers' decisions on infant feeding.
- Counselling should be individual and confidential.

Slide 5.5 (HIV)

Step 4: Help mothers initiate breastfeeding within a half-hour of birth.

- All babies should be well dried, given to their mothers to hold skin-to-skin and covered, whether or not they have decided to breastfeed.
- Staff may assume that babies of HIV infected mothers must be bathed and even separated from their mothers at birth.
- They need to understand that HIV is not transmitted by mothers while they are holding their newborns - mothers need to be encouraged to hold and feel close and affectionate towards their newborn babies.
- HIV-positive mothers should be supported in using the feeding option of their choice. They shouldn't be forced to breastfeed, as they may have chosen to replacement feed without knowledge of the delivery room staff.

Slide 5.6 (HIV)

Step 5: Show mothers how to breastfeed and maintain lactation even if they should be separated from their infants.

- Staff members will need to counsel mothers who have chosen to breastfeed (regardless of their HIV status) on how to maintain lactation by manual expression, how to store their breast milk safely, and how to feed their babies by cup.
- They will also need to counsel HIV-positive mothers on locally available feeding options and the risks and benefits of each, so they can make informed infant feeding choices.
- Staff members should counsel HIV-positive mothers who have chosen to breastfeed on the importance of doing it exclusively and how to avoid nipple damage and mastitis.
- Staff members should help HIV-positive mothers who have chosen to breastfeed to plan and implement early cessation of breastfeeding.

Slide 5.7 (HIV)

Step 5 (continued): Show mothers how to breastfeed and maintain lactation even if they should be separated from their infants.

- Staff members will need to counsel HIV-positive mothers who have chosen replacement feeds on their preparation and use and how to care for their breasts while waiting for their milk to cease and how to manage engorgement.
- Mothers should have responsibility for feeding while in the hospital. Instructions should be given privately.
- Breast milk is particularly valuable for sick or low birth weight infants. Heat treating breast milk is an option.
- If there is a breast-milk bank, WHO guidelines will need to be followed for heat treatment of breast milk. Wet nursing is an option as well, if the wet nurse is given proper support.
- Staff members should try to encourage family and community support of HIV-positive mothers after discharge, but will need to respect the mothers' wishes in regards to disclosure of their status.

Slide 5.8 (HIV)

Step 6: Give newborn infants no food or drink other than breast milk unless medically indicated.

- Staff members should find out whether HIV-positive mothers have made a feeding choice and make sure they don't give babies of breastfeeding mothers any other food or drink.
- Being an HIV-positive mother and having decided not to breastfeed is a medical indication for replacement feeding.
- Staff members should counsel HIV-positive mothers who have decided to breastfeed on the risks if they do not exclusively breastfeed. Mixed feeding brings both the risk of HIV from breastfeeding and other infections.
- Even if many mothers are giving replacement feeds, this does not prevent a hospital from being designated as baby-friendly, if those mothers have all been counselled and offered testing and made genuine choices.

Slide 5.9 (HIV)

Step 7: Practice rooming in — allow mothers and infants to remain together — 24 hours a day.

- In general it is best that HIV-positive mothers be treated just like mothers who are not HIV-positive and provided the same post partum care, including rooming-in/bedding-in. This will be best for the mothers and babies and will help protect privacy and confidentiality concerning their status.
- HIV-positive mothers who have chosen not to breastfeed should be counselled as to how to have their babies bedded in with them, skin-to-skin, if they desire, without allowing the babies access to the breast. General mother-to-child contact does not transmit HIV.
- Staff members who are aware of an HIV-positive mother's status need to take care to ensure that she is not stigmatised or discriminated against. If confidentiality is not insured, mothers are not likely to seek the services and support they need.

Slide 5.10 (HIV)

Step 8: Encourage breastfeeding on demand.

- This step applies to breastfeeding mothers regardless of their HIV status.
- Babies differ in their hunger. The individual needs of both breastfed and artificially fed infants should be respected and responded to.

Slide 5.11 (HIV)

Step 9: Give no artificial teats or pacifiers.

- This step is important regardless of mothers' HIV status and whether they are breastfeeding or replacement feeding.
- Teats, bottles, and pacifiers can carry infections and are not needed, even for the non-breastfeeding infant. They should not be routinely used or provided by facilities.
- If hungry babies are given pacifiers instead of feeds, they may not grow well.
- HIV-positive mothers who are replacement feeding need to be shown ways of soothing other than giving pacifiers.
- Mothers who have chosen to replacement feed should be given instructions on how to cup feed their infants and the fact that cup feeding has less risk of infection than bottle-feeding.

Slide 5.12 (HIV)

Step 10: Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or clinic.

- The facility should provide information on MTCT and HIV and infant feeding to support groups and others providing support for HIV-positive mothers in the community.
- The facility should make sure that replacement-feeding mothers are followed closely in their communities, on a one-to-one basis to ensure confidentiality. In some settings it is acceptable to have support groups for HIV-positive mothers.
- HIV-positive mothers are in special need of on-going skilled support to make sure they continue the feeding options they have chosen. Plans should be made before discharge.
- The babies born to HIV-positive mothers should be seen at regular intervals at well baby clinics to ensure appropriate growth and development.

Slide 5.13 (HIV)

The Ten Steps to successful breastfeeding for settings where HIV is prevalent: Actions, concerns and solutions - worksheet Example

STEP 1: Have a written breastfeeding policy that is routinely communicated to all health care staff

Actions necessary to implement the step

Slide 5.14 (HIV)

STEP 1: Have a written breastfeeding policy that is routinely communicated to all health care staff

Common concerns and solutions

Concerns	Solutions

Slide 5.15 (HIV)

The ten steps to successful breastfeeding for settings where HIV is prevalent : Actions, concerns and solutions - worksheet Example

STEP 7: Practice rooming-in.

Common concerns and solutions

Concern	Solutions
It's difficult to supervise the condition of a baby who is rooming-in. In the nursery one staff member is sufficient to supervise several babies.	▪ Assure staff that babies are better off rooming-in with their mothers, with the added benefits of security, warmth, and feeding on demand. ▪ Stress that 24-hour supervision is not needed. Periodic checks and availability of staff to respond to mothers' needs are all that are necessary.

Slide 5.16 (HIV)

Concern	Solutions
Infection rates will be higher when mothers and babies are together than when they are in a nursery.	▪ Stress that danger of infection is reduced when babies remain with mothers than when in a nursery and exposed to more caretakers. ▪ Provide staff with data showing that infection rates are lower with rooming-in and breastfeeding, for example, from diarrhoeal disease, neonatal sepsis, otitis media, and meningitis.

Slide 5.17 (HIV)

Concern	Solutions
Babies will fall off their mothers' beds.	▪ Emphasize that newborns don't move. ▪ If mothers are still concerned, arrange for beds to be put next to the wall or, if culturally acceptable, for beds to be put in pairs, with mothers placing babies in the centre.

Slide 5.18 (HIV)

Concern	Solutions
Full rooming-in, without more than half-hour separations, seems unfeasible because some procedures need to be performed on the babies outside their mothers' rooms.	▪ Study these procedures well. Some are not needed. (Example: weighing baby before and after breastfeeding.) Other procedures can be performed in the mothers' rooms. ▪ Review advantages to mother and time saved by physician when infant is examined in front of mother.

Slide 5.19 (HIV)

Concern	Solutions
A mother in the postnatal ward may be seen by others while she is replacement feeding her infant, and confidentiality will be hard to protect.	▪ For an HIV-positive mother who chooses replacement feeding it is likely others will notice, but she has been counselled and has already decided how she will make this change in her life even after she has left the maternity. ▪ For an HIV-positive mother who chooses breastfeeding, she should be supported to exclusively breastfeed and there should be no obvious difference in her care.

Slide 5.20 (HIV)

The ten steps to successful breastfeeding for settings where HIV is prevalent : Actions, concerns and solutions - worksheet Example

STEP 7: Practice rooming-in.

Actions necessary to implement the step

- Make needed changes in physical facility. Discontinue nursery. Make adjustments to improve comfort, hygiene, and safety of mother and baby.
- Require and arrange for cross training of nursery and postpartum personnel so they all have the skills to take care of both baby and mother.
- Institute individual or group education sessions for mothers on mother-baby postpartum care. Sessions should include information on how to care for babies who are rooming-in.
- Protect privacy and confidentiality of a mother's HIV status by providing the same routine care to ALL mothers and babies, including rooming-in/bedding-in, so that no one is stigmatised or set apart as different.

Slide 5.21 (HIV)

Handout 5.2 HIV

The ten steps to successful breastfeeding for settings where HIV is prevalent: Issues to consider [1]

Step 1: Have a written breastfeeding policy that is a routine communicated to all health care staff.

- The hospital policy should promote, protect and support breastfeeding irrespective of the HIV infection rate within the population.
- The hospital policy will need to be adapted so that providing appropriate support in the context of HIV is addressed.
- The hospital policy should include a recommendation that all pregnant and lactating women be offered or referred for HIV testing and counselling.
- The hospital policy should require that the hospital offer counselling for HIV-positive pregnant women about feeding options.
- The hospital policy should require the training of staff in HIV and infant feeding counselling.
- The issue of confidentiality should be addressed in the policy. Confidentiality is a challenge in settings where many staff members handle patient charts, where storage of charts is not secure, and where shortage of staffing interferes with supervision and quality assurance in care.
- The hospital policy should stress that full compliance with the “Code of Marketing of Breast-milk Substitutes” or similar national measures is essential.
- There may or may not be a national level policy on infant feeding in the context of HIV. Where one exists, the hospital policy should incorporate the national guidelines.

1 See the Session on “Integrated care for the HIV-positive Woman and her Baby” and the discussion and exercise on implementing BFHI in settings with high HIV prevalence in *HIV and Infant Feeding Counselling: A Training Course,* pp. 45-56, for further information on this topic. Points marked with an asterisk (*) are adapted from this document.

Step 2: Train all health care staff in skills necessary to implement this policy.

- Staff training needs may vary from facility to facility.
- If the hospital is already a BF hospital, then the breastfeeding knowledge and skills should be in place and the issues of adapting for a high HIV prevalence will be foremost in planning for refresher training. If the facility has never implemented the BFHI then BFHI training will need to include guidance related to HIV and infant feeding in the context of BFHI, or additional training on HIV and infant feeding will need to be organized. This will require more time and training resources.
- Staff needs to be trained on such topics as how HIV is transmitted from mother to child and how to prevent it, voluntary counselling and testing (VCT), the risks and benefits associated with various feeding options, how to help mothers make informed choices, how to teach mothers to prepare and give replacement feeds, how to maintain privacy and confidentiality, and how to minimize the "spill over" effect, causing mothers who are HIV negative or of unknown status to choose replacement feeding when breastfeeding has less risk.
- Training may require a multi-sectoral training team from nutrition, HIV/AIDS and other MCH sections.
- If there are no master trainers available locally with knowledge and experience in implementing BFHI in settings where HIV-positive mothers receive care, external trainers may need to be figured into the training budget.

Step 3: Inform all pregnant women about the benefits and management of breastfeeding.

- This step will involve considerable thought and planning for implementation. Pregnant women need general information on HIV and breastfeeding and those that are HIV-positive need additional counselling and assistance.
- WHO/UNAIDS recommends that pregnant women be offered voluntary testing and counselling (VCT) during antenatal care.
- Where VCT services do not yet exist in the antenatal/MCH service setting, their organization will involve additional equipment, space, reagents, and staff time, including for specialized training.
- Mothers may be infected but not know their HIV status. They need to know their HIV status in order to make informed infant feeding choices on the most feasible infant feeding method.
- Pregnant women who are HIV-positive should be counselled about the benefits and risks of locally appropriate infant feeding options so they can make informed decisions on infant feeding before they deliver.
- Mothers have to weigh the balance of risks: Is it safer to exclusively breastfeed for a period of time or to replacement feed, given the risk of illness or death of a baby if not breastfed?
- Staff members who serve as infant-feeding counsellors must be knowledgeable about the local situation relative to what replacement feeds are locally appropriate. They should also be able to help mothers in assessing their own situations to choose the best feeding options for themselves.

- Counsellors need to recognize that other factors such as the social stigma of being labelled as being “HIV-positive” or “having AIDS” may affect some mothers’ decisions on infant feeding. Some mothers may become victims of physical abuse or ostracized if they are suspected of being HIV-positive because they are known to have gone for testing or are not breastfeeding.

- Any discussion of feeding options should be only with HIV-positive mothers. Counselling should be individual and confidential. No group discussion on feeding options is recommended.

Step 4: Help mothers initiate breastfeeding within a half hour of birth.

- All babies should be well dried, covered and given to their mothers to hold skin-to-skin after delivery, whether or not they have decided to breastfeed.

- Staff may assume that babies of HIV-positive mothers must be bathed and even separated from their mothers at birth. They need to understand that HIV is not transmitted by a mother while she is holding her newborn (after drying and covering) and that, in fact, an HIV-positive mother needs to be encouraged to hold and feel close and affectionate towards her newborn baby.

- The HIV-positive mothers may either breastfeed or not, depending on the choices they have made. VCT should be made available to help them make these choices. HIV-positive mothers should be supported in using the infant feeding option of their choice.

- Mothers should not be forced to breastfeed, since they may have chosen to replacement feed without the knowledge of the delivery room staff.

Step 5: Show mothers how to breastfeed, and how to maintain lactation even if they should be separated from their infants.

- Staff members will need to counsel mothers who have chosen to breastfeed (regardless of their HIV status) on how to maintain lactation by expression, how to store their breast milk safely, and how to feed their babies by cup.

- They will also need to counsel HIV-positive mothers on locally available feeding options and the risks and benefits of each, so they can make informed infant feeding choices.

- Staff members should counsel HIV-positive mothers who have chosen to breastfeed on the importance of doing it exclusively, to avoid the increased risks of HIV that come with mixed feeding, and how to use good techniques to avoid nipple damage and mastitis.

- Staff members should help HIV-positive mothers who have chosen to breastfeed to plan and implement early cessation of breastfeeding.

- Staff members will need to counsel mothers who are HIV-positive and who have chosen locally appropriate replacement feeding methods, on their preparation and use. They will also need to teach mothers about breast care while waiting for their breast milk to cease and about managing engorgement at home. Mothers should have responsibility for preparing feeds and cup feeding their infants while in the hospital, with staff assistance. The importance of giving instructions privately and confidentially should be emphasized.

- Breast milk is particularly valuable for sick or low birth weight infants. Expressing and heat treating breast milk is an option for HIV-positive mothers and they will need help to do this.*

- If there is a breast milk bank, WHO guidelines will need to be followed for heat treatment of breast milk.

- If a mother has decided to use a wet nurse who is HIV-negative, the staff will need to discuss breastfeeding with the wet nurse and help her to get started or to relactate.*

- Staff members should try to encourage family and community support of HIV-positive mothers after discharge, but will need to respect the mothers' wishes in regards to disclosure of their status.

Step 6: Give newborn infants no food or drink other than breast milk unless medically indicated.

- Staff members should find out whether HIV-positive mothers have decided to breastfeed or replacement feed and make sure they don't give babies of breastfeeding mothers any other food or drink.

- Being an HIV-positive mother and having decided not to breastfeed is a medical indication for replacement feeding.

- Staff members should counsel HIV-positive mothers on the risks if they do not exclusively breastfeed or replacement feed their babies. Mixed feeding brings with it both the risk of HIV transmission from breastfeeding and the risk of other infections and malnutrition.

- Even if many mothers are giving replacement feeds, this does not prevent a hospital from being designated as baby-friendly, if those mothers have all been counselled and offered testing and made genuine choices.*

Step 7: Practice rooming in – allow mothers and infants to remain together – 24 hours a day.

- In general it is best that HIV-positive mothers be treated just like mothers who are not HIV-positive and provided the same post partum care, including rooming-in/bedding-in. This will be best for the mothers and babies as it will help with bonding and will also help protect privacy and confidentiality concerning their status.

- HIV-positive mothers who have chosen not be breastfeed should be counselled as to how to have their babies bedded in with them, skin-to-skin, if they desire, without allowing the babies access to the breast. General mother-to-child contact does not transmit HIV.*

- Staff members who are aware of an HIV-positive mother's status need to take care to ensure that she is not stigmatised or discriminated against. If privacy and confidentiality are not insured, mothers are not likely to seek the services and support they need for optimal infant feeding.

Step 8: Encourage breastfeeding on demand.

- This step applies to breastfeeding mothers regardless of their HIV status.
- Babies differ in their hunger. The individual needs of both breastfed and artificially fed infants should be respected and responded to.*

Step 9: Give no artificial teats or pacifiers (also called dummies or soothers) to breastfeeding infants.

- This step is important regardless of mothers' HIV status and whether they are breastfeeding or replacement feeding. Teats, bottles and pacifiers can carry infections and are not needed, even for the non-breastfeeding infant and thus should not be routinely used or provided by facilities.*
- If hungry babies are given pacifiers instead of feeds, they may not grow well.*
- HIV-positive mothers who are replacement feeding need to be shown ways of soothing other than giving pacifiers.
- Mothers who have chosen to replacement feed should be given instructions on how to cup feed their infants and the fact that feeding by cup has less risk of infection than bottle-feeding.

Step 10: Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or clinic.

- The facility should provide information on mother-to-child transmission of HIV and HIV and infant feeding to support groups and others providing support for HIV-positive mothers and their babies in the community.
- The facility should make sure that follow-up support exists for HIV-positive breastfeeding mothers in their communities. This may be in the form of support groups or individuals, home visiting, and other ways to ensure safe, optimal breastfeeding.
- The facility should make sure that HIV-positive mothers that have chosen to replacement feed are followed closely in their communities. This should be done on a one-to-one basis to ensure confidentiality and privacy. In some communities it is acceptable to have support groups for HIV-positive mothers.
- HIV-positive mothers are in special need of on-going skilled support to make sure they continue the feeding options they have chosen. Appropriate follow-up care plans should be prepared before they are discharged.
- The babies born to HIV-positive mothers need to be seen at regular intervals at well baby clinics to ensure appropriate growth and development.

Handout 5.3 HIV

Applying the Ten Steps in facilities with high HIV prevalence[2]

The "Ten Steps" for Successful Breastfeeding	Guidance on applying the "Ten Steps" in facilities with high HIV prevalence
Step 1: Have a written policy on breastfeeding that is routinely communicated to all health care staff.	Expand the policy to focus on infant feeding, including guidance on the provision of support for HIV positive mothers and their infants.
Step 2: Train all health care staff in skills necessary to implement this policy.	Ensure that the training includes information on infant feeding options for HIV-positive women and how to support them.
Step 3: Inform all pregnant women about the benefits and management of breastfeeding.	Where voluntary testing and counselling for HIV and PTMCT is available, counsel all pregnant women on the benefits of knowing their HIV status so that, if they are positive, they can make informed decisions about infant feeding, considering the risks and benefits of various options. Counsel HIV-positive mothers on the various feeding options available to them and how to select options that are acceptable, feasible, affordable, sustainable and safe**.** Promote breastfeeding for women who are HIV negative or of unknown status.
Step 4: Help mothers initiate breastfeeding within a half-hour of birth.	Place all babies in skin-to-skin contact with their mothers immediately following birth for at least an hour. Encourage mothers who have chosen to breastfeed to recognize when their babies are ready to breastfeed, offering help if needed. Offer mothers who are HIV positive and have chosen not to breastfeed help in keeping their infants from accessing their breasts.
Step 6: Give newborn infants no food or drink other than breast milk, unless medically indicated.	Counsel HIV positive mothers on the importance of feeding their babies exclusively by the option they have chosen (breastfeeding or replacement feeding) and the risks of mixed feeding (that is, giving both the breast and replacement feeds).

2 The application of the Steps for facilities with high HIV prevalence provided in this handout has been developed to provide additional guidance for health care managers and staff working in high prevalence settings. Guidance has been prepared, taking account of the: *Report of a meeting on BFHI in the context of HIV/AIDS, Gaborone, June 2nd – 4th 2003*, sample infant feeding policies for settings with high HIV prevalence, and the Consensus Statement for the WHO HIV and Infant Feeding Technical Consultation, Geneva, October 25-27, 2006.

The "Ten Steps" for Successful Breastfeeding	Guidance on applying the "Ten Steps" in facilities with high HIV prevalence
Step 7: Practise rooming-in — allow mothers and infants to remain together — 24 hours a day.	Protect the privacy and confidentiality of mother' HIV status by providing the same routine care to all mothers and babies, including rooming-in.
Step 8: Encourage breastfeeding on demand.	Address the individual needs of mothers and infants who are not breastfeeding, encouraging replacement feeding at least 8 times a day.
Step 9: Give no artificial teats or pacifiers (also called dummies or soothers) to breastfeeding infants.	Apply this step for both breastfeeding and non-breastfeeding infants.
Step 10: Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or clinic.	Provide on-going support from the hospital or clinic and foster community support for HIV positive mothers to help them maintain the feeding method of their choice and avoid mixed feeding. Offer infant feeding counselling and support, particularly at key points when feeding decisions may be reconsidered, such as the time of early infant diagnosis and at six months of age. If HIV positive mothers are breastfeeding, counsel them to exclusively breastfeed for the first 6 months of life unless replacement feeding is acceptable, feasible, affordable, sustainable and safe for them and their infants before that time.

Handout 5.4 HIV

The ten steps to successful breastfeeding for settings where HIV is prevalent: Worksheet: Concerns and solutions

STEP ____:	
Concerns **(list concerns, problems or challenges your maternity services face in implementing this Step).**	**Solutions** **(list possible solutions to each of the concerns, including both actions that have been successful and other approaches you think might be useful).**

The ten steps to successful breastfeeding for settings where HIV is prevalent: Worksheet: Actions necessary to implement the step

STEP ____:
(list key actions you think are necessary to successful implement this Step within maternity services that do not yet follow the Step).

Handout 5.5 (HIV)

The ten steps to successful breastfeeding for settings where HIV is prevalent: Summary of experiences[3]

STEP 1: Have a written breastfeeding policy that is routinely communicated to all health care staff.

Actions necessary to implement the step

- Identify a core group of people who will provide the primary source of support for developing a hospital breastfeeding policy and plan and addresses the issues of infant feeding in the presence of maternal HIV infection. The core group may include officers from various MOH units including Nutrition, MCH, Primary Health Care, RH, HIV/AIDS programs and others. Many countries have revised their national breastfeeding policy to a broader *infant and young child feeding policy* that encompasses HIV infected mothers.

- Ask the core group to develop a rough first draft of a new infant feeding policy that follows national breastfeeding and young child nutrition guidelines; National Code of Marketing Breast-milk Substitutes; and national HIV and/or MTCT guidelines. If an infant feeding policy exists, plan for making the necessary changes to reflect support for breastfeeding and also enabling mothers of known HIV status to make informed decisions about the safest infant feeding option for them. Work with the group as they develop the first draft, providing whatever guidance is needed.

- Establish a multi-disciplinary in-house committee or task force to whom the policy and plan will be presented for input. Include representatives from all appropriate units or departments. When the policy and plan are discussed, ask committee members to identify barriers to implementing specific policies, as well as potential solutions. If necessary, form smaller working groups to work on specific barriers or problems.

- Finalize and display written hospital breastfeeding policy and work with designated staff to initiate changes needed to implement it.

- Policy may include guidelines on topics such as:

  - How the “Ten steps to successful breastfeeding” will be implemented in the context of HIV and in coordination with other existing national guidelines.

  - Maternal nutrition issues that should be addressed.

  - Breastfeeding of low-birth-weight infants and infants delivered by C-section.

  - Purchase and use of breast-milk substitutes.

3 This handout summarizes experiences from a variety of countries.

- Acceptable medical reasons for supplementation (see WHO/UNICEF list — and refer to the balance of risks for HIV-positive mothers of NOT breastfeeding versus replacement feeding).
- The importance of providing voluntary testing and counselling (VCT) for HIV to pregnant women.
- The importance of providing individual counselling and education on replacement feeding to HIV-positive mothers who choose not to breastfeeding, rather than group education, which violates confidentiality.
- Hazards of bottle-feeding education. How to provide counselling for women who choose to formula-feed without lessening hospital support for breastfeeding.
- Code related issues (e.g., prohibiting donations of free and low-cost [under 80% of retail price] breast-milk substitutes, distribution of samples of breast-milk substitutes, gifts or coupons, use of materials distributed by formula companies). Many countries are choosing to strengthen their national codes in the face of HIV.
- Prohibiting the practice, if it exists, of giving names of pregnant or recently delivered mothers to companies producing or distributing breast-milk substitutes.
- Storing any necessary hospital supplies of breast-milk substitutes, bottles, etc., out of view.
- Allocating staff responsibilities and time related to the implementation of the breastfeeding policy.

▪ Work with designated staff to develop plans for monitoring implementation of the policy and the effects of the initiative on staff knowledge and practices, patient satisfaction and quality of care. Publicize positive results to reinforce support for changes made, and use information concerning problem areas to assist in determining whether further adjustments are needed.

STEP 1: Have a written breastfeeding policy that is routinely communicated to all health care staff.

Common concerns and solutions

Concerns	Solutions
Considerable evidence documents that some health administrators and care providers are uncertain about promotion of breastfeeding in the face of HIV. They have heard that breastfeeding is a major route of mother to child transmission (MTCT) and are not well informed on basics facts of HIV and infant feeding.	▪ Strengthened infant feeding policy in the face of HIV and training in the implementation of this policy is essential. Provide information on MTCT.
Resistance to introducing new breastfeeding policies. Concern that policies will be inappropriate, dangerous to infant health, difficult to implement considering other tasks, etc.	▪ Provide the latest global guidelines and policies on infant feeding and HIV such as the WHO/UNAIDS/UNICEF global recommendations on HIV and infant feeding. See websites such as: http://www.who.int/nutrition/topics/hivaids/en/index.html http://www.who.int/child_adolescent_health/topics/prevention_care/child/nutrition/hivif/en/index.html http://www.unicef.org/aids/ http://www.linkagesproject.org/publications/index.php http://www.linkagesproject.org/technical/infantfeeding.php http://www.unaids.org/publications/documents/mtct/infantpolicy.pdf. Provide scientific evidence of the soundness of the new policies through presentations such as one on "The Scientific Basis of the Ten Steps" or shorter session on key concerns (see Session 4) and the balance of risks of breastfeeding versus replacement feeding in resource poor settings (see *Review of HIV transmission through breastfeeding*. UNICEF/UNAIDS/WHO, 2003). Organize a task force to develop the policies, including representatives of all the departments that will be affected. If necessary, provide orientation for the task force so it is well informed about potential policies, their scientific basis, and how they will affect hospital practices before beginning work. ▪ Arrange for presentations by administrators or department heads from hospitals that have model breastfeeding policies or have key staff visit other institutions with good policies in place. ▪ As the policies are being developed, make sure that input is obtained from all influential parties, even if opposition is anticipated, so that plans can be made to address concerns identified. ▪ Present the new policies as the "current state of the

Concerns	Solutions
	art" and highlight other hospitals in the country or region that have already successfully implemented the BFHI. ▪ If resistance is high, make just a few changes at a time, starting with those for which support is greatest. Consider addressing just a few of the "steps" at a time to prevent staff from becoming overwhelmed.
Economic concerns related to potential costs of policy changes (e.g. costs of conversion to rooming-in, loss of formula company support, cessation of free and low-cost supplies, refusal of donations of breast-milk substitutes for HIV-positive mothers).	▪ Work with key staff to identify both the costs and savings to hospital and larger health system that will result from the changes and weigh the trade-offs (see Session 6). ▪ Work with staff members so they fully understand that the balance of risks for donated formulas to mothers who cannot guarantee sanitary conditions and afford to continue to buy replacement feeds after donations are discontinued. ▪ Work with staff to understand the dangers of "spillover"[4] to the community at large if free and low cost formula is made available to "some" mothers.

[4] Spillover: a term used to designate the feeding behaviour of new mothers who either know that they are HIV-negative or are unaware of their HIV status – they do not breastfeed, or they breastfeed for a short time only, or they mix-feed, because of unfounded fears about HIV or of misinformation or of the ready availability of breast milk substitutes (HIV and infant feeding: Guidelines for decision makers, 2003).

The ten steps to successful breastfeeding for settings where HIV is prevalent: Summary of experiences

STEP 2: Train all health care staff in skills necessary to implement this policy.

Actions necessary to implement the step

- Identify who will be responsible for planning and implementing an on-going training program for breastfeeding and lactation management and on counselling on infant feeding and HIV including locally appropriate replacement feeding. Work with the designated individual or group to develop a training strategy which will include:
- Identifying who needs to be trained in departments providing maternal/infant services and what their training needs are (both knowledge and clinical skills).
- Identifying the types and content of training for each target group.
- Obtain existing training materials. Available courses include, for example:
  - *"Breastfeeding "Breastfeeding Promotion and Support in a Baby-friendly Hospital*: A 20-hour Course for Maternity Staff" (Section 3 of the revised BFHI documents), New York, UNICEF.
  - *"Breastfeeding Counselling:* A T*raining Course"*. (40 hours) Geneva, World Health Organization, 1993.
  - *"Infant and Young Child Feeding Counselling: An Integrated Course"* (5 days). Geneva, World Health Organization, 2006.
  - Thomas E; Piwoz EG; World Health Organization; UNICEF; USAID *"HIV and Infant Feeding Counselling Tools"* (flipchart, take home flyers, reference guide and orientation guide). Geneva, World Health Organization, 2005/2008.
  - "Integrating Counseling on HIV and Infant feeding into MCH and Community Services". Basic Course; MOH Zambia and LINKAGES Project (12 days).
  - "Integrating Counseling on HIV and Infant feeding into MCH and Community Services, Training of Trainers for the Basic Course", MOH Zambia and LINKAGES Project (12 days).
  - "Integrating Counselling on HIV and Infant feeding into MCH and Community Services, Comprehensive Counselling Course"; MOH Zambia and LINKAGES Project (5 weeks).
  - "Integrated BFHI and MTCT course for MCH and Community Services", Malawi. Basic Course, LINKAGES Malawi (12 days).
  - Other training materials developed within the country or region.
- Select appropriate training materials and make any necessary adaptations to them.
- Identify trainers with the help of appropriate government breastfeeding, nutrition, MCH, and HIV/AIDS authorities.
- Develop a training schedule, considering the need for initial training, refresher training and training of new staff, as well as for training of trainers.
- Allot the necessary budget and staff time.

STEP 2: Train all health care staff in skills necessary to implement this policy.

Common concerns and solutions

Concerns	Solutions
Little or no time for training.	■ Reassess priorities. ■ Consider time saved by staff in the long run if breastfeeding problems as well as HIV transmission are prevented and health of infants improved, thus decreasing time and resources necessary for caring for sick infants and reducing the risks of mother to child transmission (MTCT). ■ Consider scheduling breastfeeding-related training, including training on infant feeding in the context of HIV, in conjunction with staff meetings or other on going training activities or integrating training into daily routines through apprenticeships or on-the-job training when appropriate. ■ Consider requiring staff to read selected materials or complete a self-guided course and then test their knowledge. Combine with clinical practice sessions and performance assessment. ■ Provide a resource collection where staff can borrow books, articles, and videos on breastfeeding, lactation management, and related topics.
Lack of faculty/trainers/resources	■ Identify training resources. Contact national, regional, or international organizations such as UNICEF; WHO; IBFAN; LINKAGES, Wellstart and its Associate network; Institute of Child Health, University of London; La Leche League International, ILCA, WABA, etc., for assistance, if necessary (see list of addresses on page 5-36). ■ Consider initiating a training strategy in which key health staff members are first trained as trainers and then used to train the rest of the staff. Choose strong candidates to be the trainers, if possible including staff from the various service units and shifts. ■ Ask the training coordinator to identify good training videos already prepared or videotape training sessions and have new employees view the tapes. Supplement with clinical practice sessions.

Concerns	Solutions
Staff members do not understand the importance of breastfeeding support nor the need for voluntary testing and counselling (VCT) or HIV and infant feeding counselling and support and thus see little need for training in this area.	▪ Consider holding an orientation or advocacy session for staff before the training cycle begins. Introduce the hospital's breastfeeding policy and review evidence of the importance of breastfeeding support, linking the policies with increased breastfeeding and lowered morbidity and mortality and balance of risks for HIV-positive mothers to replacement feed in this setting. It may also be helpful to review the national (or hospital's) current rates of mother-to-child transmission of HIV. ▪ Identify times when staff can gather for informal reviews of case studies of mothers with breastfeeding problems and how they were resolved. Follow by discussion on how to address similar situations in the future. ▪ Identify times when staff can gather for informal reviews of case studies of mothers with replacement feeding problems and how they were resolved. Follow by discussion on how to address similar situations in the future. ▪ Arrange for bulletin board displays or include items in newsletters featuring BFHI progress, new articles, letters from patients, results from surveys, etc. ▪ Establish an employee HIV and infant feeding support program to increase the number of staff members with positive personal breastfeeding experiences.
Stigmatisation and prejudice by health providers creates a barrier for mothers to learn their HIV status and from seeking the care they need (i.e. prevents mothers from seeking breastfeeding counselling, voluntary counselling and testing for HIV, and infant feeding counselling (BF/VCT/IF).	▪ Training of health providers must address not only the basic facts about HIV generally and MTCT and infant feeding in particular, but it must allow the opportunity for staff to share their own fears and misunderstandings about HIV. ▪ Training must include field experiences where they can visit VCT services, breastfeeding mothers, groups of people living with HIV/AIDS in order to become sensitised to the problem and to help them to become more understanding of mothers who are HIV-positive. ▪ Training on HIV and infant feeding counselling must allow for experiential sessions wherein staff feel safe to air their own biases, misconceptions, prejudices, and fears. Only in this way will these not translate to care of mothers and babies.
Health staff have poor knowledge and clinical skills on HIV in general, and on	▪ Train staff on breastfeeding and the BFHI.

Concerns	Solutions
prevention of mother-to-child transmission of HIV (PMTCT) and on breastfeeding and HIV, and infant feeding counselling.	▪ Train staff on basic facts on HIV and on PMTCT. ▪ Train staff on locally appropriate replacement feeding options. ▪ Train staff on the balance of risks of breastfeeding versus replacement feeding in the mother's own setting.
Attendance at training sessions is low or health staff members are pulled out of the training to go back to the unit.	▪ Stress the importance of HIV and infant feeding counselling and support skills along with other areas of expertise and require attendance at training sessions. ▪ Bring the training to staff on each shift. ▪ Offer continuing education credits for the training or other incentives such as recognition for new skills. ▪ Arrange for several hospitals to sponsor joint training in an attractive site. ▪ Work with hospital management to insure that training is considered a priority.
Hospital and its health staff members rely on funding from companies selling breast-milk substitutes for training activities, conference attendance, etc.	▪ Convince staff of the hidden agenda of the formula industry and the moral issues involved in accepting its funding. In settings that are resource poor and hard hit by the HIV pandemic, families are even more financially compromised than in the past and household food security is very weak. ▪ Calculate the cost to hospital and families of illnesses due to feeding breast-milk substitutes. ▪ Search for alternative sources of funding.

List of training resources

Institute of Child Health
University of London
30 Guilford Street
London WCN 1EH
United Kingdom
Tel.: +44 171-242-9789
Fax: +44 171-404-2062

International Baby Food Action Network (IBFAN)
P.O. Box 781
Mbabane
Swaziland
Tel: [268] 45006
Fax: [268] 44246

International Lactation Consultant Association (ILCA)
1500 Sunday Drive, Suite 102
Raleigh, North Carolina, 27607, USA
Tel.:+1 919-861-5577
Fax: +1 919-787-4916
E-mail: info@ilca.org

La Leche League International
1400 N. Meacham Road
P.O. Box 4079
Schaumburg, IL 60173-4809
USA
Tel.: +1 847-592-7570
Fax: +1 847-969-0460

LINKAGES Project
Academy for Educational Development
1825 Connecticut Avenue, N.W.
Washington, DC. 20009
Website: http://www.linkagesproject.org/
(note: The LINKAGES Project ended December 2006. Publications are still available on the LINKAGES website)

Infant and Young Child Nutrition Project
PATH
1800 K Street, NW, Suite 800
Washington, DC 20006

UNICEF Headquarters
3 United Nations Plaza
44th Street Between1st and 2nd,
New York, NY 10017
USA
Tel.: +1 212-326-7000
Fax: +1 212-887-7465
Website: http://www.unicef.org/

Wellstart International
E-mail: info@wellstart.org
Website: www.wellstart.org

World Alliance for Breastfeeding Action
PO Box 1200
19850 Penang, Malaysia.
Tel.: +60 4-658-4816
Fax: +60 4-657-2655
E-mail: waba@streamyx.com
Websites: http://www.waba.org.my/
www.waba.org.br

World Health Organization
Department of Nutrition for Health and Development
20, Avenue. Appia
CH-1211 Geneva 27
Switzerland
Tel.: +41 22-791-3315
Fax: +41 22-791-4156
E-mail: nutrition@who.int
Website: http://www.who.int/nutrition/en/

World Health Organization
Department of Child and Adolescent Health and Development
20, Avenue. Appia
CH-1211 Geneva 27
Switzerland
Tel.: +41 22-791-3281
Fax: +41 22-791-4853
E-mail: cah@who.int
Website:
http://www.who.int/child_adolescent_health/en/

The ten steps to successful breastfeeding for settings where HIV is prevalent: Summary of experiences

STEP 3: Inform all pregnant women about the benefits and management of breastfeeding.

Actions necessary to implement the step

- Insure routine scheduling of prenatal classes that cover essential topics related to breastfeeding and infant feeding in the context of HIV. Ask the staff to keep records of the classes held and their content.

- Review (or prepare) written guidelines for individual prenatal counselling to insure that key breastfeeding/infant feeding in the context of HIV topics are covered and time is allowed to address concerns of individual mothers. (*"HIV and Infant Feeding Counselling Tools"*, 2005, are available from the World Health Organization. These include a flipchart and take-home flyers that can be used as tools to help counsel HIV-positive women on feeding options).

  Essential topics that are important to address during prenatal education and counselling include:

  - benefits of breastfeeding;
  - early initiation;
  - importance of rooming-in (if new concept);
  - importance of feeding on demand;
  - how to assure enough milk;
  - positioning and attachment;
  - importance of exclusive breastfeeding;
  - risks of artificial feeding and use of bottles and pacifiers;
  - basic facts on HIV and prevention of mother-to-child transmission of HIV (PMTCT);
  - voluntary testing and counselling (VCT) for HIV;
  - locally appropriate replacement feeding options;
  - balance of risks of breastfeeding versus replacement feeding in the mother's own setting.

    (prenatal education should **not** include group education on formula preparation. HIV-positive mothers who have chosen replacement feeding should be given individualized instruction on preparation of the feed of their choice).

- determine if any special strategies are needed to encourage women to attend prenatal classes or counselling sessions (for example, holding late-evening classes for working mothers, providing special incentives for attendance, etc.);

- take away all literature and posters about bottle-feeding and promotion of breast-milk substitutes;
- ensure that formula companies do not provide breastfeeding promotion materials;
- discontinue distribution in prenatal clinics of samples of breast-milk substitutes or coupons.

STEP 3: Inform all pregnant women about the benefits and management of breastfeeding.

Common concerns and solutions

Concerns	Solutions
Promotional materials are free from the formula industry. It's difficult to find replacement materials and the funds to purchase them.	▪ Determine what promotional materials are available free or at low cost from the government, NGOs or other agencies. If there is a BFHI national authority, ask what materials it has available. ▪ Pressure local and national health authorities to make materials available. ▪ Ask the health facility staff to develop low-cost promotional materials with appropriate breastfeeding messages, adapting materials from elsewhere, when appropriate. ▪ Seek other sources of support, including donations from local businesses and volunteer organizations to support the development and production of educational materials.
There's no staff time in busy prenatal clinics for individual counselling or group sessions related to breastfeeding, voluntary testing and counselling and HIV and infant feeding counselling.	▪ Convince staff of importance of such sessions. ▪ Show how this will save time in the future, due to fewer breastfeeding and other infant feeding problems and reduction in levels of illness. ▪ Seek volunteer help from local NGOs, mother-support groups, etc., for conducting classes or providing counselling. ▪ Integrate breastfeeding and infant feeding material into other prenatal classes such as those on childbirth education, infant care, and nutrition.
Promotional and educational materials are often not well adapted to different educational, cultural and language groups.	▪ Ask the staff to produce or adapt promotional or educational materials to meet local needs, as necessary. ▪ Form a network with other health facilities in the area and share materials or work together to develop them.
Busy mothers are reluctant to spend time to receive information or instructions, or don't know the information is available.	▪ Ask the staff to arrange group counselling while mothers are waiting to be seen. ▪ Ask the receptionist or registrar at the health facility to encourage participation in breastfeeding classes.

Concerns	Solutions
	■ Obtain support of clinical staff in assuring time allocation for counselling and stressing its importance during consultations. ■ Ask the staff to prepare written materials that mothers can take with them when they leave the health facility. Include breastfeeding guidelines, overview of the "Ten steps" and hospital breastfeeding support services, invitation/announcement of breastfeeding classes, list of mother-support groups and other community resources, etc. ■ For HIV-positive mothers, HIV and infant feeding education groups may not be appropriate. Provide mothers with a list of individual peer counsellors, including HIV-positive mothers who are trained as HIV and infant feeding counselling volunteers, and other community resources who will visit the HIV-positive mother in her home or where she wishes. ■ Hold an extra prenatal class in late evening for working women. ■ Arrange for a resource centre or area where mothers can look at or borrow breastfeeding-related books, articles, videos, or other materials, at their own convenience. ■ Hold a "breastfed baby parade" or a "beautiful breastfed baby contest" at a park, marketplace, or other public area. ■ Ask private practitioners to refer their clients to breastfeeding classes and other support services and, when appropriate, to HIV and infant feeding education support services.
Pregnant mothers are afraid or unwilling to undergo voluntary testing and counselling (VCT). Therefore they are unable to made informed decisions about feeding options other than breastfeeding.	■ Counsel all pregnant mothers concerning the reasons why VCT will be valuable to them and their unborn babies. ■ Conduct formative research to determine the local barriers to accepting VCT. ■ If a mother knows that she is HIV-positive, arrange for a private room for infant feeding to ensure a mother can make appropriate infant feeding choice while still maintainer her confidentiality. ■ Determine staffing and time needed for counselling women on these issues. Weigh various options for addressing these needs, given resource constraints.

Concerns	Solutions
	Community volunteers may be helpful in sensitising mothers in advance of their attendance at antenatal clinic.
Health administrators say there are not enough funds to create new confidential counselling space and/or for additional staff for VCT or HIV and infant feeding counselling.	▪ Meetings can be held with district and national health decision makers to leverage funding for these activities ▪ Creative, low cost ways can be looked at to better utilize existing space, to build inexpensive barriers to make smaller counselling rooms, and to rearranging timing of clinic services.
Health staff members have poor knowledge and clinical skills on HIV, MTCT and HIV and infant feeding counselling.	▪ Train staff on how to provide appropriate counselling and care related to these issues (see Step 2 above).

The ten steps to successful breastfeeding for settings where HIV is prevalent: Summary of experiences

STEP 4: Help mothers initiate breastfeeding within a half-hour of birth.

Actions necessary to implement the step

- Work with staff to reprioritise perinatal routines for infant care immediately after birth to allow time for immediate mother/baby contact.
- Institute temperature control in labour, delivery, and recovery areas to insure infant temperature regulation.
- Arrange for continuous mother/baby contact after delivery.
- Assign staff responsibility for seeing that early initiation occurs for mothers who have chosen to breastfeed and insure that staff has the skills to give mothers required support.
- Train staff in the importance of suctioning a normal newborn only if necessary (if initial assessment [APGAR] are good and baby is crying lustily it is NOT necessary). If necessary to suction, do so gently as micro trauma to the mucus membranes of the newborn's throat and upper airway (oropharynx) can interfere with breastfeeding and can potentially risk HIV transmission if the mother is breastfeeding.
- Allot staff time if necessary for breastfeeding support.
- Allow support person (family member, "doula", etc.) to stay with the mother during and immediately after delivery and participate in providing breastfeeding, as appropriate.
- When reviewing delivery-room policies, consider issues such as the mother/baby pair's need for privacy, a tranquil environment, subdued lighting, a minimal number of health personnel in room, reduced reliance on sophisticated technology for low-risk births, etc. Assuring confidentiality and privacy for an HIV-positive mother who has chosen replacement feeding may be a challenge, but can be accomplished with staff and administrative commitment.

STEP 4: Help mothers initiate breastfeeding within a half-hour of birth.

Common concerns and solutions

Concerns	Solutions
It is routine to suction all babies immediately after delivery and this is what health staff learned in school.	■ Discuss the anatomic and physiologic reasons for why a normal, crying, newborn will clear its own airway. ■ Review with the head of the maternity, what the current protocol is for babies who do need suctioning and what equipment is used. Suggest that a mucus "bulb" (ear) syringe, may be the cheapest, most effective and least traumatic to use for this purpose.
Not enough staff or personnel time to assist with breastfeeding initiation, considering number of deliveries and other procedures scheduled immediately after birth. Prescribed duration of skin-to-skin contact (at least 30 minutes) is of special concern.	■ Ask key staff to reassess which procedures are necessary immediately after birth. Reorganize "standing orders" to allow time for immediate contact and breastfeeding for mothers who have chosen to breastfeed. For example, review with staff the 5 Steps of the WHO "Warm Chain" recommendations for newborn care that include "immediate drying, skin-to-skin contact, breastfeeding, and postponing weighing and bathing". ■ Reinforce the positive aspects of this change: time savings, no need to warm infant up, minimal separation of the mother and infant, etc. ■ Arrange for staff to be taught how to examine the baby right on the mother's chest. ■ Arrange for a voluntary breastfeeding counsellor to help mothers to breastfeed right after birth, if staff is too busy. The mother and baby can be left by themselves, part of the time, to get to know each other, while the staff continues its work. A mother who has chosen not to breastfeed can still be encouraged to have skin-to-skin contact and hold and cuddle her newborn. ■ If space in labour and delivery is needed right away for another birth, determine if staff can move mother and baby to a nearby empty room and have nurse do charting and exam there, if necessary.

Concerns	Solutions
Mother is too tired after delivery to feed infant.	■ Explain that this is often a misconception. If the mother is given her baby to hold, and encouraged, she will almost always become engaged. ■ Arrange to have a breastfeeding support person help her. ■ Ensure that breastfeeding mothers receive instruction during pregnancy about the importance of early feeds and the fact that mother and baby usually remain alert during this period.
The beds in the delivery room are too narrow. If the infant is placed with the mother (who may be very tired) and there is not constant supervision, the infant may fall.	■ Place the infant on the mother's chest. Elevate the mother's head with pillow, blanket or even her own clothing. If there is danger of the infant falling from a narrow bed, consider wrapping the mother and baby together, lightly, with a sheet or cloth. ■ Alternatively, roll the mother on her side and tuck the newborn next to her to breastfeed.
Need to monitor mothers and babies - therefore need light, personnel, equipment.	■ Ask that delivery room staff consider clustering procedures, for example, assessing maternal and infant condition and vital signs all at the same time and then leaving mother and infant alone.
If the delivery room is cold, it is too chilly for immediate breastfeeding and the baby must be transferred either to the nursery or mother's room for the first feeding.	■ Review with staff the 5 Steps of the WHO "Warm Chain" recommendations (see Step 4 above). ■ Show staff, by using a thermometer under the baby's arm, that skin-to-skin contact with the mother provides enough heat to keep baby warm. ■ If the delivery room is cold, consider whether it is possible to raise the temperature.
Perinatal personnel think that breastfeeding within 30 to 60 minutes after birth is a lower priority than other procedures.	■ Briefly review with the staff the key research on WHY the very early first breastfeeds are linked to ongoing breastfeeding success, (i.e., baby is awake, alert state in first hour, baby's keen sense of smell and crawling reflexes, mother's readiness in first hour, etc. ■ Convince delivering physicians to routinely suggest to mothers "Let's get you started with breastfeeding right now". ■ Ask the staff responsible to add "time of breastfeeding initiation" to the baby's chart.

Concerns	Solutions
	■ Make sure that the physiologic and psychological advantages of early breastfeeding are stressed during staff training. When labour and delivery staff are trained, emphasize their critical link to breastfeeding management and that the first hour is a very important and special time in this connection.

The ten Steps to successful breastfeeding for settings where HIV is prevalent: Summary of experiences

STEP 5: Show mothers how to breastfeed and maintain lactation even if they should be separated from their infants.

Actions necessary to implement the step

- Train staff on milk-expression techniques and safe handling and storage of breast milk.
- Designate staff time for individual or group counselling of mothers on breastfeeding management and maintenance of lactation when mother and baby are separated.
- Designate areas for mothers to breastfeed and for milk expression and milk storage. Purchase equipment (e.g. milk-storage containers, cups and spoons).
- Facilitate sleeping accommodations that allow mothers to stay with their babies if hospitalised. Likewise, allow healthy breastfed babies to stay with hospitalised breastfeeding mothers.
- Designate staff time for individual counselling of HIV-positive mothers on infant feeding options. If a mother wishes, involve a family member of the mother's choice in this counselling.
- Train staff on preparation and storage of replacement feeds so that they can confidently train the HIV-positive mothers who choose this option in preparation, storage and use of the replacement feed of her choice.
- Train staff on how to show HIV-positive mothers, who will replacement feed, how to suppress lactation and how to manage engorgement at home.
- Train staff to care for mothers who are very ill with advanced HIV/AIDS. They will need special counselling, along with a designated relative or support person (if that is the woman's choice), on replacement feeding for the baby and the need for close monitoring of the baby's growth and development.
- Train staff on how to counsel guardians of an infant-who is orphaned on replacement feeding and on the need for close monitoring of the baby's growth and development.

Help staff to understand the dangers of "spillover" to the community if all mothers see replacement feeding demonstrations and get the wrong message about breastfeeding. Here again it is also important that staff understand the dangers if donated formula is made available to "some" mothers. The spillover effect can be minimized if BFHI is strong and if ONLY mothers who are of known HIV-positive status are counselled on feeding options other than breastfeeding.

STEP 5: Show mothers how to breastfeed and maintain lactation even if they should be separated from their infants.

Common concerns and solutions

Concerns	Solutions
In hospitals where the postpartum stay is very short or staffing is minimal, there's very little time for counselling.	■ Emphasize counselling during prenatal period. ■ Reassign nursery staff to do counselling. ■ If minimal time is available for individual counselling, arrange that most of the instruction is provided through group classes. ■ Require that hospital staff members observe at least one breastfeed before discharging each mother/baby pair. ■ Use infant feeding volunteers to make rounds and provide advice. Arrange to train volunteers and provide them with guidelines concerning their roles and any restrictions. ■ Have infant feeding (breastfeeding and the locally available and appropriate replacement feeding methods) education handouts available after delivery. ■ Have the staff arrange to show videos to reinforce proper preparation and storage of the chosen replacement feeding methods and lactation suppression techniques. Bedside instruction may or may not be the appropriate place for this counselling.
Reluctance on the part of staff to provide breastfeeding counselling because of lack of competence.	■ Training must include basic facts on MTCT and review of the global and national infant feeding/MTCT guidelines and policies. ■ Provide short instruction sheets concerning what advice to give for common breastfeeding problems including guidelines for counselling mothers who are HIV-positive or of unknown status. ■ Post a list of staff members Encourage other health personnel that ask for their assistance to watch as these experienced staff members give mothers advice. ■ Make sure an integral part of training includes clinical experience in working with breastfeeding mothers and dealing with common problems, as well as on locally appropriate replacement feeding,

Concerns	Solutions
	lactation suppression, management of engorgement, and increased risks of MTCT if there is ANY breastfeeding.
Lack of understanding among staff of the importance of breastfeeding in the immediate postpartum period and the problems caused by inaccurate or inconsistent messages.	▪ In discussions with staff, emphasize the importance of patient-centred care and the role breastfeeding education plays in this connection. ▪ Encourage trainers, first, to conduct focus groups with nursing staff on what they were taught and why they do what they do, and then to tailor training to address identified problems.
Fear on the part of staff and mothers of wet-nursing and use of stored breast milk for feeding other babies because of HIV transmission.	▪ Wet nursing and using breast milk from other mothers is acceptable in some settings and not acceptable in others. Local formative research will show whether or not mothers will choose these as alternative feeding methods. ▪ Expressed breast milk from a donor will need to be heat treated per most current WHO recommendations. ▪ Generally wet nursing is no longer encouraged as a feeding option, although there are exceptions to this in the case of a family member who is known to be HIV negative.
Lack of milk storage area and equipment.	▪ No sophisticated equipment is needed for milk storage. Only a refrigerator and clean collection containers for expressed milk are required. ▪ Milk storage may not be needed if mothers have day-and-night access their hospitalised infants for breastfeeding.
Healthy infants will get sick if kept with their mothers when their mothers become sick and are admitted to the hospital.	▪ Offer information regarding the protective effects of breastfeeding and the health risks to newborns if not kept with their mothers and breastfed even if their mothers are ill and hospitalised.
Breastfeeding/replacement feeding mothers who are sick in the hospital will not be able to take care of their newborn infants who room in with them.	▪ Ask the staff to evaluate this problem case by case. Perhaps a relative or friend will need to room-in to care for the infant in some situations.
Counselling on replacement feeding will give a "mixed" message to all mothers and may undermine breastfeeding (spillover).	▪ Help staff to understand the dangers of "spillover" to the community if all mothers see replacement feeding demonstrations and get the wrong message about breastfeeding. Here again it is also important that staff understand the dangers if donated formula is made available to "some" mothers. The spillover effect can be minimized if BFHI is strong and if

Concerns	Solutions
	ONLY mothers who are of known HIV-positive status are counselled on feeding options other than breastfeeding.

The ten steps to successful breastfeeding for settings where HIV is prevalent: Summary of experiences

STEP 6: Give newborn no other food or drink other than breast milk unless medically indicated.

Actions necessary to implement the step

- Examine routine policies concerning the use of breast-milk substitutes. Make sure they conform with the WHO/UNICEF list of "**Acceptable medical reasons for use of breast-milk substitutes**" (should be included in hospital policy, see Step #1).

- Examine current national and global policies on the mother-to child transmission of HIV and infant feeding (see WHO Summary of New Recommendations on the USE of ARV in preventing MTCT of HIV, October 2000). http://www.who.int/hiv/pub/guidelines/pmtctguidelines3.pdf?

- Ensure that staff members caring for HIV-positive mothers are counselled so they can make informed infant feeding choices best for their own setting and circumstances and that they understand the risks of ANY mixed feeding. This applies to BOTH breastfeeding mothers who should exclusively breastfed and replacement feeding mothers who should exclusively replacement feed.

- Arrange that small amounts of breast-milk substitutes be purchased by the hospital for use if medically indicated.

- Store breast-milk substitutes and related equipment and supplies out of sight.

- Develop policies that facilitate early breastfeeding of low-birth-weight infants and infants delivered by C-section and for HIV-positive mothers who have chosen to breastfeed, when there are no medical contraindications (can be included in hospital policy, see Step # 1).

- Ensure that adequate space and equipment is available for milk expression and storage (see Step # 5).

STEP 6: Give newborn no other food or drink other than breast milk unless medically indicated.

Common concerns and solutions

Concerns	Solutions
Staff members or mothers are worried or confused about what is the safest feeding option for HIV-positive mothers and may think that replacement feeding and/or mixed feeding is safer than exclusive breastfeeding.	▪ Review with staff the current research on the relative safety of different feeding options (Coutsoudis 1999, 2001 and WHO Oct 2000). ▪ Review with staff the balance of risks that an HIV-positive mother must weigh in deciding on what infant feeding method is best for her (WHO/UNICEF/UNAIDS/UNFPA (HIV and infant feeding: A guide for health-care managers and supervisors) 2003, pp. 5-7 – Session 4 HIV Handout, Overview: Infant and young child feeding in the context of HIV).
HIV-positive mothers are afraid that if they are seen NOT breastfeeding they will be stigmatised and labelled as having AIDS or being promiscuous. Some are afraid of physical abuse.	▪ Antenatal counselling for all mothers on HIV is essential. This counselling helps dispel myths about HIV and MTCT and also helps HIV-positive mothers weigh the stigma issues for themselves and their families *before* delivery. ▪ Follow-up support for HIV-positive mothers, regardless of their infant feeding choice, is as important as follow-up for breastfeeding mothers.
Staff members or mothers worry that mothers' milk is insufficient for babies in the first few hours or days after birth because of delay in the "true milk" coming in.	▪ Make sure that staff and mothers are provided information about the sufficiency and benefits of colostrums and the fact that nothing else is needed (e.g. water, tea, or infant formula) in addition to breast milk. Include the fact that it is normal for a baby's weight to drop during the first 48 hours. ▪ For HIV-positive mothers who have chosen to breastfeed it is essential that they understand that NO other feeds other than their own breast milk (including colostrum) should be given to their babies.
Staff members or mothers fear that babies will become dehydrated or hypoglycaemic if given only breast milk.	▪ Establish a literature review committee and present findings related to this issue at a staff meeting. ▪ Make sure that staff members are reminded of the signs that babies are getting all they need from breastfeeding, and encourage them to pass on this information to mothers who are worried that their milk is insufficient. ▪ Consider arranging for brief in-service training

Concerns	Solutions
	sessions to demonstrate how to assess the effectiveness of a breastfeed and give nurses supervised practice in making their own assessments. ▪ Remove glucose water from the unit, so it is more difficult to use routinely.
Mothers request supplements.	▪ Arrange for mothers to be informed during the prenatal and early postpartum period concerning the problems that arise from supplementation. ▪ Depending on the national policy and hospital there may or may not be small stocks of replacement feeds for HIV-positive mothers.
Mothers who are HIV-positive request replacement feeds.	▪ Counsel the mother about the risks of mixed feeding and that either exclusive breastfeeding or replacement feeding is the best way for her to reduce risks of HIV transmission. ▪ For mothers who have chosen replacement feeding it is best that she begin from birth to buy her own replacement feeding supplies. She will need to sustain this feeding method for as long as the baby needs breast milk substitutes. ▪ Depending on the national policy and hospital policy there may or may not be small stocks of replacement feeds for HIV-positive mothers, but the point above is important to consider.
Some mothers are too malnourished to breastfeed.	▪ Make sure that staff members realize that even malnourished mothers produce enough milk for their infants if their infants feed on demand. ▪ In cases where the family provides food for the mother while she is in the hospital, use the opportunity to inform family members about the importance of sound nutrition for the mother and inexpensive, nutritious dietary choices.
The counselling and support necessary to achieve exclusive breastfeeding is too expensive.	▪ Stress that costs will be more than offset by savings to the hospital when purchase, preparation and provision of breast-milk substitutes is minimized. Emphasize that savings will also accrue from reduction in neonatal infections, diarrhoea, etc.
Medications are being given to the mother that are considered contraindications to breastfeeding.	▪ Ensure that staff members are familiar with the list of acceptable medical reasons for supplementation that are included in the revised Annex to the Global Criteria for the Baby-friendly Hospital Initiative and as Handout 4.5 in Session 4 of this course.

Concerns	Solutions
	■ Ask the pharmaceutical department to prepare a list of drugs that are compatible and incompatible with breastfeeding.
Mothers will feel they have been denied something valuable if distribution of samples or discharge packs is discontinued.	■ Consider replacing samples of breast-milk substitutes with a "breastfeeding pack", which includes information on breastfeeding and where to get support and may include samples of products that don't discourage breastfeeding.

The ten steps to successful breastfeeding for settings where HIV is prevalent: Summary of experiences

STEP 7: Practice rooming-in – allow mothers and infants to remain together – 24 hours a day.

Actions necessary to implement the step

- Make needed changes in physical facility. Discontinue nursery for normal newborns. Make adjustments to improve comfort, hygiene, and safety of mother and baby.
- Require and arrange for cross training of nursery and postpartum personnel so they all have the skills to care for both baby and mother (see Step # 2).
- Institute individual or group education sessions for mothers on mother-baby postpartum care. Sessions should include information on how to care for baby who is rooming-in.

Protect privacy and confidentiality of a mother's HIV status by providing the same routine care to ALL mothers and babies including rooming-in/bedding –in, so that no one is stigmatised or set apart as different.

STEP 7: Practice rooming-in – allow mothers and infants to remain together – 24 hours a day.

Common concerns and solutions

Concerns	Solutions
It is difficult to supervise the condition of a baby who is rooming-in. In the nursery one staff member is sufficient to supervise a number of babies.	■ Assure staff that babies are better off close to their mothers, with the added benefits of security, warmth, and feeding on demand. "Bedding-in", if culturally acceptable, provides the best situation for gaining all these benefits and eliminates the need to purchase bassinets or cots. Mothers can provide valuable assistance when their infants are rooming-in or bedding-in, alerting staff if problems arise. ■ Stress that 24-hour supervision is not needed. Periodic checks and availability of staff to respond to mothers' needs are all that is necessary.
Mothers need to get some rest after delivery (especially at night) and babies still need to eat. Especially after caesarean sections, mothers need time to recuperate. Babies should be fed breast-milk substitutes during this period.	■ Ask staff to assure mothers that by "rooming-in" they are doing the best for their babies, that not much extra work is involved, and that health workers are available in the unit to assist them if needed. ■ Ask staff to discuss with mothers the fact that the more babies are with them the more they'll understand what is normal and abnormal and how to provide good care. It is best to practice being with their babies (even during the night) while still in the hospital, when staff is around to help if necessary. ■ Suggest to the staff that after good breastfeeds mothers may even sleep better when their babies are with them. ■ Make sure that staff knows how to help mothers who have had Caesarean sections choose breastfeeding techniques and positions that are comfortable and effective. ■ If regional or local anaesthesia is used during Caesarean sections, early breastfeeding will be less of a problem. However, a mother who has had general anaesthesia can breastfeed as soon as she is conscious if a staff member supports her.
Mothers in the postnatal ward may worry if they room-in in close proximity to HIV-positive mothers because of misconception about how HIV is spread.	■ Staff members can be sensitive to this concern and reassure mothers that HIV is not spread through casual contact. Explain to mothers that requests that HIV-positive mothers be "isolated" may contribute to "stigmatisation" of people with HIV/AIDS and help perpetuate misconceptions about how HIV is spread

Concerns	Solutions
	(see Step # 2 above).
Infection rates will be higher when mothers and babies are together than in a nursery.	■ Stress that the danger of infection is less when babies remain with their mothers than when in the nursery and exposed to more caretakers. ■ Provide staff with data that show that with rooming-in and breastfeeding, infection rates are lower, for example, from diarrhoeal disease, neonatal sepsis, otitis media, and meningitis.
If visitors are allowed in the rooming-in wards, danger of infection and contamination will increase. In situations where visitors are allowed to smoke, it is a health hazard to mother and baby. Some mothers feel they need to entertain their visitors and that they will have time for their babies after discharge.	■ Emphasize that babies receive immunity to infection from colostrum, and that studies show infection is actually less in rooming-in wards than in nurseries. ■ To support mothers further in doing the best for their babies, limit visiting hours and the number of visitors, and prohibit smoking.
The rooms are too small.	■ No need to have bassinets for infants. No extra space is necessary for “bedding-in”.
Babies will fall off the mothers’ beds.	■ Emphasize that newborns don’t move. If mothers are still concerned, arrange for the beds to be put next to the wall or, if culturally acceptable, for the beds to be put in pairs, with mothers keeping their babies in the centre.
Full rooming-in, without more than half hour separations, seems unfeasible because some procedures and routines need to be performed on the babies outside their mothers’ rooms.	■ Study these procedures well. Some are not needed. (Example: Weighing baby before and after breastfeeding) Other procedures can be performed in the mother’s room. ■ Review advantages to mother and time saved by physician when he examines the infant in front of the mother.
Private patients feel they have the privilege to keep their babies in nurseries and feed them breast-milk substitutes, receive expert help from nursery staff, etc.	■ Whatever is best for public patients is also best for private patients. ■ Consider pilot projects to “test” rooming-in in private as well as public wards.
Some private hospitals make money from nursery charges and thus are reluctant to disband these units.	■ Explore the compensatory savings from rooming-in due to less frequent use of breast-milk substitutes, less staff time for bottle preparation and nursery care, less infant illness, etc. ■ Consider continuing to charge the same fees when the nursery is disbanded, reallocating the charges for mother/baby care on the wards.

Concerns	Solutions
Babies more easily kidnapped when rooming-in than in the nursery.	■ Suggest to the staff that they ask mothers to request that someone (e.g., other mothers, family members, or staff members) watch their babies if they go out of the room. ■ Mothers need to know that there is no reason a baby should be removed without the mother's knowledge.
An HIV-positive mother in the postnatal ward may be seen by others replacement feeding her infant, and confidentiality will be hard to protect.	■ For an HIV-positive mother who chooses replacement feeding, confidentiality WILL be an issue, but optimally a mother will have already been counselled in the antenatal period and have made an informed decision that replacement feeding is most appropriate for her and her baby. ■ For an HIV-positive mother who chooses breastfeeding, she should be supported to exclusively breastfeed, just like the other mothers, and there will be no obvious difference in her care. ■ Staff who care for mothers in HIV prevalent settings will ALL need to be trained to be sensitive to confidentiality issues at all times, including in record keeping.

The ten steps to successful breastfeeding for settings where HIV is prevalent: Summary of experiences

STEP 8: Encourage breastfeeding on demand.

Actions necessary to implement the step

- Introduce rooming-in (see Step # 7).
- Examine routine policies concerning infant procedures (e.g., blood drawing, physical examination, weighing, bathing, circumcision, cleaning of rooms, etc.) that separate mother and baby; conduct the procedures on the ward, whenever possible.
- Ensure that staff training includes the definition and benefits of on-demand feeding and key messages concerning this issue that mothers should receive during breastfeeding counselling (see Step # 2).

STEP 8: Encourage breastfeeding on demand.

Common concerns and solutions

Concerns	Solutions
On-demand feeding is good, but does not provide enough milk for the baby. Colostrum is insufficient and supplementation is necessary.	▪ Remind staff that the infant's stomach capacity is 10 - 20 ml at birth and the quantity of colostrum is physiologically matched.
In situations where rooming-in is not practised, it saves on staff time and effort if babies are fed in the nursery instead of taking babies to mothers to breastfeed at unpredictable times.	▪ Consider rooming-in, which will take less staff time than keeping babies in the nursery and feeding them breast-milk substitutes or transporting them back and forth for breastfeeding.
When babies are taken out of the rooms for exams, lab tests, and measurement procedures this interferes with feeding on demand.	▪ Encourage physicians to examine babies in mothers' rooms. Emphasize that it is a time-saver since mothers' questions can be answered and any education provided at the same time. Stress that patient satisfaction also increases as a result. ▪ Arrange for staff to complete other procedures in mothers' rooms, when feasible. For example, the weighing scale might be wheeled from room to room. ▪ Ask the staff to try to schedule after feedings procedures that must be performed outside the rooms, or allow mothers to accompany their babies so they can breastfeed when required. ▪ Inform the staff that babies are not to be supplemented while they are away for procedures. If necessary, mothers should be called to breastfeed.
Visiting hours that are too long or unrestricted interfere with breastfeeding on demand. Mothers may be embarrassed to breastfeed in front of visitors, may be too busy entertaining visitors, or may be too exhausted afterwards to feed their babies.	▪ Shorten visiting hours or limit them (i.e. 2 visitors per patient or only immediate family and grandparents). ▪ Arrange for the staff to provide mothers with signs they can place on their doors (if they have private rooms) to ask that they not be disturbed if resting or feeding their babies. ▪ Ask instructors in prenatal classes to emphasize the importance of limited visiting hours to allow more time for mother/baby learning, feeding and rest.

The ten steps to successful breastfeeding for settings where HIV is prevalent: Summary of experiences

STEP 9: Give no artificial teats or pacifiers.

Actions necessary to implement the step

- Examine routine policies. Hospital policies should:
  - discourage mothers or family members from bringing pacifiers from outside for their babies' use;
  - prohibit use of bottles and teats or nipples for infant feeding within the hospital;
  - provide guidance for use of alternative feeding methods, for example, use of cups and spoons if breast-milk substitutes are used;
- Purchase supplies (e.g. cups, syringes, spoons) for use in feeding breast-milk substitutes to infants (without using teats or bottles) in cases where there are acceptable medical reasons for supplementation (see Step # 5).

STEP 9: Give no artificial teats or pacifiers.

Common concerns and solutions

Concerns	Solutions
When infants are upset, pacifiers will help quiet them. Also, infants may not be hungry, but still need to suck.	▪ Babies may cry for a variety of reasons. Ask staff to explore alternatives to pacifiers (e.g. encouraging mother to hold baby, offering the breast, checking for soiled diaper), possibly through a group discussion.
The nursing staff and/or mothers do not believe that pacifier use causes any problems.	▪ Make sure that staff and mothers are educated concerning problems with pacifier use (e.g. interferes with oral motor response involved in breastfeeding, easily contaminated). ▪ Establish an ad hoc committee to review the literature and make a presentation to the administrative and medical staff on issues related to pacifier use. ▪ Post a notice visible to both staff and patients -- "no more pacifiers for breastfed infants" -- and list the reasons why. ▪ If the mother requests a pacifier, have staff discuss with her the problems it may cause. Consider asking her to sign a written informed consent form that discusses the risks of nipple confusion, impaired milk supply and contamination. ▪ In settings where contamination of pacifiers can lead to diarrhoea and other illness, it is best to encourage calming the bay in other ways or to use a mother's or family member's washed finger as a pacifier.
Pacifiers are provided free of charge for mothers requesting them.	▪ Calculate the savings to the hospital from not buying pacifiers or artificial teats. ▪ Establish a policy stating that the hospital will not supply free pacifiers and mothers, if they wish to use them, must bring their own.
Infants may aspirate if fed by cup.	▪ Provide the staff with examples (through video, slides, or visit) of infants being successfully fed by cup in other health facilities. ▪ Emphasize the feasibility and safety of cup feeding.
Purchasing cups, syringes, and spoons may be expensive.	▪ Special types of cups, syringes and spoons are not necessary. They just need to be clean.

The ten steps to successful breastfeeding for settings where HIV is prevalent: Summary of experiences

STEP 10: Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or clinic.

Actions necessary to implement the step

- Work with key hospital staff to identify hospital and community resources for mothers that are both breastfeeding and replacement feeding.

- Make sure that the hospital provides follow-up support for breastfeeding and replacement feeding, for example, through a postnatal clinic, and schedules the first visit within a week of discharge and insures that infant feeding is assessed and any problems are identified and addressed.

- Explore ways to link mothers with community-level breastfeeding support resources, such as health centres, MCH clinics, and breastfeeding support groups (NGOs such as local La Leche League groups). One means would be to send a discharge/referral slip to the community clinic where the mother can go for postnatal care and at the same time tell the mother where she can receive breastfeeding support.

- Explore ways to link HIV-positive mothers with community-level resources for people living with HIV/AIDS, including health centres, MCH clinics, NGOs, churches, and home based care groups. Optimally referrals will be done in such a way as to preserve privacy and confidentiality. In some settings support groups of HIV-positive mothers and their babies may be appropriate, in others not and support may need to be one-on-one.

- Consider arranging for mother-support groups to make contact with mothers while still in the hospital. For example, volunteers can offer refreshments to mothers on the wards and at the same time provide information on where to go for breastfeeding support. Volunteers can help conduct hospital lactation clinics, give breastfeeding advice on wards, etc. For HIV-positive women it will depend on individual circumstances as to how this initial contact is made.

- Consider asking hospital personnel to organize breastfeeding or replacement feeding support groups for which, at least initially, hospital staff serve as facilitators. Arrange training for hospital staff on organizing and facilitating mother-support groups and consider similar training for other potential mother-support group leaders.

- Make information (verbal and written) on breastfeeding support resources available to mother, family and community.

- Make information (verbal and written) on locally appropriate replacement feeding options and resources available to the HIV-positive mother, and, if she wishes, her family and community.

STEP 10: Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or clinic.

Common concerns and solutions

Concerns	Solutions
The hospital staff members are unfamiliar with good sources of breastfeeding support to which they can refer mothers.	▪ Form an ad hoc group with a representative from the hospital, the local MCH clinics, and any mother support groups that can be identified. Ask groups to develop a resource list and make it available to hospital staff, local physicians and mothers. ▪ Encourage local mother-support groups to meet occasionally at the hospital, which can provide space and publicity free of charge. ▪ Arrange for community breastfeeding support groups to provide a mini-training session to the staff on the services they offer. ▪ Arrange for community HIV support groups to provide a mini-training session to the staff on the services they offer related to HIV-positive mothers and their families.
There is a mistaken impression that health professionals aren't supposed to be involved in organizing or facilitating mother-support groups.	▪ If lay leaders are not available to organize and facilitate mother-support groups, explore using health staff for this purpose. If health staff members are involved, they need to be trained not to direct or dominate the groups, but to facilitate sharing and support among mothers. As lay leaders come forward, they can receive additional training and take over the group work.
Lay group leaders and their members may provide incorrect information.	▪ Make sure that potential mother-support group leaders are provided with adequate training and that the mothers themselves receive accurate prenatal and postnatal education on breastfeeding/locally appropriate replacement feeding from the hospital staff.
Hospital administrators and staff already have too much to do; organizing support groups would be a serious imposition.	▪ Explore whether knowledgeable volunteer groups or individuals can help in, or even take full responsibility for, this activity.
Mother-to-mother support doesn't work in the local culture.	▪ Explore culturally appropriate support mechanisms for breastfeeding/replacement feeding mothers. For example: ▪ involving traditional or religious organizations for women in providing breastfeeding or more general

Concerns	Solutions
	mother support; ▪ involving existing community-based HIV support groups in providing breastfeeding, replacement feeding or more general mother support; ▪ reinforcing the extended family role in supporting breastfeeding/replacement feeding by providing updated information on breastfeeding to family members most likely to provide advice.
Post-discharge hospital follow-up is too costly. Home visits are either impossible or only possible in emergencies or for very high-risk patients. Phone contact is either not possible or, at best, unreliable.	▪ Examine what follow-up mechanisms are most feasible in the local situation, considering constraints. For example: ▪ arranging for breastfeeding/replacement feeding assessment and support during postnatal visits; ▪ arranging home visits at least for the mother at highest risk of breastfeeding/replacement feeding failure; ▪ referring mothers to community health centres, outreach workers, and/or volunteer groups that can provide support (following the caveats above about preserving privacy and confidentiality).

Session 6:
Costs and savings

Objectives

At the conclusion of this session, participants will be able to:

Describe the potential costs and savings related to converting to and maintaining baby-friendly health facilities.

Suggest several creative ways to minimize costs or use existing resources when implementing the Ten Steps.

Describe how they would estimate costs and savings related to breastfeeding promotion within their own health facilities.

Discuss the costs and savings related to breastfeeding promotion for the family, the larger health system, and the country (optional).

Duration

Costs and savings in health facilities (including in participants' own institutions): 50 minutes
Costs and savings for the family: 15-30 minutes (optional)
Costs and savings at the health system and national level: 15 minutes (optional)
Costs and savings related to breastfeeding promotion (discussion): 10 minutes

Total: 1 to 1¾ hours

Teaching methods

Presentation
Group work
Discussion

Preparation for session

Review the slides/transparencies provided with the session plan. They present data on costs and savings in both non-industrialized and industrialized country settings. You may want to use only a selected set of the slides/transparencies in the session, emphasizing those with most relevance to your own situation.

Prepare additional slides/transparencies presenting costs and savings data from your own country or region, if feasible. Using local and national data in this session will greatly enhance its relevance for the participants. If information is not readily available, the process of collecting it should begin several weeks before the course.

A miniature version of the slide/transparency presentation has been included as a handout for participants. If a number of slides/transparencies are omitted from the presentation and/or other slides or transparencies are included, consider adjusting the handout as well.

After reviewing the entire session, decide whether to include sections 4 and 5, which focus on costs and savings at the family, health system and national levels. Costs and savings at the health facility level (examined in sections 1-3) are especially relevant for health facility administrators. If your audience includes health care policy-makers responsible for decisions related to the larger health care system, sections 4 and 5 may be of particular interest to them. If there is a need to shorten the session, consider omitting some or all of the material in these last sections.

If you plan to include the exercise described in section 4, decide whether to use slide/transparency 6.15 or 6.16 and Handout 6.4a or 6.4b, depending on whether there are different average or minimum wages for urban and rural areas of the country, and gather the data needed for the exercise on costs of various brands of formula and average or minimum wages. Before the session begins adjust whichever handout you will use so it uses formula “tins” of a weight commonly found locally (for example 500g tins or 450g tins) and adjust the number needed so 20 Kg of formula will be provided in the first six months (for example 40 500g tins or about 44 450g tins). Then fill in the information concerning brands of formula and their costs, as well as average (or minimum) wages.

Training materials

Summaries

Available summaries of research studies presented in Session 6

Handouts

6.1 Presentation for session 6
6.2 Cost analysis of maintaining a newborn nursery at the Dr. Jose Fabella Memorial Hospital
6.3 Table 1: Potential costs and savings associated with breastfeeding promotion in health facilities (organized according to the Ten Steps)
6.4a: Exercise: The percentage of wages needed to feed formula to an infant for six months
6.4b: Exercise: The percentage of urban and rural wages needed to feed formula to an infant for six months.

Slides/transparencies

6.1 - 6.32

The website featuring this Course contains links to the slides and transparencies for this session in two Microsoft PowerPoint files. The slides (in colour) can be used with a laptop computer and LCD projector, if available. Alternatively, the transparencies (in black and white) can be printed out and copied on acetates and projected with an overhead projector. The transparencies are also reproduced as the first handout for this session, with 6 transparencies to a page.

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*References used in the Session Plan.

Outline

Content	Trainer's Notes
1. Costs and savings from breastfeeding promotion in health facilities	***Presentation and discussion: 10 minutes***
■ Brief examples of savings from breastfeeding promotion and rooming-in in health facilities:	Mention that a mini-version of the presentation is reproduced in Handout 6.1 and included in the participants' folder. Show slide/transparency 6.1, which provides the heading for this part of the session focusing on costs and savings for health facilities, and then show slides/transparencies with examples of savings from breastfeeding promotion in health facilities. If possible, use slides/transparencies showing data from your own country or region. If desired, use some or all of the slides/transparencies below which provide additional examples from a variety of countries:
▪ A reduced need for infant formula, bottles, glucose and oxytocin in the Maternal and Child Hospital in Tegucigalpa, Honduras *(Huffman et al.).*	Slide/transparency 6.2
▪ Reduced formula purchases and intravenous fluids used at Sanglah Hospital in Indonesia *(Soetjiningssih and Suraatmaja S).*	Slide/transparency 6.3
▪ Reduced length of newborn hospitalization at Sanglah Hospital in Indonesia *(Soetjiningssih and Suraatmaja S).*	Slide/transparency 6.4
▪ Decreased use of bottles in the newborn nursery in Hospital Santo Tomas in Panama City *(Levine et al.).*	Slide/transparency 6.5
▪ Decreased need for staff in the Clinical Hospital of the Catholic University in Chile *(Valdes et al.).*	Slide/transparency 6.6 Emphasize, if appropriate, that staff don't have to be laid off but can be reassigned to other important tasks.
■ Cost analysis of maintaining a newborn nursery at the Dr. Jose Fabella Memorial Hospital. ▪ Calculation of recurrent costs for maintenance of a nursery for normal newborns with formula feeding	Show slides/transparencies 6.7 - 6.11 and refer participants to Handout 6.2. Inform the participants that the Medical Director of Fabella Hospital made this estimation of savings resulting from conversion to rooming-in at the hospital by calculating what extra costs in current prices would be involved in maintaining a full

Content	Trainer's Notes
compared to the current system of rooming-in and intensified breastfeeding promotion *(Gonzales).*	system of nursery care and formula feeding as compared to rooming-in. Review the summary of costs for maintaining the nursery presented in the slides/transparencies and suggest that the participants look later at Handout 6.2 if they are interested in additional details on how the calculations were made. Mention that costs for converting to rooming-in (such as for training and physical changes) need to be calculated as well. Ask for questions or comments from the participants.
2. Creative ways to minimize costs or use existing resources when implementing the Ten Steps	***Presentation and discussion: 10 minutes***
■ Presentation of examples from a variety of countries of ways to minimize costs or use existing resources: ▪ Reassign staff from the normal newborn nursery and/or formula room to provide mother/baby care and education on the rooming-in wards. ▪ Organize a group of volunteers to provide breastfeeding counselling on the wards or ask a local mother-support organization to provide this service.(provide training and written guidelines for the volunteers to insure quality). ▪ "Bed-in" babies with their mothers, if culturally acceptable, rather than providing them with cribs or bassinets. ▪ Use a simple refrigerator for breast milk storage and low-cost containers for cup-feeding. ▪ Counsel mothers, who are staying in the hospital so they can breastfeed their premature or sick babies, and, if possible, assist them in providing care.	Show slides/transparencies 6.12 and 6.13 and describe the examples of creative ways to minimize costs or use existing resources when implementing the Ten Steps. Stress the fact that what is appropriate and feasible will vary from country to country and that these examples are presented simply to provide ideas on ways health facilities might cut costs as they implement the Ten Steps.
■ Examples or suggestions from participants on other creative ways to cut costs or use existing resources more	After the examples have been given, ask the participants for their own suggestions concerning creative ways to cut costs or use existing resources (if participants do not have many

Content	Trainer's Notes
efficiently and economically.	examples to contribute, ask the trainers for ideas and/or contribute some further suggestions yourself). List the suggestions on a blackboard or flip chart.
3. Estimating costs and saving in the participants' own institutions:	***Brief presentation, group work, and discussion: 30 minutes***
■ Review of the Table that lists the potential costs and savings associated with breastfeeding promotion related to each of the "10 steps" in health facilities.	Refer participants to Handout 6.3. Describe how the Table can be used to help identify the items to consider when calculating costs and savings. Ask participants sitting next to each other to work in groups of two or three to examine the Table for 10 minutes or so and circle items in the various categories that are likely to result in both substantial costs and substantial savings in health facilities like their own as changes are made to better promote breastfeeding and become baby-friendly. Ask each group to report briefly on the costs and savings they have identified. List the items in a flipchart under two columns. Emphasize that it can be very useful to estimate the costs and savings at each of the participant's own health facilities. If the savings outweigh the costs, this is an added incentive for becoming baby-friendly. If some health facilities will need to give up acceptance of free or low-cost supplies of breast-milk substitutes in order to be designated baby-friendly, emphasize again that this is definitely required under the International Code and is better for mothers and babies.
■ Discussion of strategies participants can use to calculate the actual costs and savings associated with breastfeeding promotion in their own health facilities. ▪ Participants can consider whether it would be useful and feasible to calculate the costs and savings related to implementing the Ten steps to successful breastfeeding in their own facilities and, if so, how they would go about it.	Ask participants for ideas concerning how they might calculate costs and savings in their own institutions. Issues could include: ■ Whether costs and savings data are important at their institution for making decisions concerning BFHI and breastfeeding and, if so, who would use the data. ■ Whether they would rather choose to do simple estimates of key costs and savings or plan more detailed, complete studies. ■ Whether the study would be retrospective (like the study at Fabella Hospital, which estimated added costs if a nursery were reinstated) or prospective (measuring

Content	Trainer's Notes
	costs and savings realized as BFHI is being implemented). ■ Depending on the type and complexity of the study, whether an economist would need to be involved.
4. Estimating costs and savings for the family (optional)	■ Presentations, group work, and discussion: 15-30 minutes
	■ Decide whether to include these next two sections in the session, depending both on time available and whether family, health care system and national costs and savings are important to address, considering the types of participants in the course. If desired, an abbreviated version of this section can be presented using only selected slides/transparencies.
■ It is important to look briefly at costs and savings of breastfeeding promotion for the family, both because the effects of the Baby-friendly Hospital Initiative don't stop at the hospital door, and because it is useful to consider the impact of breastfeeding promotion from a broader perspective.	Show slide/transparency 6.14, which provides the heading for the part of the session that focuses on costs and savings for the family.
■ Examples of lower costs for the family that can result from optimal breastfeeding:	

Content	Trainer's Notes
▪ Breastfeeding can greatly reduce family expenses, especially in situations where the cost of formula consumes a good portion of an average worker's wage *(WHO).*	Ask the participants to calculate and compare the cost for infant formula for six months with the average (or minimum) wage for that same period. Before the session starts, decide whether to use slide/transparency 6.15 or 6.16 and Handout 6.4a or 6.4b, depending on whether there is one average (or minimum) wage for the country, or different wages for urban and rural areas. As mentioned under "Preparation for Session", before the session begins adjust whichever handout you will use so it uses formula "tins" of a weight commonly found locally (for example 500g tins or 450g tins) and adjust the number needed so 20 Kg of formula will be provided in the first six months (for example 40 500g tins or about 44 450g tins). Then fill in the information concerning brands of formula and their costs, as well as average (or minimum) wages. The exercise can be completed by the participants as a group for one brand of formula, with the trainer filling in the answers on the transparency. Alternatively, it can be done in several small groups, with each group making the calculations for a different brand of formula and reporting on their results. Discuss the results briefly, emphasizing the unnecessary financial burden formula feeding places on the family, since feeding a baby on formula costs a large part of an average (or minimum) wage, which many families cannot afford. Mention that there are other costs related to formula feeding, in addition to the costs for formula, such as costs for fuel and water, time spent in washing or sterilizing bottles and teats, etc. Stress the fact that promotion of formula to the public is not permitted under the International Code and that it is the responsibility of health services to ensure that they do not in any way promote or endorse the use of breast-milk substitutes.
▪ Here are a few country examples of costs for one month of breast-milk substitutes for a 3 month old baby, the minimum wage, and percentage of this wage that it would cost to purchase the formula (*Gupta and Khanna*).	Show slide/transparency 6.17. Point out that these estimates don't include the time it takes to purchase, prepare, and administer the artificial feeds.

Content	Trainer's Notes
■ Costs for supplementing breastfeeding mothers' diets are much lower than for purchasing breast-milk substitutes. (examples from Côte d'Ivoire and France) (*Nurture and Bitoun*).	Show slides/transparencies 6.18 and/or 6.19. Emphasize the fact that the percentage of the average or minimum wage needed to supplement the breastfeeding mother's diet is much less than that needed for purchasing breast-milk substitutes.
■ (alternative to slides/transparencies 6.18 and/or 6.19:) The cost of breastfeeding to the household is substantially lower than the cost of artificial feeding, as shown by this example from Singapore *(Fok et al.)*.	Show slides/transparencies 6.20 and 6.21. Discuss the fact that costs for the family for breastfeeding include both the cost of additional food for the lactating mother and the value of the mother's time in nursing her infant. For artificial feeding the costs include the costs for goods needed to feed artificially and the value of the time of each person participating in feeding. Numerous studies show that costs for infant formula and other supplies are higher than costs for feeding a lactating mother and that more time is needed for artificial feeding than breastfeeding, because of the preparation and clean up needed. Thus in Singapore and other settings around the world, breastfeeding is less expensive than feeding breast-milk substitutes.
5. Estimating costs and savings within the health care system and at the national level (optional)	***Presentations and discussion: 15 minutes*** Show slide/transparency 6.22 which provides the heading for this part of the session focusing on costs and savings within the health care system and at national levels.
■ Breastfeeding helps minimize health care costs within health care systems and commercial enterprises:	

Content	Trainer's Notes
■ Costs for health care in the first year of life are much less for breastfed babies (example from Health Maintenance Organization) *(Ball and Wright).*	Show slides/transparencies 6.23 and 6.24. This study compared the frequency of health care utilization for 3 illnesses (lower respiratory tract illnesses, otitis media, and gastrointestinal illness) in relation to duration of exclusive breastfeeding in studies in Tucson, Arizona, and Dundee, Scotland. Children were classified as never breastfed, partially breastfed, or exclusively breastfed for at least 3 months. Cost estimates were based on direct medical costs for office visits, hospitalization, and prescriptions in a large HMO in Tucson, Arizona. The additional health care needed for never breastfed babies cost the system between \$331 and \$475 per child during the first year. These costs are conservative, as they only include some of the costs for 3 illnesses.
■ Breastfeeding support helps save employers money through reduction in infant illness rates and maternal absenteeism (example from two companies, USA) *(Cohen et al.).*	Show slide/transparency 6.25. The comparison of formula-fed and breastfed infants was made in two companies in California with lactation programmes (a utilities company and an aeronautics corporation). Results indicate that more illness was experienced among formula-fed infants (90% versus 58%). Show slide/transparency 6.26. In addition, the breastfeeding infants had fewer illness episodes resulting in maternal absence from work. The results indicate, for example, that in the breastfeeding group, only 11% of the illness episodes of babies resulted in their mothers being absent from work one day, while among the formula-fed group, 26% of the illnesses resulted in one-day absences ($p<.5$). The percentages of infant illnesses that led to 2 to 4 days absence and more than 4 days absence among the two groups (mothers breastfeeding and mothers formula-feeding) were just slightly higher for the formula-feeding group. Looking at all the illness episodes that resulted on one or *more* days of absences, the results show that: ■ 43% of the illness episodes of formula-fed babies resulted in their mothers being absent one or more days from work. ■ Only 25% of the illness episodes of breastfed babies resulted in one or more days of maternal absence. ■ Fewer absences among mothers of breastfed babies can mean substantial savings for employers (*Cohen et a.l*).

Content	Trainer's Notes
■ At the national level, breast milk can be considered an important "national resource".	
▪ The value of breast milk to the national economy has been calculated for many different countries. The case of India can be examined as one interesting example *(Gupta and Khanna).*	Show slide/transparency 6.27. Review the value of the national "production of breast milk" in India. Emphasize the fact that if breastfeeding declines, additional costly and unnecessary expenditures for breast-milk substitutes (BMS) will result.
■ Breastfeeding promotion can result in substantial savings at the national level, not only due to the lowered need to purchase BMS, but also to lower costs for medical treatment and less lost time at work.	
▪ One recent study in the US, for example, estimated that if exclusive breastfeeding were increased from the current levels (64% after delivery in the hospital, 29% at 6 months) to those recommended by the US Surgeon General (75% and 50%) the savings due to lowered costs for 3 childhood diseases would be a minimum of $3.6 billion (*Weimer*).	Show slide/transparency 6.28. Explain that the estimates of costs due to breastfeeding at current rates compared to recommended rates are for otitis media, gastroenteritis, and necrotizing enterocolitis (NEC). Costs calculated include those for surgical treatment, physician visits, lost wages, and, in the case of NEC, for premature death. These estimates are on the conservative side, as they only include estimates for 3 conditions and not all costs for each of the conditions are included.

Content	Trainer's Notes
▪ Savings from a reduction in a number of illnesses episodes can increase quickly with small (achievable) increases in exclusive breastfeeding , as shown by a study in England and Wales *(Department. of Health).* ▪ The hospital costs attributable to early weaning for five illnesses in just one territory in Australia have been estimated to be about $1-2 million a year *(Smith et al.).*	Show slide/transparency 6.29. Point out that even very realistic increases in levels of breastfeeding can generate substantial savings. The National Health Service in the United Kingdom, for example, reports that just a 1% increase in the breastfeeding rate at 13 weeks would result in a savings of £500,000 in the treatment of gastro-enteritis. The study in Australia estimated the costs attributable to early weaning for five illnesses – gastrointestinal illness, respiratory illness and otitis media, eczema and necrotizing enterocolitis. The researchers point out that estimates would be higher if they included other chronic or common illnesses and out-of-hospital costs.
▪ Increased investment in breastfeeding promotion would lead to substantial savings on health care costs, far outweighing the cost of promotion (example from El Salvador) *(Wong et al.).*	Show slides/transparencies 6.30 through 6.32. Describe the example of El Salvador, where a thorough study was made of the benefits to the public sector from the current levels of breastfeeding, the costs for current breastfeeding promotion activities, and the additional savings that could be realized through an intensified programme of breastfeeding promotion: ▪ Annual benefits from current levels of breastfeeding are over 2,800,000 USD. (slide/transparency 6.30). ▪ The cost of current breastfeeding promotion activities is 32,000 USD. If an additional 90,000 USD were spent for intensified promotional activities, it is estimated that exclusive breastfeeding for infants under 6 months would increase from 15% to 30%. (slide/transparency 6.31). ▪ The net benefit from the current level of breastfeeding promotion is over 2,775,000 USD. The intensified activities would yield an additional 624,000 USD in savings. (slide/transparency 6.32). Mention the fact that the study in El Salvador (and several other countries) was made using a *Workbook for Policymakers: Guide to Assessing*

Content	Trainer's Notes
	the Economic Value of Breastfeeding. This workbook, which is available from The LINKAGES Project (1825 Connecticut Ave. NW, Washington D.C. 20009), can be used to calculate the costs and savings of breastfeeding at a national level.
6. Costs and savings related to breastfeeding promotion (discussion) ■ Discussion of issues related to costs and savings of breastfeeding promotion in the participants' own institutions and country.	***Discussion: 10 minutes*** Ask the participants to raise any issues that come to mind related to the costs and savings of breastfeeding promotion. Issues that could be explored include: ▪ How important the cost and savings issue is (both within health facilities and the larger health system). ▪ How government and health facility officials and staff can be sensitized to the savings that can be realized through intensified breastfeeding promotion.

Summaries of research studies presented during Session 6

Slide/transparency: Study:

Slide/transparency	Study
6.6	Valdes V, Perez A, Labbok M, Pugin E, Zambrano I, Catalan S. The impact of a hospital and clinic-based breastfeeding promotion programme in a middle class urban environment. *J Trop Pediatr.* 1993 Jun; 39(3):142-51.
6.20-6.21	Fok D, Mong TG, Chua D. The economics of breastfeeding in Singapore. *Breastfeed Rev.* 1998 Aug; 6(2):5-9.
6.23-6.24	Ball TM, Wright AL. Health care costs of formula-feeding in the first year of life. *Pediatrics.* 1999 Apr; 103(4 Pt 2):870-876.
6.25-6.26	Cohen R, Mrtek MB, Mrtek RG. Comparison of maternal absenteeism and infant illness rates among breastfeeding and formula-feeding women in two corporations. *Am J Health Promot.* 1995 Nov-Dec, 10(2):148-153.

The impact of a hospital and clinic-based breastfeeding promotion programme in a middle class urban environment

Refers to slide/transparency 6.6

Reference: Valdes V, Perez A, Labbok M, Pugin E, Zambrano I, Catalan S. The impact of a hospital and clinic-based breastfeeding promotion programme in a middle class urban environment. *J Trop Pediatr.* 1993 Jun; 39(3):142-151.

Background. Hospital interventions in support of breastfeeding have been highly successful in areas where the indigenous population has a well-established environment of breastfeeding. However, programmes designed to improve breastfeeding patterns in urban populations have met with mixed success.

Methods. This paper presents a prospective intervention study with a control group in which a health system-based breastfeeding promotion programme was initiated to support optimal breastfeeding for both child health and child spacing. Following collection of control data, a four-step intervention programme (Breastfeeding Promotion Program) was instituted.

Findings. This paper reports the process of the development of the intervention programme as well as the comparison of the control and study populations. Major findings include significant increases in duration of full breastfeeding from 31.6 per cent at 6 months in the control group to 66.8 per cent in the intervention group. The duration of lactational amenorrhea was similarly increased: 22 per cent of the control mothers and 56 per cent of the intervention group women were in amenorrhoea at 180 days.

Conclusions. The cost-effectiveness of the hospital changes is illustrated.

The economics of breastfeeding in Singapore

Refers to slides/transparencies 6.20 and 6.21

Reference: Fok D, Mong TG, Chua D. The economics of breastfeeding in Singapore. *Breastfeed Rev.* 1998 Aug;6(2):5-9.

Background. A study of 340 mothers was conducted in Kandang Kerbau Hospital on September 1992 to determine if it were more economical for households to breastfeed or bottle-feed an infant for the first three months.

Methods. Two economic models, a low cost model and a high cost model, were adopted incorporating a mathematical expression from Almroth's work in 1979.

Findings. The savings in a mother's gross income for the period ranged from 3% to 9% for the low cost model and from 8% to 21% for the high cost model.

Conclusions. From the household perspective, two components contributed to the economic savings of breastfeeding over artificial feeding: the cost of goods consumed and the time taken to feed the baby. It was noted that the time taken to artificially feed is longer than the time taken to breastfeed an infant. The results of this study provided more concrete basis for policy makers and advocates of breastfeeding to promote breastfeeding in Singapore. The amount of savings from breastfeeding could be considered for the health care system from the public perspective.

Health care costs of formula-feeding in the first year of life

Refers to slides/transparencies 6.23 and 6.24

Reference: Ball TM, Wright AL. Health care costs of formula-feeding in the first year of life. *Pediatrics.* 1999 Apr; 103(4 Pt 2):870-876.

Objective: To determine the excess cost of health care services for three illnesses in formula-fed infants in the first year of life, after adjusting for potential confounders.

Methods: Frequency of health service utilization for three illnesses (lower respiratory tract illnesses, otitis media, and gastrointestinal illness) in the first year of life was assessed in relation to duration of exclusive breastfeeding in the Tucson Children's Respiratory Study (n = 944) and the Dundee Community Study (Scottish study, n = 644). Infants in both studies were healthy at birth and represented non-selected, population-based samples. Children were classified as never breastfed, partially breastfed, or exclusively breastfed, based on their feeding status during the first 3 months of life. Frequency of office visits and hospitalizations for the three illnesses was adjusted for maternal education and maternal smoking, using analysis of variance. Cost estimates, from the perspective of the health care provider/payer, were based on the direct medical costs during 1995 within a large managed care health care system.

Results: In the first year of life, after adjusting for confounders, there were 2033 excess office visits, 212 excess days of hospitalization, and 609 excess prescriptions for these three illnesses per 1000 never-breastfed infants compared with 1000 infants exclusively breastfed for at least 3 months. These additional health care services cost the managed care health system between $331 and $475 per never-breastfed infant during the first year of life.

Conclusions: In addition to having more illnesses, formula-fed infants cost the health care system money. Health care plans will likely realize substantial savings, as well as providing improved care, by supporting and promoting exclusive breastfeeding.

Comparison of maternal absenteeism and infant illness rates among breastfeeding and formula-feeding women in two corporations

Refers to slides/transparencies 6.25 and 6.26

Reference: Cohen R, Mrtek MB, Mrtek RG. Comparison of maternal absenteeism and infant illness rates among breastfeeding and formula-feeding women in two corporations. *Am J Health Promot.* 1995 Nov-Dec, 10(2):148-53.

Purpose: A comparison was made between breastfeeding and formula-feeding among employed mothers. Absenteeism directly related to childcare was examined. DESIGN: This quasi-experimental study followed convenience samples of breastfeeding and formula-feeding mothers until their infants were weaned or reached 1 year of age.

Setting: Two corporations with established lactation programs were used. One had approximately 100 births annually among 2400 female employees, and the other had approximately 30 births annually among 1200 female employees.

Subjects: A sample of 101 participants, 59 feeding breast milk and 42 using commercial formula, was composed of employees returning from maternity leave for a medically uncomplicated birth.

Intervention: The programs provided counselling by a lactation professional for all participants and facilities to collect and store breast milk.

Measures: Confidential participant diaries provided descriptive data on infant illnesses and related absenteeism that the lactation consultant verified with health care providers and through employer attendance records.

Analysis: Attribute counts of illnesses and absenteeism were reported as percentages. Single degree of freedom chi square tests were used to compare rates between nutrition groups.

Findings: Approximately 28% of the infants in the study had no illnesses; 86% of these were breastfed and 14% were formula-fed. When illnesses occurred, 25% of all 1-day maternal absences were among breastfed babies and 75% were among the formula-fed group.

Conclusions: In this study fewer and less severe infant illnesses and less maternal absenteeism was found in the breastfeeding group. This was not an experimental study. Participants were self-selected, and a comparison group was used rather than a true control group. Corroboration of these findings from larger experimental studies is needed to generalize beyond these groups.

Handout 6.1

Presentation for session 6: Costs and savings

Breastfeeding promotion:

Costs and savings for health facilities

Transparency 6.1

The Maternal and Child Hospital in Tegucigalpa, Honduras, with approximately 12,000 deliveries a year, instituted an intensive breastfeeding promotion and rooming-in programme which resulted in major savings for:

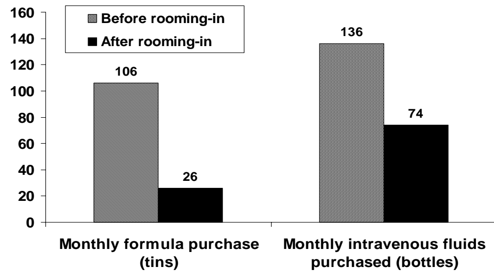
- Formula: $8,500
- Bottles: $7,500
- Glucose Solution: $1,500
- Oxytocin (Methergine): $1,000

The change saved the hospital $16,500 annually

Adapted from: Huffman SL et al. *Breastfeeding Promotion in Central America: High Impact at Low Cost.* Washington D.C., Nutrition Communication Project, AED, 1991.

Transparency 6.2

Cost savings realized through intensified rooming-in programme at Sanglah Hospital, Indonesia*

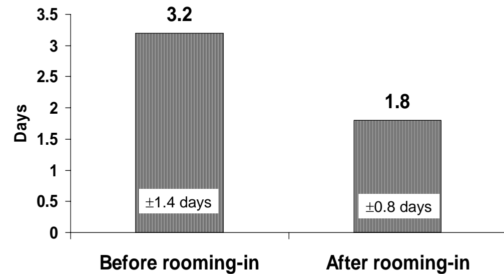


*Annual deliveries 3,000-3,500

Adapted from:Soetjiningsih and Sudaryat Suraatmaja. The advantages of rooming-in. *Paediatrica Indonesiana,* 1986, 26:229-35.

Transparency 6.3

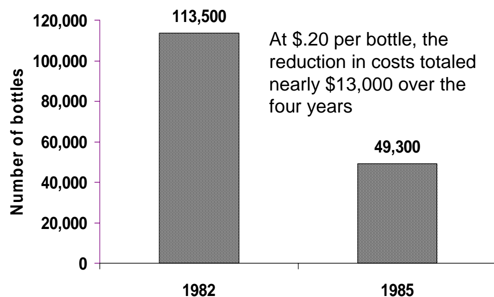
Average length of newborn hospitalization Sanglah Hospital, Indonesia



Adapted from:Soetjiningsih and Sudaryat Suraatmaja. The advantages of rooming-in. *Paediatrica Indonesiana,* 1986, 26:229-35.

Transparency 6.4

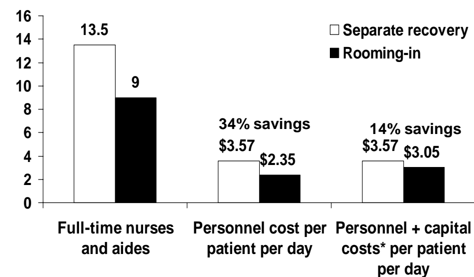
Cost savings due to breastfeeding promotion activities at Hospital Santo Tomas in Panama City



Adapted from: Levine & Huffman. *The Economic Value of Breastfeeding, The National, Public Sector, Hospital, and Household Levels, A Review of the Literature.* Washington D.C., Nuture/Center to Prevent Childhood Malnutrition, 1990.

Transparency 6.5

Cost savings of rooming-in compared to separate recovery rooms at the Clinical Hospital of the Catholic University of Chile



Adapted from Valdes et al. The impact of a hospital and clinic-based breastfeeding promotion programme in a middle class urban environment. *Journal of Tropical Pediatrics.* 1993, 39:142-151.

Transparency 6.6

Cost analysis of maintaining a newborn nursery at the Dr. Jose Fabella Memorial Hospital

Hospital Statistics:

Average daily deliveries: ***100 babies***

Daily newborn census: ***320 babies***

Adapted from: Gonzales R. Cost Analysis of Maintaining a Newborn Nursery at Dr. Jose Fabella Memorial Hospital, Manila. (Transparencies presented in meeting in Manila, Philippines), 1990.

Transparency 6.7

Summary of costs for maintaining a newborn nursery

Feeding bottle sets/year	
124,800 x 20 P =	***2,496,000 P***
Milk formula cans/year	
17,521 x 36 P =	***630,720 P***
Salary of nursing staff/year	
900 x 3,000 P x 12 =	***3,240,000 P***
Salary of formula room staff/year	
6 x 2,000 P x 12 =	***144,000 P***
Total	***6,510,720 P (310,037 USD)***

Transparency 6.8

Not included:

- *Cost of electricity*
- *Cost of water*
- *Cost of detergents*
- *Cost of diapers*
- *Cost of bassinets*
- *Cost of cleaning utensils*

Transparency 6.9

How much is this of the hospital budget?

$$\frac{\text{Cost} = 6{,}510{,}720\ P}{\text{Budget} = 73{,}000{,}000\ P} = \mathbf{8\%}$$

Transparency 6.10

The savings of 8% of the hospital budget is now converted into:

- *Availability of drugs and medicines at all times*
- *Improved food and nourishment for patients*
- *Availability of blood in times of emergency*
- *Fresh linens and gowns for patients*
- *Additional nursing staff to attend to patients.*

Transparency 6.11

Creative ways to minimize costs or use existing resources
Part 1

- Reassign staff from the normal newborn nursery and formula room to provide mother/baby care and education on the rooming-in wards.
- Organize a group of volunteers to provide breastfeeding counselling on the rooming-in wards or ask a local mother support organization to provide this service. (Provide training and written guidelines for the volunteers to insure quality.)

Transparency 6.12

Creative ways to minimize costs or use existing resources
Part 2

- "Bed-in" babies with their mothers rather than providing them with cribs or bassinets if culturally acceptable.
- Use a simple refrigerator for breast milk storage and free or low cost containers for cup-feeding.
- Teach mothers, who are staying in the hospital so they can breastfeed their premature or sick babies, also how to help provide care for their babies.

Transparency 6.13

Breastfeeding promotion:

Costs and savings for families

Transparency 6.14

Exercise: The percentage of wages needed to feed formula to an infant for six months

Calculation

Brand of formula: …………………………………..
Cost of one 500g tin of formula: …………
Cost of 40 x 500g tins of formula (amount needed for 6 months): …………

Average (or minimum) wage
1 month: …………
6 months: …………

Cost of 40 x 500g tins of formula / Average (or minimum) wage for 6 months: ………… / ………… X 100 = ………..%

Answer: To feed a baby on ___________________ formula costs: __________% of the average (or minimum) wage

Adapted from: WHO/UNICEF. *Breastfeeding Counselling: A Training Course, Trainer's Guide.* pages 420-421, Geneva, World Health Organization, 1993.

Transparency 6.15

Exercise: The percentage of urban and rural wages needed to feed formula to an infant for six months

Calculation

Brand of formula: …………………………………..
Cost of one 500g tin of formula: ………… x 40 tins = …………

Average (or minimum) wage	Agricultural	Urban
1 month:	…………	…………
6 months:	…………	…………

Cost of 40 x 500g tins of formula / Agricultural wage for 6 months: ………… / ………… X 100 = ………..%

Cost of 40 x 500g tins of formula / Urban wage for 6 months: ………… / ………… X 100 = ………..%

Answers: To feed a baby on ___________________ formula costs: __________% of the agricultural wage

To feed a baby on ___________________ formula costs: __________% of the urban wage

Adapted from: WHO/UNICEF. *Breastfeeding Counselling: A Training Course, Trainer's Guide.* pages 420-421, Geneva, World Health Organization, 1993.

Transparency 6.16

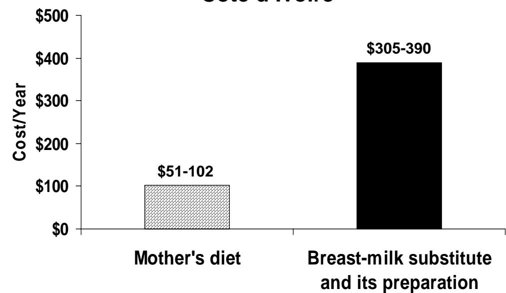
Costs of breast-milk substitutes and comparisons with minimum wages

Country	Cost per kg (in US$)	Cost per month (in US$)	Minimum wage per month (in US$)	% of wage per month
New Zealand	8.78	36.00	764	5
Germany	16.40	67.24	1149	6
Malaysia	7.42	30.42	143	21
Poland	24.51	100.49	394	26
Slovakia	8.33	34.15	79	43
Indonesia	6.73	27.60	55	50

Adapted from: Gupta and Khanna. Economic value of breastfeeding in India. *The National Medical Journal of India,* 1999, May-June 12(3):123-7.

Transparency 6.17

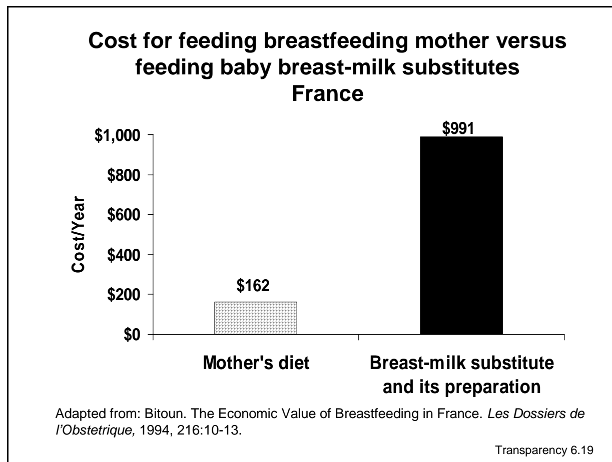
Cost for feeding breastfeeding mother versus feeding baby breast-milk substitutes Côte d'Ivoire



Adapted from: Nurture, The Economic Value of Breastfeeding: Four Perspectives for Policymakers. *Center to Prevent Childhood Malnutrition Policy Series*, 1990, 1(1):1-16, September.

Transparency 6.18

Cost for feeding breastfeeding mother versus feeding baby breast-milk substitutes France



Adapted from: Bitoun. The Economic Value of Breastfeeding in France. *Les Dossiers de l'Obstetrique,* 1994, 216:10-13.

Transparency 6.19

Household savings from breastfeeding in Singapore

- Cost of breastfeeding =
  - Costs of additional food for lactating mother *plus*
  - Value of mother's time for breastfeeding
- Cost of artificial feeding =
  - Cost of goods needed to feed artificially (milk, bottles, fuel, utensils) *plus*
  - Value of time of each person participating in feeding

Adapted from: Fok et al. The economics of breastfeeding in Singapore. *Breastfeeding Review: Professional Publication of the Nursing Mothers' Association of Australia,* 1998, 6(2):5-9.

Transparency 6.20

Household savings for the first 3 months of life if breastfeeding, for 15,410 babies born in Kendang Kerbau Hospital in Singapore:

- **Low cost model*:** $4,078,102 **($264 per infant)**
- **High cost model*:** $7,453,817 **($483 per infant)**

* **The low cost model used low or average costs for formula, feeding supplies, sterilization, and wages. The high cost model used higher costs for the same items.**

Adapted from: Fok et al. The economics of breastfeeding in Singapore. *Breastfeeding Review: Professional Publication of the Nursing Mothers' Association of Australia,* 1998, 6(2):5-9.

Transparency 6.21

Breastfeeding promotion:

Costs and savings at the health care system and the national level

Transparency 6.22

Comparative health care costs of treating breastfed and formula-fed babies in the first year of life in a health maintenance organization (HMO)

When comparing health statistics for 1000 never breastfed infants with 1000 infants exclusively breastfed for at least 3 months, the never breastfed infants had:

- 60 more lower respiratory tract illnesses
- 580 more episodes of otitis media, and
- 1053 more episodes of gastrointestinal illnesses

Adapted from: Ball & Wright. Health care costs of formula-feeding in the first year of life. *Pediatrics,* 1999, April, 103(4 Pt 2):870-6.

Transparency 6.23

In addition, the 1000 never-breastfed infants had:

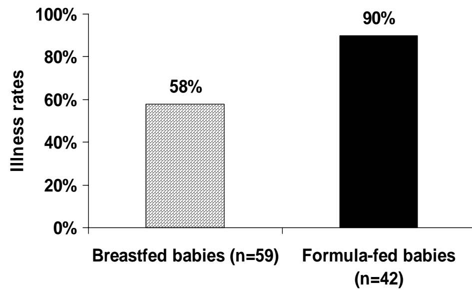
- 2033 excess office visits
- 212 excess hospitalizations
- 609 excess prescriptions

These additional health care services cost the managed care system between $331 and $475 per never-breastfed infant during the first year of life.

Adapted from: Ball & Wright. Health care costs of formula-feeding in the first year of life. *Pediatrics,* 1999, April, 103(4 Pt 2):870-6.

Transparency 6.24

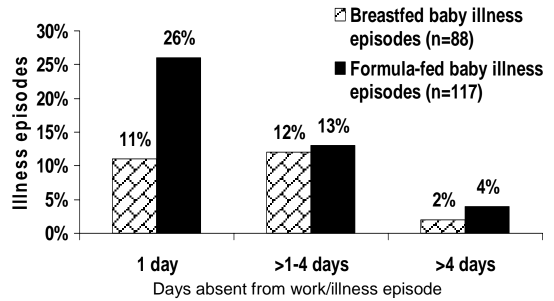
Illness rates among breastfeeding & formula-feeding infants of mothers working in two corporations in the U.S.



Adapted from: Cohen et al. Comparison of maternal absenteeism and illness rates among breastfeeding and formula-feeding women in two corporations. *AJHP,* 1995, 10(2):148-153.

Transparency 6.25

Distribution of illness episodes and maternal absenteeism by nutritional groups



Adapted from: Cohen et al. Comparison of maternal absenteeism and illness rates among breastfeeding and formula-feeding women in two corporations. *AJHP,* 1995, 10(2):148-153.

Transparency 6.26

The value of breast milk to the national economy in India

- National production of breast milk by all mothers in India for the children they were breastfeeding at the time of the estimate was about 3944 million liters over 2 yrs.
- If the breast milk produced were replaced by tinned milk, it would cost 118 billion Rupees.
- If imported, the breast-milk substitutes would cost 4.7 million USD.
- If breastfeeding practices were optimal, breast milk production would be twice the current amount, doubling the savings by fully utilizing this "national resource".

Adapted from: Gupta and Khanna. Economic value of breastfeeding in India. *The National Medical Journal of India,* 1999, May-June 12(3):123-7.

Transparency 6.27

Savings from 3 childhood illnesses if exclusive breastfeeding rates were increased to levels recommended by the Surgeon General in the U.S.*

Condition	Costs included	Savings in $
Otitis media	Surgical & nonsurgical treatment and lost time and wages.	$ 365,077,440
Gastroenteritis	Physician visits, lost wages, childcare, and hospitalization	$ 9,941,253
Necrotizing Enterocolitis (NEC)	Surgical treatment, lost wages, and value of premature death	$3,279,146,528
TOTAL:		**Over $3.6 billion**

* Current levels of EBF were 64% after delivery and 29% at 6 months. Recommended levels are 75% after delivery and 50% at six months.

Adapted from: Weimer. *The economic benefits of breastfeeding: A review and analysis, Food Assistance & Nutrition Research Report No. 13.* Wash.D.C., USDA, 2001.

Transparency 6.28

Savings from potential increases in exclusive breastfeeding in England and Australia

- In England and Wales it has been estimated that the National Health Service spends £35 million per year in treating gastroenteritis in bottle-fed infants.
- For each 1% increase in breastfeeding at 13 weeks, a savings of £500,000 in treatment of gastroenteritis would be achieved.
- In Australia, in just one territory, hospital costs attributable to early weaning for five illnesses have been estimated to be about $1-2 million a year.

Adapted from: Dept. of Health. *Breastfeeding: Good practice guidance to the NHS.* London, United Kingdom of Great Britain, 1995, and Smith et al., Hospital system costs of artificial feeding: Estimates for the Australian Capital Territory, Aust N Z J Public Health, 2002 26(6):543-51.

Transparency 6.29

A full case study of costs and savings from breastfeeding and promotional activities in El Salvador: Total annual benefits to the public sector from current levels of breastfeeding

Source of benefit	Total annual amount
Infant diarrhoea cases prevented	$456,130
Infant ARI cases prevented	$839,583
Births averted (delivery costs)	$1,224,328
Breastmilk substitutes use averted	$288,337
TOTAL	**$2,808,378**

Adapted from: Wong et al. *An Analysis of the Economic Value of Breastfeeding in El Salvador, Policy & Technical Monographs.* Washington D.C., Wellstart Intl. and Nuture, 1994.

Transparency 6.30

Annual costs and benefits for current and intensified activities to promote breastfeeding (El Salvador)

Current activities:

- Advocacy/monitoring
- Hospital-based promotion
- PHC facility & community promotion
- Information, education & communication

Current cost: **$32,000**

Additional cost for intensified activities: **$90,188**

Estimated benefit of intensified activities:

- Increase in exclusive breastfeeding among infants under 6 months from **15% to 30%**

Adapted from: Wong et al. *An Analysis of the Economic Value of Breastfeeding in El Salvador, Policy & Technical Monographs.* Washington D.C., Wellstart Intl. and Nuture, 1994

Transparency 6.31

Net benefits from breastfeeding promotion: Comparison of the current and an intensified programme (El Salvador)

	Current	Additional under alternative
Benefits	$2,808,378	$714,328
Costs	$32,830	$90,188
Net benefits	**$2,775,558**	**$624,140**

Adapted from: Wong et al. *An Analysis of the Economic Value of Breastfeeding in El Salvador, Policy & Technical Monographs.* Washington D.C., Wellstart International and Nuture, 1994

Transparency 6.32

Handout 6.2

Cost analysis of maintaining a newborn nursery at the Dr. Jose Fabella Memorial Hospital[1]

Hospital statistics

Average daily deliveries - 100 babies

Daily newborn census - 320 babies

Physical facilities

Nursery space for 300 bassinets

Formula room for 2400 formulas a day

Manpower needs

Coverage: 24-hour basis

Ratio: 1 nursing staff to 10 newborns (1:10)

Total nursing staff: 90 in 24 hours (30 in three shifts)

Formula room staff: 6 in 24 hours (2 in three shifts)

Materials and supplies

Feeding bottles sets: 124,800 sets/year

300	babies
x 8	feeds/day (every three hours in 24 hours)
2,400	feeding bottle sets/day
x 52	weeks/year (one set lasts for one week of re-use)
124,800	feeding bottle sets/year

Milk formula: 17,520 one-pound cans/year

2,400	scoops of formula/feed
÷ 50	scoops for every one-pound can
48	cans per day
x 365	days
17,520	cans/year

[1] Developed by Dr. Ricardo Gonzales, Medical Director, Dr. Jose Fabella Memorial Hospital, Manila, Philippines, 1990.

Other costs

Electricity	■	Cleaning brushes
Water	■	Babies diapers
Detergents	■	Bassinets

Summary of costs for maintaining a newborn nursery

Feeding bottle sets/year (124,800 x 20 P) =	2,496,000 P
Milk formula cans/year (17,521 x 36 P) =	630,720 P
Salary of nursing staff/year (90 x 3,000 P x 12) =	3,240,000 P
Salary of formula room staff/year (6 x 2,000 P) =	144,000 P
Total	6,510,720 P*
	(310,034 USD)

* Costs not included: electricity, cleaning utensils, water, diapers, detergents, and bassinets.

How much of the national budget is this?

Cost: 6,510,720 P
Budget: 73,000,000 P

The savings of 8% of the hospital budget is now converted into:

Availability of drugs and medicines at all times.

Improved food and nourishment for patients.

Availability of blood in times of emergency.

Fresh linens and gowns for patients.

Additional nursing staff to attend to patients.

Handout 6.3

Table 1:
Potential costs and savings associated with breastfeeding promotion in health facilities

(organized according to the BFHI "Ten steps to successful breastfeeding")

	Costs or use of existing resources	Savings
Step 1: Have a written breastfeeding policy	Lobbying or promotional activities *[staff time, materials]* Selecting coordinator and BF committee, developing policy *[staff time]*	More mothers choose facility due to improved image as "baby-friendly" *[higher patient census and thus more patient fees]*
Step 2: Train all health care staff	Initial training of staff *[educational materials, supplies, trainer fees, if any, staff time off]* Refresher training and training of new staff *[educational materials, supplies, trainer fees, if any, staff time off]*	
Step 3: Inform all pregnant women about the benefits and management of breastfeeding	Education and counselling on breastfeeding during antenatal care *[staff time, educational materials]* Loss of donations of promotional materials from companies promoting breast-milk substitutes *[any promotional materials that were provided free of charge]*	No group education and counselling on feeding breast-milk substitutes (BMS) *[less staff time and educational material. Individual counselling on BMS may still be needed for HIV+ mothers who decide to replacement feed]*
Step 4: Help mothers initiate breastfeeding within a half-hour of birth	Staff assistance with breastfeeding after delivery *[change of tasks, no extra staff needed]*	Less anesthesia and shift to local rather than general anesthesia during delivery (so mother/baby pair will be awake for breastfeeding) *[less anesthesia, cotton, and syringes, less costly anesthesia]*

	Costs or use of existing resources	Savings
Step 4: Help mothers initiate breastfeeding within a half-hour of birth (continued)		Less oxytocic drugs (since with breastfeeding the body's natural release of oxytocin helps to contract the uterus) *[less oxytocic drugs, supplies (syringes, cotton), and staff time]* Less hypothermia with skin-to-skin whole body contact and thus less use of warmers or incubators *[less staff time]*
Step 5: Show mothers how to breastfeed and how to maintain lactation even if separated	Education and counselling on breastfeeding on wards *[nursery staff redeployed for mother/baby support on wards X no extra cost]* Breast milk expression and storage *[breast milk expression supplies and equipment, refrigerator space – don't need breast pumps or milk bank]*	Use of volunteer breastfeeding counsellors, if allowed *[less staff time for counselling and care]* No group education and counselling on feeding breast-milk substitutes *[less staff time and educational materials. Individual counselling on BMS may still be needed for HIV+ mothers who decide to replacement feed.]* Use of expressed breast milk rather than breast-milk substitutes whenever possible *[less purchase and preparation of breast-milk substitutes]*
Step 6: Give newborn infants no food or drink other than breast milk, unless medically indicated	No free or low-cost supplies of breast-milk substitutes *[purchase of any supplies of BMS for at least 80% of fair market value]* Loss of general benefits provided by companies selling breast-milk substitutes *[equipment, supplies, educational benefits, etc., that had been provided free of charge]*	Less or no breast-milk substitutes No glucose water preparation and use for normal newborns *[no staff time for preparation and feeding of breast-milk substitutes. Less or no expenditure on bottles and teats, breast-milk substitutes and glucose water, electricity, water, equipment and supplies for washing and sterilizing bottles, mixing breast-milk substitutes, etc. Some equipment and supplies may be necessary to*

	Costs or use of existing resources	Savings
		counsel HIV+ mothers who decide to replacement feed]
Step 7: Practice rooming-in	**On the wards:** One-time alteration of physical facilities, if necessary, to allow rooming-in *[any costs for physical alterations]*	**On the wards:** Nursery space available for other purposes *[space available for alternative use; expenses for nursery equipment, supplies, upkeep reduced or eliminated]* Less or no care of infants in nursery and transporting of newborns from nursery to postpartum wards *[less staff time]* Fewer or no bassinets or baby cots *[expense for bassinets reduced or eliminated]* More mother-to-baby care and feeding and fewer fussy babies *[less staff time for baby care and feeding- staff freed for other duties]* More mother-to-mother care and assistance *[less staff time for mother care - staff freed for other duties]* Reduced morbidity and mortality due to diarrhoeal disease, respiratory illness, sepsis, meningitis, jaundice *[less staff time and other costs for longer hospitalization such as medical equipment, bed occupancy, feeding and care of sick infants, intravenous fluids, etc.]*

	Costs or use of existing resources	Savings
Step 7: Practice rooming-in (breastfeeding mothers of babies in newborn special care unit encouraged to remain in hospital)	**In the neonatal intensive care unit:** Breastfeeding mothers of babies in newborn special care unit stay in hospital *[space for mothers= beds, food]*	**In the neonatal intensive care unit:** Mothers of babies in special care unit taught to care for own infants *[less staff time required for infant care in Special Care Unit]* Shorter stay of babies in special care unit due to breastfeeding, more care of infants by mothers, with mothers learning how to care for infants at home as well *[less staff time, space, use of equipment and supplies]* Reduced morbidity and mortality due to neonatal infection *[less staff time and other costs for longer hospitalization]* Lower abandoned babies *[less feeding costs, less staff time for care and placement of babies]*
Step 8: Encourage breastfeeding on demand		Fewer fussy babies *[less staff time]*
Step 9: Give no artificial teats or pacifiers to breastfeeding infants	Cup-feeding of expressed breast milk *[cups and spoons]*	No pacifiers or bottles and teats (nipples) for breastfeeding infants *[no pacifiers or bottles and teats supplied by hospital]*
Step 10: Foster the establishment of breastfeeding support groups and refer mothers to them on discharge	Follow-up support for breastfeeding mothers, such as breastfeeding support during postnatal visits, lactation clinics, home visits, telephone calls and/or though mother support groups *[costs depend on types of support provided]*	Less illness and fewer visits to outpatient department and paediatric unit due to less breast milk substitutes and bottle-feeding, less diarrhoeal disease, respiratory illness, allergy, malnutrition due to diluted breast milk substitutes, etc. *[less staff time, less medicine, and fewer other costs for patient care]*

Handout 6.4a

Exercise
The percentage of wages needed to feed formula to an infant for six months

Calculation:

Brand of formula: ....

Cost of one 500g tin* of formula: ....

Cost of 40 x 500g tins* of formula (amount needed for 6 months): ....

Average (or minimum) wage

1 month: ....

6 months: ....

$$\frac{\text{Cost of 40 x 500g tins formula}}{\text{Average (or minimum) wage for 6 months}} \quad \frac{.............}{..............} \times 100 = ... \%$$

Answer:

To feed a baby on .... formula costs:

.... % of the average (or minimum) wage

*A mother/family needs about 20 Kg of formula to feed her baby for six months. Adapt the calculations, if necessary. For example, if locally formula is sold in 450 g tins, 44 tins would be needed for six months.

Adapted from: Breastfeeding Counselling: a Training Course, Trainer's Guide, WHO/UNICEF, 1993, pp. 420-421.

Handout 6.4b

Exercise
The percentage of urban and rural wages needed to feed formula to an infant for six months

Calculation:

Brand of formula: ....

Cost of one 500g tin* of formula: ....

Cost of 40 x 500g tins* of formula (amount needed for 6 months): ....

Average (or minimum) wage	Agricultural	Urban
1 month:	....	....
6 months:	....	....

Cost of 40 x 500g tins formula ....
______________________ ______
Agricultural wage for 6 months .... x 100 = ... %

Cost of 40 x 500g tins formula ....
______________________ ______
Urban wage for 6 months .... x 100 = ... %

Answers:

To feed a baby on .... formula costs .... % of the agricultural wage

To feed a baby on .... formula costs .... % of the urban wage

* A mother/family needs about 20 Kg of formula to feed her baby for six months. Adapt the calculations, if necessary. For example, if locally formula is sold in 450 g tins, 44 tins would be needed for six months.

Adapted from: *Breastfeeding Counselling: a Training Course, Trainer's Guide*, WHO/UNICEF, 1993, pp. 420-421.

Session 7
Appraising policies and practices

Objectives

At the conclusion of this session, participants will be able to:

- Use the *WHO/UNICEF BFHI hospital self-appraisal tool* to appraise how well their health facilities are following the "Ten steps to successful breastfeeding" and on which steps improvement is needed.

Duration

Introduction: 5 minutes
Completion of *Self-appraisal tool* (during session or evening before): 15 -25 minutes
Group or individual work to summarize results: 15 minutes

Total: 20-45 minutes during session

Teaching methods

Group or individual work

Preparation for session

- Course planners and facilitators should decide when this session should be scheduled during the course. Two options include:

  - Scheduling the session between *Session 6: Costs and savings* and *Session 8: Developing action plans* on the second day of the course.

  - Scheduling this session right after *Session 3: The Baby-friendly Hospital Initiative* on the first day of the course.

- Option one has two advantages. If the session is scheduled for the second day course facilitators can ask the participants to get together the evening before and fill out the *Self-appraisal tool*, thus saving 10-15 minutes in the course schedule and allowing each team to complete the task at its own pace. In addition, the participants can be asked to develop their Action plans (Session 8) right after identifying areas needing improvement in their health facilities through this analysis.

- Option two has the advantage that participants will have analyzed their own hospital policies and practices through the use of the *Self-appraisal tool* before they get introduced to the *Scientific basis of the Ten Steps* (Session 4) and then work on general strategies for *Becoming baby-friendly* (Session 5). Knowing where they "fall short" in implementing the *Ten Steps* in their own institutions may motivate them to pay special attention to information that will assist them in justifying and making the improvements needed.

- If option one is selected, decide whether participants will be asked to fill out the *Self-appraisal* the previous evening or during the session itself.

Training materials

The *BFHI Hospital self-appraisal tool* (copy distributed to participants as a handout during Session 3).

References

UNICEF/WHO. *Baby-friendly Hospital Initiative, revised, updated and expanded for integrated care: Section 4: Hospital Self-Appraisal and Monitoring.* Geneva, World Health Organization, 2009.

Outline

Content	Trainer's Notes
1. Review the purpose of the WHO/UNICEF BFHI hospital self-appraisal tool Review of the use of the *Hospital self-appraisal tool* to assess where each health facility is in the process of implementing the *Ten Steps*, what further work is needed to support breastfeeding, and whether to apply for external assessment.	***Review: 5 minutes*** Briefly review the use of the *Hospital self-appraisal tool*, reminding the participants of the points made during the BFHI presentation in Session 3 and stressing that the results from the self-appraisal will be helpful to consider when developing action plans for the participants' health facilities during Session 8.
2. Completion of the Hospital self-appraisal Tool Completion of the *Hospital self-appraisal tool* by team or individual from each health facility.	***Individual or group work (during session or evening before): 15 -25 minutes*** Ask the team or individual from each health facility to complete the *Hospital self-appraisal tool* either during the session or the evening before.
3. Summary of Results Preparation of summary of accomplishments and areas where the health facility needs to improve.	***Individual or group work: 15 minutes*** After the *Hospital self-appraisal tool* is completed each group (or individual) should summarize both its accomplishments and key areas in which further work is needed to implement the *Ten Steps* and fully implement the *International Code*. This summary should be recorded either on transparencies or on flip chart paper, so that it can be presented during Session 8, just before the presentation of the *Action plan*. Participants should be encouraged to be as frank as possible, as the results will help them identify particular problem areas on which they should focus, as they develop their own Action plans during Session 8. If facilitators sense that participants will worry about divulging their facilities' shortcomings, arrangements can be made to make sure that self-appraisal results remain confidential, and teams can be asked only to report "in general" on areas needing improvement.

Session 8:
Developing action plans

Objectives

At the conclusion of this session, participants will be able to:

- Identify specific changes necessary to ensure that their health facilities are baby-friendly.
- Prepare brief action plans for making necessary changes in their health facilities' policies and procedures.

Duration

Group or individual work on *Action Plans*: 1 to 1½ hours.
Presentations and discussion of results from self appraisals and action planning: 1 hour.
Discussion and recommendations for regional coordination: 30-60 minutes (optional).

Total: 2 to 3 hours

(time for presentations and discussion will vary, depending on the number of teams and/or individuals that will be reporting).

Teaching methods

Group or individual work
Presentations and discussion

Preparation for session

- Prior to the session, trainers should decide how participants should be grouped for the preparation of their *Action Plans*. In general, one plan should be prepared for each health facility represented at the course. If there are several participants from non-care-giving settings, such as the Ministry of Health, trainers should work with them to decide whether it would be useful for them to work with hospital teams or to develop plans focused on their own responsibilities related to BFHI.
- Make sure adequate working space is available for the various teams and/or individuals and that flipcharts and markers are ready for them to use in preparing summaries of their plans.

- It is important, before the session, to determine what type of follow-up support will be available to the teams as they implement their *Action Plans* after the course and whether progress reports will be requested and how often. The individual responsible for follow-up (e.g., the national breastfeeding coordinator or BFHI coordinator) should help lead the discussion following the presentation of the *Action Plans*.

- In some courses, it may be useful to add some time after the presentation and discussion of *Action Plans* for discussing possibilities for regional coordination among the health facilities and other organizations represented at the course (see item 4 in the session plan.). If this discussion will be included, adjust the programme schedule to provide the extra time needed.

Training materials

Handouts

8.1: Slide presentation handout for Session 8 (slides 8.2-3)
8.2: Action Plan

Slides/transparencies

8.1: Action plan
8.2-3: Example of a section of an *Action Plan*

The website featuring this Course contains links to the slides and transparencies for this session in two Microsoft PowerPoint files. The slides (in colour) can be used with a laptop computer and LCD projector, if available. Alternatively, the transparencies (in black and white) can be printed out and copied on acetates and projected with an overhead projector. The transparencies are also reproduced as the first handout for this session.

References

WHO. *Protecting, promoting and supporting breastfeeding: The special role of maternity services.* A Joint WHO/UNICEF Statement. Geneva, World Health Organization, 1989.

Outline

<table>
<tr><th>Content</th><th>Trainer's Notes</th></tr>
<tr><td>

1. Development of an Action Plan for making necessary changes

- Developing an *Action Plan* for making the necessary changes in each health facility is the next step in the planning process. The process may include:
  - Reviewing the results of the *Self-appraisal*, problem areas identified during the last session, and ideas concerning changes identified by the team that are needed to make its facility baby-friendly.
  - Developing the first draft of a brief *Action Plan* while still at the course.
  - Discussing the results and potential strategies on return to the team's health care facility, bringing other important decision-makers into the planning process, and reaching a consensus on actions to be taken.
- The *Action Plan* table provides a quick way to summarize the main activities that are part of the plan, as well as their timing and who is responsible. Participants from the various health facilities may want to use this table to prepare the broad outlines of their plans, or use some other format, if it is more appropriate for their own setting.
- An example of a section of a completed *Action Plan* may give participants who have not had much experience with planning a better idea of what to put in the plans.

</td><td>

Group or individual work: 60 minutes

Mention that a mini-version of the presentation is reproduced in Handout 8.1 and included in the participants' folder.

Briefly review the *Action Plan* table (slide 8.1). Pass out two copies of the action plan table (Handout 8.2) to the individual or group from each health facility. Ask each team to meet and develop a first draft of its plan, focusing on actions that will improve its facility's support of breastfeeding and solve key problems identified during the *Self-appraisal*.

Mention that the plans can be organized however most useful, given the types of "actions" being considered. If a facility is just becoming involved in BFHI, it would be useful to consider using the "20-hour Course" to train clinical staff on implementation of the "Ten Steps" and a shorter course for non-clinical staff. In other cases only "refresher" training or training for new staff may be needed. In additional, changes in policies and procedures may need to be considered (The Policy Checklist found in Session 3, Handout 3.5, Annex 1, may be helpful when considering what is needed).

It may be useful for teams to organize the actions or activities by "Steps" or by types of activities, such as training, planning sessions, changes in policies, changes in procedures, monitoring or auditing and evaluation, etc.

If the participants work in facilities with high HIV prevalence they should take special care to develop plans that adequately address the challenges of providing support to HIV positive pregnant women, mothers, and their infants. The handouts provided in Session 5 – HIV may be quite helpful in providing ideas as they develop their action plans.

The plans should be written on the blank handout sheets and then summarized on flipchart paper or transparencies for presentation during plenary. The presentation in the plenary should include both a brief summary of the results from the *Self-appraisal* (achievements and steps needing improvement) and an overview of the proposed *Action Plan*. Each team should designate one representative to present the *Self-appraisal*

</td></tr>
</table>

Content	Trainer's Notes
	results and another to present their plans. Mention how long each group will have for its presentation. If it would be helpful, present an example of a portion of an *Action Plan* focused on "Step 1", using Slides 8.2-3, to give participants a sense of what their *Action Plans* might look like. Remind the participants that these are only the first drafts of their plans. The plans can be more fully developed in collaboration with other important decision-makers once participants return to their institutions. In some courses there may be participants who do not work in health facilities, for example, policy-makers from the Ministry of Health or managers from institutions that finance health care. Ask these participants to prepare plans as well, focusing on actions that will support the BFHI.
2. Self-appraisal and Action Plan presentations ■ Presentation of overviews of results from the *Self-appraisal* and the main points in the *Action Plans* the teams have developed to address improvements needed.	***Presentations: 50 minutes*** Ask each team to present both a brief overview of the results from its *Self-appraisal* and a summary of the main aspects of the *Action Plan* it has developed to address improvements needed. Mention again how much time is scheduled for each presentation and discussion and manage the session so that the last groups presenting are not short changed. Collect the *Self-appraisal* and *Action Plan* summaries prepared by the teams after their presentations, make copies and give originals back to the teams (if flipcharts are prepared, these sheets can be collected instead). These summaries can be used to prepare the course report and to guide those responsible for providing follow-up support.
3. Discussion of follow-up support ■ Discussion of any plans for follow-up and supervision, as well as any support available, as teams implements their plans.	***Discussion: 10 minutes*** Discuss plans for follow-up and supervision as well as any support that will be available and how it will be coordinated. In addition, discuss whether progress reports will be requested and, if so, how often and what format should be used.

Content	Trainer's Notes
4. Discussion of regional coordination (optional) ■ Discussion of the possibilities for regional coordination within the Initiative and development of recommendations or agreements concerning collaborative activities.	***Discussion: 30-60 minutes*** If considered useful, spend some time before the course ends discussing possibilities for regional coordination among the health facilities and other organizations represented at the course. The BFHI may be strengthened, for example, if all health facilities agree to follow the *Ten Steps* and fully adhere to the *International Code*. Some facilities that are farther along in the process may be able to provide assistance to those just starting to make changes. Recommendations or agreements concerning collaborative activities can be developed.

Handout 8.1:

Presentation for session 8: Developing action plans

Action Plan

Action	Timing	Responsibility

Transparency 8.1

Action Plan

Action	Timing	Responsibility
Step 1: Policy Appoint a committee with reps from prenatal care, L&D, post-partum wards and neo-natal intensive care to improve hospital BF/IF policy. (Include HIV guidelines.)	2 months after return from course	Hospital administrator to appoint committee
Hold annual sessions for all maternity staff to orient them to new BF/IF policy	Each January	Chief nursing officer from maternity services
Include review of BF/IF policy in orientation for all new staff	As needed	Staff providing orientation

Transparency 8.2

Action Plan (continued)

Action	Timing	Responsibility
Post new policy in all relevant units	After policy finalized	Chief nursing officer
Prepare policy summary for mothers, including pictorial version for non-literate clients	Same	TBD
Distribute policy to all women during first counselling session	On-going	Staff counsellors

Transparency 8.3

Handout 8.2

Action Plan

Action	Timing	Responsibility

This course is an adaptation from WHO course "Promoting breast-feeding in health facilities: A short course for administrators and policy-makers". It can be used to orient hospital decisions-makers (directors, administrators, key managers, etc.) and policy-makers to the Baby-friendly Hospital Initiative and the positive impacts it can have and to gain their commitment to promoting and sustaining "Baby-friendly".

The course material includes a Course Guide and eight Session Plans with handouts and PowerPoint slides. Two alternative session plans and materials for use in settings with high HIV prevalence have been included.

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BABY-FRIENDLY HOSPITAL INITIATIVE

Revised Updated and Expanded
for Integrated Care

SECTION 3

BREASTFEEDING PROMOTION AND SUPPORT IN A BABY-FRIENDLY HOSPITAL

A 20-HOUR COURSE FOR MATERNITY STAFF

2009

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These multi-country and multi-organizational contributions were invaluable in helping to fashion a course designed to address the current needs of countries and their mothers and babies, facing a wide range of challenges in many differing situations.

In addition to pictures and illustrations from the UNICEF and WHO collections:
Jenny Corkery created the illustrations of the ‘story mothers’.
Photographs were kindly provided by Dr Nils Bergman, Dr Ruskhana Haider,
Barbara Wilson-Clay and Kay Hoover.

Preface for the BFHI materials: Revised, Updated and Expanded for Integrated Care

Since the Baby-friendly Hospital Initiative (BFHI) was launched by UNICEF and WHO in 1991-1992, the Initiative has grown, with more than 20,000 hospitals having been designated in 156 countries around the world over the last 15 years. During this time, a number of regional meetings offered guidance and provided opportunities for networking and feedback from dedicated country professionals involved in implementing BFHI. Two of the most recent were held in Spain, for the European region, and Botswana, for the Eastern and Southern African region. Both meetings offered recommendations for updating the Global Criteria, related assessment tools, as well as the "18-hour course," in light of experience with BFHI since the Initiative began, the guidance provided by the new Global Strategy for Infant and Young Child Feeding, and the challenges posed by the HIV pandemic. The importance of addressing "mother-friendly care" within the Initiative was raised by a number of groups as well.

As a result of the interest and strong request for updating the BFHI package, UNICEF, in close coordination with WHO, undertook the revision of the materials in 2004-2005, with various people assisting in the process (Genevieve Becker, Ann Brownlee, Miriam Labbok, David Clark, and Randa Saadeh). The process included an extensive "user survey" with colleagues from many countries responding. Once the revised course and tools were drafted they were reviewed by experts worldwide and then field-tested in industrialized and developing country settings. The full first draft of the materials was posted on the UNICEF and WHO websites as the "Preliminary Version for Country Implementation" in 2006. After more than a year's trial, presentations in a series of regional multi-country workshops, and feedback from dedicated users, UNICEF and WHO[1] met with the co-authors above[2] and resolved the final technical issues that had been raised. The final version was completed in late 2007. It is expected to update these materials no later than 2018.

The revised BFHI package includes:

Section 1: Background and Implementation, which provides guidance on the revised processes and expansion options at the country, health facility, and community level, recognizing that the Initiative has expanded and must be mainstreamed to some extent for sustainability, and includes:

1.1 Country Level Implementation
1.2 Hospital Level Implementation
1.3 The Global Criteria for BFHI
1.4 Compliance with the International Code of Marketing of Breast-milk Substitutes
1.5 Baby-Friendly Expansion and Integration Options
1.6 Resources, References and Websites

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1 Moazzem Hossain, UNICEF NY, played a key role in organizing the multi-country workshops, launching the use of the revised materials. He and Randa Saadeh, and Carmen Casanovas of WHO worked together with the co-authors to resolve the final technical issues.

2 Miriam Labbok is currently Professor and Director, Center for Infant and Young Child Feeding and Care, Department. of Maternal and Child, University of North Carolina School of Public Health.

Section 2: Strengthening and sustaining the Baby-friendly Hospital Initiative: A course for decision-makers, was adapted from WHO course "Promoting breast-feeding in health facilities a short course for administrators and policy-makers". This can be used to orient hospital decisions-makers (directors, administrators, key managers, etc.) and policy-makers to the Initiative and the positive impacts it can have and to gain their commitment to promoting and sustaining "Baby-friendly". There is a Course Guide and eight Session Plans with handouts and PowerPoint Slides. Two alternative session plans and materials for use in settings with high HIV prevalence have been included.

Section 3: Breastfeeding Promotion and Support in a Baby-Friendly Hospital, a 20-hour course for maternity staff, which can be used by facilities to strengthen the knowledge and skills of their staff towards successful implementation of the Ten Steps to Successful Breastfeeding. This section includes:

- 3.1 Guidelines for Course Facilitators including a Course Planning Checklist
- 3.2 Outlines of Course Sessions
- 3.3 PowerPoint Slides for the Course

Section 4: Hospital Self-Appraisal and Monitoring, which provides tools that can be used by managers and staff initially, to help determine whether their facilities are ready to apply for external assessment, and, once their facilities are designated Baby-friendly, to monitor continued adherence to the Ten Steps. This section includes:

- 4.1 Hospital Self-Appraisal Tool
- 4.2 Guidelines and Tools for Monitoring

Section 5: External Assessment and Reassessment, which provides guidelines and tools for external assessors to use to both initially, to assess whether hospitals meet the Global Criteria and thus fully comply with the Ten Steps, and then to reassess, on a regular basis, whether they continue to maintain the required standards. This section includes:

- 5.1 Guide for Assessors, including PowerPoint slides for assessor training
- 5.2 Hospital External Assessment Tool
- 5.3 Guidelines and Tool for External Reassessment
- 5.4 The BFHI Assessment Computer Tool

Sections 1 through 4 are available on the UNICEF website at http://www.unicef.org/nutrition/index_24850.html or by searching the UNICEF website at http://www.unicef.org/ and, on the WHO website at http://www.who.int/nutrition/publications/infantfeeding/9789241594950/en/index.html or by searching the WHO website at www.who.int/nutrition.

Section 5: External Assessment and Reassessment, is not available for general distribution. It is only provided to the national authorities for BFHI who provide it to the assessors who are conducting the BFHI assessments and reassessments. A computer tool for tallying, scoring and presenting the results is also available for national authorities and assessors. Section 5 can be obtained, on request, from the country or regional offices or headquarters of UNICEF and WHO, Nutrition Sections.

SECTION 3

BREASTFEEDING PROMOTION AND SUPPORT IN A BABY-FRIENDLY HOSPITAL

A 20-HOUR COURSE FOR MATERNITY STAFF

Page

3.1 Guidelines for Course Facilitators

Course objectives	1
Length of the course	2
Preparing for the course	3
Course materials	4
Presentation of the course	6
Annex 1: Course Planning Checklist	8
Annex 2: Example of a course timetable	11
Annex 3: Resources for further information	12
Annex 4: Instruction to make a cloth breast model	17
Annex 5: Assessment of Learning Tools	18
Annex 6: Picture credits	19
Annex 7: Notes for an orientation session for non-clinical staff	20

3.2 Session Outlines

3.3 PowerPoint Slides for the course

Each Section is a separate file and may be downloaded from UNICEF Internet at http://www.unicef.org/nutrition/index_24850.html, or the WHO Internet at www.who.int/nutrition

3.1 GUIDELINES FOR COURSE FACILITATORS

The original "18-hour" course was widely used and translated into many languages. This revision takes into account new research on supportive practices as well as the HIV situation. These are guidelines for experienced course facilitators and are not intended as a word-by-word course. This course focuses on the application of the health workers' knowledge and skills in their everyday practice rather than providing a large amount of theory and research findings.

The Key Points from this course are:

– Breastfeeding is important for mother and baby.
– Most mothers and babies can breastfeed.
– Mothers and babies who are not breastfeeding need extra care to be healthy.
– Hospital practices can help (or hinder) baby and mother friendly practices.
– Implementing the Baby-friendly Hospital Initiative helps good practices to happen.

Course objectives

The short-term objectives of this course are:

- To help equip the hospital staff with the knowledge and skill base necessary to transform their health facilities into baby-friendly institutions through implementation of the Ten Steps to Successful Breastfeeding, and
- To sustain policy and practice changes.

This course is suitable for staff who has contact with pregnant women, mothers and their newborn infants. The staff may include doctors, midwives, nurses, health care assistants, nutritionists, peer supporters and other staff. It is also suitable for use in pre-service training so that students are prepared with the knowledge and skills to support breastfeeding when they begin work. A hospital may use sections of the course to provide short in-service sessions for staff on specific topics.

The course by itself cannot transform hospitals, but it can provide a common foundation for basic breastfeeding management that will lay the basis for change. These health workers in contact with the women and her child, along with hospital administrators, policy makers, and government officials will then have the bigger task of ensuring long-term implementation of appropriate policies that support optimal infant feeding.

On completion of this course, the participant is expected to be able to:

- use communication skills to talk with pregnant women, mothers and co-workers;
- practice the Ten Steps to Successful Breastfeeding and abide by the International Code of Marketing of Breast-milk Substitutes;
- discuss with a pregnant woman the importance of breastfeeding and outline practices that support the initiation of breastfeeding;
- facilitate skin-to-skin contact and early initiation of breastfeeding;
- assist a mother to learn the skills of positioning and attaching her baby as well as the skill of hand expression;
- discuss with a mother how to find support for breastfeeding after she returns home;
- outline what needs to be discussed with a women who is not breastfeeding and know to whom to refer this woman for further assistance with feeding her baby;
- identify practices that support and those that interfere with breastfeeding;
- work with co-workers to highlight barriers to breastfeeding and seek ways to overcome those barriers.

This course is NOT designed to train trainers to teach courses, to provide training in on-going support for infant feeding after discharge from the maternity service, to train specialist workers in assisting with breastfeeding difficulties, to train infant feeding counsellors working with women who are HIV-positive, or to train administrator's and those involved in policy development. There are other specialised courses for those health workers that give fuller training than this short course can provide such as:
-*Breastfeeding Counselling: a training course,* WHO/UNICEF (1993).
-*HIV and Infant Feeding Counselling: a training course,* WHO,UNICEF,UNAIDS (2000).
-*Infant Feeding in Emergencies*, Emergency Nutrition Network (ENN) in conjunction with WHO/UNICEF (2003).
-*Integrated Infant Feeding Counselling: a training course*, WHO/UNICEF (2005).
-*Strengthening and sustaining the Baby-friendly Hospital Initiative: A course for decision-makers*, which forms Section 2 of this updated BFHI package of materials.

Some staff may not have a role in clinical care but would benefit from knowing more about why breastfeeding is important and how they can help support it. A 15-20 minute session in Appendix 7 can be used as an orientation to non-clinical staff. It can also be used for new clinical staff waiting to be scheduled for participating in the full 20-hour course.

Length of the course

The decision to develop the course to 20 hours is based on several factors. It is recognised that intensive in-service training such as this course necessitates some interruption of clinical care. The 20 hours may be presented in three intensive days or in shorter segments over a longer period, whichever is most suitable for the facility. It is intended that every hospital staff member who has direct patient care responsibility for mothers and babies will attend the course. It is kept short in anticipation that it will need to be repeated within the same hospital in order to reach all staff from all shifts.

A 20-hour syllabus allows much of the essential information to be presented. There are 15.5 hours of classroom time focused on skill-oriented training including discussion and pair practice. The 4.5 hours of clinical practice provides time with pregnant women and new mothers. A formal opening or closing, if needed, and breaks are not included in the 20 hours. Additional time needs to be added for the clinical practice if participants must travel from the classroom to another site where the mothers are available.

The amount of time anticipated for the individual topics within each session is indicated. This time allows the core material to be presented, however additional time will be needed if there is additional discussion and debate on the topic. Additional time will be needed for some of the activities printed in boxes, as indicated. Aim to allow a five-minute break between sessions for a 'stretch' if a longer break is not scheduled for that time.

At the end of the course, participants need to be clear about what action they need to take to implement the practices and skills into their every day work. Information on developing an "action plan" is given in the final session. However, additional time will be needed to develop a detailed plan, which is important for change to occur and be sustained.

If it is possible to arrange more than 20 hours, certain topics could be presented in greater depth, and more time would be available for discussion. Additional role-play practice would also be of benefit to the participants.

It is expected that clinical learning will continue with supervision by the more experienced and knowledgeable hospital staff. This ongoing clinical practice will be essential to providing

continuity of care to breastfeeding mothers and babies and to ensuring the implementation of the Ten Steps to Successful Breastfeeding.

Preparing for the course

An overall course planning checklist is provided in Annex 1.

Choosing facilitators

Facilitators should be knowledgeable about breastfeeding and health care practices (including birth procedures) that are baby-friendly. The facilitators should be experienced in presentation skills and in techniques of assisting learning. At least one of the course facilitators should have a high level of breastfeeding knowledge so they are able to answer questions and find further references. The number of facilitators will depend on the number of participants and the format of the course. Participation in this course does not qualify the person to become a facilitator for this course.

If this course is given as an intensive three days course, no one facilitator should have primary responsibility for teaching more than three sessions in a day. Aim for a change of facilitators frequently - at least for each session. Sessions may be divided with two or more facilitators taking different sections to provide variety. Each facilitator should have at least one hour of teaching responsibility daily. One facilitator can do all the teaching if only one session is held on a single day, as may be likely in hospital in-service training.

In order to learn effectively from the clinical practice and to safe guard the mothers and babies, there should be sufficient facilitators to supervise the practice. Additional facilitators may be available if there are skilled staff on the wards or clinic already who can assist. Each facilitator should ideally have four and no more than six participants to supervise during clinical practice. If the course is conducted in short sessions over a period in one facility, clinical practice can be done by a small group of not more than six people with a facilitator at a time convenient to their work.

Clinical practice requirements

A minimum of four and a half hours of clinical experience forms part of the training course. The facilitators will need to meet with hospital administration and maternity staff before the course begins to discuss the best way that each clinical practice can be carried out. Read the session through carefully to see how it can be conducted effectively in your setting.

Facilitators will need to help the hospital maternity staff decide how to select appropriate women for participants to talk with, to observe and to assist. It is likely that the nurse or physician in charge of the maternity ward will work together with the facilitators on this activity.

It is expected that this course will be used primarily for hospital in-service training, with the wards easily accessible for clinical practice. The clinical work is an essential part of the training and the three clinical practices allotted are an absolute minimum. It is anticipated that course participants will need ongoing supervised clinical practice to ensure that the new management becomes routine.

Preparing the timetable

Find out what are the best times to conduct the clinical practices and build the classroom sessions around these visits to the wards/clinics. If there are a large number of participants, it may be possible to divide the group so that some are talking with pregnant women while other participants are assisting breastfeeding or hand expression. Ensure the classroom knowledge on a topic comes before the clinical practice for that topic. For example, to talk to a pregnant woman about practices that support breastfeeding such as early contact and rooming-in, these sessions will need to be covered before the clinical practice with pregnant women.

The number of facilitators and their particular skills also needs to be taken into account. Planning the timetable may mean shifting facilitators or topics around so that no facilitator is overburdened at the start and unused later.

The timetable may also need to consider when equipment is available, when meal breaks need to be taken and whether travel time is needed for clinical practices. An example of a timetable is provided in Annex 2.

Room requirements

The course will need:

- A classroom big enough for the whole group.
- Tables and chairs that can be moved for individual learning activities.
- A blackboard, white board or flipchart (and chalk or markers) in the front of the room for writing.
- A notice board or wall to display materials and tape or other system for attaching notices to the wall.
- Easy access to data projector for PowerPoint, extension cords, and screen or suitable wall or equipment to produce colour printed overhead transparencies
- 2-3 large tables to hold the projector, display materials and for the facilitator's use;
- Simple room-darkening arrangements.

Course materials

Facilitator's materials

- Session Outlines containing the points to be covered for each topic and illustrations where relevant.
- PowerPoint containing the pictures and illustrations. Colour printouts or transparencies of the PowerPoint can be made if PowerPoint is not available.
- Annex 3: Resources for Further Information, which includes web sites for further information and resource materials.
- Section 4.1, which includes the Hospital Self-Appraisal Tool is a separate document in the set of Baby-friendly Hospital Initiative materials.

Other teaching aids

- Dolls. Choose or make dolls that range in size from newborn to a few months old. At least one doll is needed for each group of 3-4 participants.
- Cloth breast model. See Annex 4 for instructions on how to make a breast model. At least one breast is needed for each group of 3-4 participants.

The one to two page summaries of each session can be used as a Participants' Manual if required. Participants are not expected to need to take extensive notes.

Session Outlines

The cover page for each session sets out:

- The learning objectives for the session, which are numbered as section headings.
- The overall time allocated for the session.
- Any additional materials or preparation the facilitator will need for the session.
- A list of Further Reading for the facilitators. The items listed can be downloaded from the Internet unless stated otherwise. Details of the web sites are in Annex 3. Additional material may be available from local UNICEF or WHO offices.

Teaching outline

Topics are listed under each main heading. To the left of the main heading is the objective number that corresponds with the topic. To the right of the main heading is the time suggested for teaching that topic. Class activities appear in boxes. Facilitators are expected to check the material is still suitable and up-to-date before each session.

Knowledge check

A knowledge check appears at the end of each session. Participants can be asked to complete each test in their own time, in pairs or in groups. Facilitators may offer to review any material that is still unclear. If facilitators wish, and if time allows, the knowledge check may be used for class discussion. When preparing the session, facilitators should review these knowledge checks and prepare possible answers. Answers to the questions are generally provided in the text for that session.

Session summary

At the end of each session is a short summary of the main points. The summary may be given to participants at the start of the session so that the participants can refer to this page and add additional notes if needed. The summaries may be photocopied for use outside the course.

Additional information section

The core material in each session aims to cover the practice situations for the majority of participants. The facilitator may want additional information to answer questions or to cover a topic in greater depth. Presenting this additional information is not included in the session time.

Language of the course

The course can be translated into the native language of the country, but should always be reviewed by one or more people qualified in lactation management to ensure accuracy of the information provided.

Assessment of learning

A self-assessment of learning tool is included in Annex 5. This can be used as a post-test; or to assist the participants to continue to develop their knowledge and skills; or to assess if a new staff member has adequate knowledge and skill from a previous employment or training. This tool can be modified so the facilitator can assess the learning as well as the participant's self-assessment.

Presentation of the course

Interactive facilitation

The session outline provides the key points to include in each section. It is best if the facilitator does not read all the points word by word as a lecture but uses a more interactive style:

- The facilitator can ask participants a question that will lead into a section – for example, “How might birth practices affect breastfeeding?” Let participants comment first and then present the points in the text for this section.
- The facilitator can ask about their experiences to also involve participants - “When do women in this area have an antenatal discussion about feeding their baby”?
- It can be helpful to ask a question after the key points have been presented, - “How do you think this practice would work here?”
- Help participants to relate theory to practice, - “If a mother came to you with sore nipples, what might you watch for when you observe the baby feeding?”
- If you want participants to study a picture and comment on it, keep silent for a moment to give them time to think.

Keep in mind that the time is very limited and ensure the discussions are relevant to the topic, brief, and helpful to the group. Concentrate on covering the topics that apply to most women rather than spending a long time discussing unusual or rare situations.

If participants are looking for more information, direct them to the Further Reading materials, or encourage them to attend a more specialist course as listed earlier.

Babies are both male and female, therefore the phrase "she or he," is used when the baby is referred to in this course. Facilitators do not need to say she or he each time, they are encouraged to use “she” sometimes and “he” sometimes for the baby as they facilitate the course. In the story, one baby is a boy and one baby is a girl, therefore he or she is used depending on which baby is referred to.

Discussions

These discussions give an opportunity for participants to share ideas and raise questions. The facilitator will need to guide the discussion and keep participants focused. If one participant dominates discussion, the facilitator will need to intervene. If the facilitator dominates, it becomes a lecture or question-and-answer session, and is not a discussion.

Working in small groups gives participants an opportunity to share ideas and experiences. These small group discussions are very important for changing attitudes, not just to share facts. Facilitators can rotate from group to group to ensure the information shared supports baby-friendly practices. In general, do not spend time reporting back from the groups, especially if all groups were discussing the same topic.

Each group should have a reporter who summarizes the main points and questions on a large card or sheet of paper to post for all to see. The facilitator can provide relevant information as the course continues and discuss the questions raised.

Pair practice

Pair practice allows participants to practice communication skills with one another. Let participants choose their own partners or mix participants so that they have an opportunity to work with different people. If someone ends up alone, a facilitator can pair with the extra person. In addition to the activities identified as pair practice, this technique can be used with any of the Case Studies.

Role plays

When facilitators use role-plays and demonstrations as a learning tool, they should rehearse the general direction of the role-play before the session. As an alternative, selected participants can be asked to participate in a role play/demonstration with a facilitator. Role play/demonstrations should be informal, small dramas that take only a few minutes. Role play/demonstrations can be used to stimulate discussion, to model certain kinds of interaction, and to introduce a case study for further role playing between participants.

Role plays and demonstrations are suggested at several points throughout the course. However, it is hoped that individual facilitators will utilise their own teaching skills and talents to present material in creative ways. Have fun with role plays, and provide as many opportunities as possible for participants to join in.

Case studies

The case studies present a situation that the participants are asked to discuss or to use as the basis for a role-play. Participants may want to adapt their case study to fit particular national, cultural, or management situations. Names and character details can easily be changed. If class time does not permit the use of a case study, participants may be asked to do a homework assignment based on it.

Forms

Forms are used for activities in several sessions. One copy of each form is provided at the end of the session plan where it will be used. The necessary number of copies can be made for the session so that every person has one form. The forms may also be copied for clinical use outside the course.

Illustrations

Illustrations are referred to within the outlines. They may be used to make overhead transparencies or flipcharts if the PowerPoint is not available.

Photographs and illustrations

While topics may be presented without the use of PowerPoint slides, they are helpful whenever possible. The facilitator should explain what the participants are to look for in the picture. Participants can be asked to come to the front of the room to point out what they see in a picture. Where electricity and room darkening are available only in the evenings, scheduling of topics will need to be adjusted. If PowerPoint is not available, the pictures can be printed, preferably in colour, for the participants to look at as a group.

HIV and infant feeding

If the course is held where there is a high rate of HIV infection among pregnant women, and participants' knowledge on mother-to-child transmission of HIV is limited, additional information related to HIV may be provided as additional sessions. Sessions from *HIV and Infant Feeding Counselling: a training course,* UNAIDS/WHO/UNICEF (2000) or *Integrated Infant Feeding Counselling: a training course,* WHO/UNICEF (2005) can be used to provide information on:

-Basic facts on HIV and on Prevention of Mother-to-Child Transmission (PMTCT).
-Testing and counselling for HIV.
-Locally appropriate replacement-feeding options.
Risks of "spill over" of replacement feeding to the general population.

Annex 1: Course Planning Checklist

Initial planning

1. Visit the health facility that you will use for clinical practices.
   _ Confirm the hours during which it is possible to talk with pregnant women and new mothers. If you plan to visit more than one facility at each practice time, it is important to make sure they are available at the same time. Each participant will need to talk with at least one pregnant women and one breastfeeding mother. For example, in a course with 12 participants, there would need to be at least 20 pregnant women at the antenatal clinic and/or antenatal in-patient ward or waiting mother facility, to provide sufficient women to talk to allowing for some women to be unwilling to talk.

2. Choose a classroom site. Ideally, this should be at the same site as the clinical practice sites. Make sure that the following are available:
   _ Easy access from the classroom to the area for the clinical practice.
   _ A large room that can seat all participants and facilitators for sessions, including space for guests invited to opening and closing ceremonies. There should be space for a group of four participants and a facilitator to sit at a table.
   _ For the facilitators' preparation day before the participants' course, you will need one classroom that can accommodate 8 people.
   _ Adequate lighting and ventilation, and wall space to post up large sheets of paper in each of the rooms.
   _ At least one table for each group of 4 participants and additional table space for materials.
   _ Freedom from disturbances such as loud noises or music.
   _ Arrangements for providing refreshments.
   _ Space for at least one clerical or logistic support staff during participants' course.
   _ A place where supplies and equipment can be safely stored and locked up if necessary.
   _ When you have chosen a suitable site, book the classroom space in writing and subsequently confirm the booking some time before the course, and again shortly before the course.
   _ Confirm the times of the clinical practice visits with the clinical sites.
   _ Make arrangements for transporting participants and facilitators to the clinical practice site.

3. Decide exact dates of the course and prepare a timetable.
   _ Decide the course schedule, for example, a whole course on consecutive days or 1-day each week.
   _ Allow 1 day for the preparation of facilitators.
   _ Allow 3 days for the course for participants.
   _ Course Director available 1-2 days before the facilitators' preparation session, as well as during all of the facilitators' preparation session and the course itself.
   _ If the clinical practice site is a different venue than the classroom you need to allow extra time to travel to and from the clinical practice site.
   _ Ideally allocate no more than 6.5 teaching hours per day with meal and break times in addition.
   _ Prepare the course timetable allocating clinical practice times, classroom times, and meal and break times.

- If participants have long distance to travel, consider a later start on Day 1 and an early finishing time on Day 4, if the course is held on consecutive days.
- If there will be a formal opening or closing ceremony include these in the timetable so that these events do not take time away from the course sessions.

4. Choose lodging for the participants and facilitators if needed. If lodging is at a different site from the course, make sure that the following are available:
   - Reliable transportation to and from the course site.
   - Meal service convenient for the course timetable.
   - When you have identified suitable lodging, book it in writing and subsequently confirm the booking some time before the course, and again shortly before the course.

5. Select and invite facilitators. It is necessary that:
   - Facilitators are experienced in course facilitation and are knowledgeable about breastfeeding and health care practices that are baby-friendly.
   - Facilitators are able and willing to attend the entire course, including the preparatory day before the course.
   - Facilitators receive materials at least three weeks before the start of a course so they have an opportunity to read them.
   - There is at least one facilitator per 4 participants during the clinical practice visits. Additional facilitators may be available if there are skilled staff on the wards or clinic who can assist.

6. Identify suitable participants, and send them letters of invitation stating:
   - The objectives of the training and a description of the course.
   - The desired times of arrival and departure times for participants.
   - That it is essential to arrive in time and to attend the entire course.
   - Administrative arrangements, such as accommodation, meals, and payment of other costs.

7. Arrange to send travel authorisations to facilitators, course director, and participants.

8. Arrange to send materials, equipment, and supplies to the course site.

9. Invite outside speaker for opening and closing ceremonies, if needed.

Arrangements a week before the course begins

10. Confirm arrangements for:
    - Lodging for all facilitators and participants.
    - Classroom arrangements.
    - Daily transportation of participants from lodgings to classroom and to and from clinical practice sites.
    - The clinical practice site and that facility staff are briefed on the visits
    - Meals and refreshments.
    - Opening and closing ceremonies with relevant authorities. Check that invited guests are able to come.
    - A course completion certificate (if one will be given) and when a group photograph will be taken in time to be developed before the closing ceremony. (optional).
    - Arrangements for typing and copying of materials during the course (for example, timetables, lists of addresses of participants and facilitators).

11. Arrange to welcome facilitators and participants at the hotel, airport, or railway/bus station, if necessary.

12. Ensure course materials, supplies, and equipment, are available and ready to be delivered to the course site.

Actions during the course

13. After registration, assign groups of 4 participants to one facilitator. Post up the list of names where everyone can see it.

14. Provide all participants and facilitators with a Course Directory, which includes names and addresses of all participants, facilitators, and the Course Director.

15. Arrange for a course photograph, if desired, to be taken.

16. Prepare a course completion certificate for each participant.

17. Make arrangements to reconfirm or change airline, train, or bus reservations and transportation to stations for facilitators and participants, if necessary.

18. Allocate a time for payment of per diem and for travel/lodging arrangements that does not take time from the course.

Add any other points you need to check:

Equipment list:

_ Data projector and laptop for PowerPoint, extension cord, and screen or suitable flat white wall, or equipment to produce colour printed overhead transparencies and an overhead projector.

_ Dolls. Choose or make dolls that range in size from newborn to a few months old. At least one doll is needed for each group of 3-4 participants.

_ Cloth breast model. See Annex 3 for instructions on how to make a breast model. At least one breast is needed for each group of 3-4 participants.

_ Pens, pencils, erasers, and paper for the participants and facilitators.

_ A blackboard, white board or flipchart (and chalk or markers).

_ Flip chart paper and means to attach sheets to the wall, markers.

Annex 2: Example of a Course Timetable – held over 3 days

Time for core material is indicated, not including additional information sections or optional activities. Arrange clinical practices first and then fit the classroom sessions around these practices.

Day 1		
8.30-8.45	Welcome (allow extra time for a formal opening, if desired)	15 minutes
8.45-9.15	Session 1: BFHI: a part of the Global Strategy	30 minutes
9.15-10.15	Session 2: Communication skills	60 minutes
10.15-10.30	Break	*15 minutes*
10.30-12.00	Session 3: Promoting breastfeeding during pregnancy – Step 3	90 minutes
12.00-12.45	Session 4: Protecting breastfeeding	45 minutes
12.45-1.45	Break	*60 minutes*
1.45-3.00	Session 5: Birth practices and breastfeeding – Step 4	75 minutes
3.00-3.15	Break	*15 minutes*
3.15-4.00	Session 6: How milk gets from breast to baby	45 minutes
4.00-4.30	Session 7: Helping with a breastfeed – Step 5 – sections 1-3	30 minutes
4.30-4.45	Summary of the day and any questions	15 minutes
Day 2		
8.30-9.30	Session 7: Helping with a breastfeed – Step 5 – sections 4-7	60 minutes
9.30-10.00	Break (extra time if needed for clinical practice movement)	*30 minutes*
10.00-12.00	Clinical practice 1: observing and assisting breastfeeding	120 minutes
12.00-1.00	Session 8: Practices that assist breastfeeding – Steps 6, 7, 8 and 9	60 minutes
1.00-2.00	Break	*60 minutes*
2.00-2.45	Session 9: Milk supply	45 minutes
2.45-3.30	Session 10: Special infant situations	45 minutes
3.30-3.45	Break	*15 minutes*
3.45-4.45	Session 11: If baby cannot feed at the breast – Step 5	60 minutes
4.45-5.00	Summary of the day and any questions	15 minutes
Day 3		
8.30-9.30	Session 12: Breast and nipple concerns	60 minutes
9.30-10.30	Clinical practice 2:discussing breastfeeding with pregnant women	60 minutes
10.30-11.15	Break (extra time if needed for clinical practice movement)	*45 minutes*
11.15-12.45	Clinical practice 3: observing hand expression and cup feeding	90 minutes
12.45-1.45	Break	*60 minutes*
1.45-2.30	Session 13: Maternal health concerns	45 minutes
2.30-3.45	Session 14: On-going support for mothers – Step 10	75 minutes
3.45-3.55	Break	*10 minutes*
3.55-4.30	Session 15: Making your hospital Baby-friendly	35 minutes
4.30-4.45	Summary of the day and any questions	15 minutes
4.45-5.00	Closing (allow extra time for a formal closing, if desired)	15 minutes

Annex 3: Resources for further information

Web sites:

Remember – web sites change frequently. Search for the key words 'BFHI', baby-friendly, and breastfeeding in the sites search engine, and look under Resources, Publications and Links within the web site.

To download a PDF file without opening it, right click your mouse, then 'Save Target As' and file it in a suitable directory with a recognisable name.

Adobe Reader is free and can be downloaded from most sites that have PDF files or from http://www.adobe.com./

UNICEF Headquarters. Additional materials may also be available from Country Offices For more information on UNICEF's work on infant and young child feeding support of country efforts to implement the targets of the Innocenti Declaration and the Global Strategy for Infant and Young Child Feeding , or on the Baby-friendly Hospital Initiative as a whole, and to download copies as materials are updated, please refer to http://www.unicef.org/nutrition/index_breastfeeding.html

WHO Headquarters. Additional materials may also be available from Regional Offices
Documents listed may be downloaded unless stated otherwise.

Nutrition for Health and Development (NHD)
World Health Organization, 20 Avenue Appia, 1211 Geneva 27, Switzerland
Fax: +41 22 971 41 56, e-mail: nutrition@who.int
http://www.who.int/nutrition/publications/infantfeeding/en/index.html

Department of Child and Adolescent Health and Development (CAH)

World Health Organization
20 Avenue Appia, 1211 Geneva 27, Switzerland
Fax: +41-22 791 4853, e-mail: cah@who.int
http://www.who.int/child_adolescent_health/documents/en/

WHO/UNICEF. Global Strategy for Infant and Young Child Feeding. Geneva, World Health Organization. 2002. Available in English, Arabic, Chinese, French, Russian, Spanish.

WHO/LINKAGES. Infant and Young Child Feeding. A tool for assessing national practices, policies and programmes. Geneva, World Health Organization. 2003.

International Code of Marketing of Breast-milk Substitutes. Geneva, World Health Organization, 1981. Available in English and French

The International Code of Marketing of Breast-milk Substitutes. A common review and evaluation framework. 1996. Geneva, World Health Organization, 1996.

The International Code of Marketing of Breast-milk Substitutes: summary of action taken by WHO Member States and other interested parties, 1994-1998. 1998.

Infant formula and related trade issues in the context of the International Code paper. Geneva, World Health Organization.

Follow-up formula in the context of the International Code paper. Geneva, World Health Organization.

The Innocenti Declaration: Progress and achievements, Parts I, II and III. Weekly Epidemiological Record, 1998, 73(5):25-32, 73(13):91-94 and 73(19):139-144.

Diet, Nutrition and the Prevention of Chronic Diseases. Report of a Joint WHO/FAO Expert Consultation. Geneva, World Health Organization Technical Report Series, No. 916.

Nutrient requirements for people living with HIV/AIDS. Report of a technical consultation. World Health Organization, Geneva, 13–15 May 2003.

Feeding and Nutrition of Infants and Young Children. Guidelines for the WHO European Region, with Emphasis on the Former Soviet Countries. WHO Regional Publications, European Series No. 87. http://www.euro.who.int/InformationSources/Publications/Catalogue/20010914_21#Feeding_feeding

Infant Feeding in Emergencies. (English and Russian)WHO European Office 1997 http://www.euro.who.int/document/e56303.pdf

WHO/UNICEF. *Implementing the Global Strategy for Infant and Young Child Feeding: Report of a technical meeting, Geneva, 3-5 February 2003. Geneva, World Health Organization, 2003.*

Evidence for the Ten Steps to Successful Breastfeeding. Geneva, World Health Organization, 1999. Available in English, French and Spanish.

Butte, NF; Lopez-Alarcon MG and Garza C. *Nutrient adequacy of exclusive breastfeeding for the term infant during the first six months of life*. Geneva, World Health Organization, 2002.

The optimal duration of exclusive breastfeeding. Report of an expert consultation. Geneva, World Health Organization, 2001.

Kramer MS, Kakuma R and WHO.*The optimal duration of exclusive breastfeeding. A systematic review*. Geneva, World Health Organization, 2001.

Complementary feeding: Report of the Global Consultation, and Summary of Guiding Principles for complementary feeding of the breastfed child. Geneva, World Health Organization, 2003.

Guiding principles for complementary feeding of the breastfed child. WHO, PAHO, 2004. Available in English, French and Spanish.

Complementary feeding of young children in developing countries: A review of current scientific knowledge. Geneva, World Health Organization, 1998.

WHO/UNICEF. *Breastfeeding and maternal medication: Recommendations for drugs in the eleventh WHO model list of essential drugs* .Geneva, World Health Organization, 2002.

Breastfeeding and maternal tuberculosis UPDATE, N 23 February 1998. Geneva, World Health Organization, 1998.

Breastfeeding and the use of water and teas UPDATE, No. 9 November 1997. Geneva, World Health Organization, 1997.

Not enough milk UPDATE, No. 21 March 1996. Geneva, World Health Organization, 1996.

Hepatitis B and breastfeeding UPDATE, No. 22 November 1996. Geneva, World Health Organization, 1996.

Persistent diarrhoea and breastfeeding. Geneva, World Health Organization, 1997.

Mastitis. Causes and management. Geneva, World Health Organization, 2000. Available in English, Bahasa, French, Russian, Spanish.

Relactation. A review of experience and recommendations for practice. Geneva, World Health Organization, 1998. Available in English, French, Spanish.

Hypoglycaemia of the newborn. Review of the literature. Geneva, World Health Organization, 1997.

WHO/UNICEF. *Breastfeeding counselling: A training course*. Geneva, World Health Organization, 1993. Available in English, French, Russian, Spanish.

HIV and Infant Feeding: Framework for Priority Action. Geneva, World Health Organization, 2003. Available in Chinese, English, French, Portuguese, Spanish.

HIV transmission through breastfeeding. A review of available evidence. Geneva, World Health Organization, 2004.

WHO, UNICEF, UNAIDS and UNFPA.*HIV and Infant Feeding. Guidelines for decision-makers*. Geneva, World Health Organization, 2004. Available in English, French, Spanish.

WHO, UNICEF, UNAIDS and UNFPA. *HIV and Infant Feeding. A guide for health-care managers and supervisors*. Geneva, World Health Organization, 2004. Available in English, French, Spanish.

Thomas E, Piwoz E, WHO. HIV and infant feeding counselling tools. Geneva, World Health Organization, 2005. Available in English, French, Spanish.

Department of Reproductive Health and Research (RHR),
World Health Organization, 1211 Geneva 27, Switzerland
Fax: + 41 22 791 4189, e-mail: reproductivehealth@who.int
http://www.who.int/reproductive-health/publications/index.htm

Pregnancy, childbirth, postpartum and newborn care - a guide for essential practice Geneva, World Health Organization, 2006.

Kangaroo Mother Care - a practical guide. Geneva, World Health Organization,2003. Available in English, French, Spanish.

Health aspects of maternity leave and maternity protection. Geneva, World Health Organization, 2000.

Statement on the effect of breastfeeding on mortality of HIV-infected women, 7 June, 2001. Geneva, World Health Organization, 2001.

BFHI around the world

- → Australia: http://www.bfhi.org.au/
- → Canada (English and French): http://www.breastfeedingcanada.ca/
- → Belgium: http://www.vbbb.be/
- → France: http://www.coordination-allaitement.org/L%27IHAB.htm
- → Germany: http://www.stillfreundlicheskrankenhaus.de/home.html
- → Ireland: http://www.ihph.ie/babyfriendlyinitiative/index.htm
- → Italy: http://www.mami.org/
- → Netherlands: http://www.borstvoeding.nl/default.asp
- → Switzerland: http://www.allaiter.ch/
- → New Zealand: http://www.babyfriendly.org.nz/
- → United Kingdom: http://www.babyfriendly.org.uk/
- → USA: http://www.babyfriendlyusa.org/

WHO- Western Pacific Region:
http://www.wpro.who.int/health_topics/infant_and_young_child_feeding/general_info.htm

WHO European Office: http://www.euro.who.int/nutrition/Infant/20020730_1

Statistics on BFHI worldwide March 2002:
http://www.unicef.org/nutrition/files/nutrition_statusbfhi.pdf

Organisations, some with Protocols and Policies:

Academy of Breastfeeding Medicine (ABM) is a worldwide organization of physicians dedicated to the promotion, protection and support of breastfeeding and human lactation.
Web site: http://www.bfmed.org/
ABM Protocols include:

Hypoglycemia (English) Hypoglykämie (German) Hipoglucemia (Spanish)
Going Home/Discharge (English) Alta (Spanish)
Supplementation (English) Alimentación suplementaria (Spanish)
Mastitis (English) Mastitis (Spanish)
Peripartum BF Management (English) Manejo en el Periparto de la Lactancia (Spanish)
Cosleeping and BF
Model Hospital Policy
Human Milk Storage Information
Galactogogues
Breastfeeding the Near-term Infant
Neonatal Ankyloglossia
Transitioning from the NICU to Home

Coalition for Improving Maternity Services (CIMS)
Established in 1996, the Coalition for Improving Maternity Services (CIMS) is a collaborative effort of numerous individuals and more than 50 organizations representing over 90,000 members. Their mission is to promote a wellness model of maternity care that will improve birth outcomes and substantially reduce costs. http://www.motherfriendly.org/

The Cochrane Collaboration is an international non-profit and independent organisation, dedicated to making up-to-date, accurate information about the effects of health care readily available worldwide. It produces and disseminates systematic reviews of healthcare interventions and promotes the search for evidence in the form of controlled trials and other studies relevant to health care. Reviews related to breastfeeding are included. http://www.cochrane.org/

Emergency Nutrition Network (ENN) The Emergency Nutrition Network aims to improve the effectiveness of emergency food and nutrition interventions by providing a forum for the exchange of field level experiences between staff working in the food and nutrition sector in emergencies strengthening institutional memory amongst humanitarian aid agencies working in this sector helping field staff keep abreast of current research and evaluation findings relevant to their work better informing academics and researchers of current field level experiences, priorities and constraints thereby leading to more appropriate applied research agendas. http://www.ennonline.net/

European Union Project on Promotion of Breastfeeding in Europe, Protection, promotion, and support of breastfeeding in Europe: a blueprint for action. European Commission, Directorate Public Health and Risk Assessment, Luxembourg, 2004. Available in many European languages http://ec.europa.eu/health/ph_projects/2002/promotion/promotion_2002_18_en.htm

IBFAN - **the International Baby-Food Action Network** - consists of public interest groups working around the world to reduce infant and young child morbidity and mortality. IBFAN aims to improve the health and well being of babies and young children, their mothers and their families through the protection, promotion and support of breastfeeding and optimal infant feeding practices. Publications (not all can be downloaded) include *Protecting Infant Health: A Health Workers' Guide to the International Code of Marketing of Breastmilk Substitutes*, available in a variety of languages, and *The Code Handbook: A Guide to Implementing the International Code of Marketing of Breastmilk Substitutes. http://www.ibfan.org/site2005/Pages/index2.php?iui=1*

International Board of Lactation Consultant Examiners (IBLCE) are the certifying agency for International Board Certified Lactation Consultants, offering an internationally recognised examination each year at sites around the world. http://www.iblce.org/

International Lactation Consultant Association (ILCA) is the professional association for International Board Certified Lactation Consultants (IBCLCs) and other health care professionals who care for breastfeeding families. Their vision is a worldwide network of lactation professionals. Our mission is to advance the profession of lactation consulting. http://www.ilca.org/
The materials on the site include:

Evidence-Based Guidelines for Breastfeeding Management during the First Fourteen Days (1999) Translated into: Albanian, German, Lithuanian, Macedonian, and Serbian.
Position paper on HIV and Infant Feeding (Revised 2004).
Position paper on Infant Feeding (Revised 2000).
Position paper on Infant Feeding in Emergencies (2005).
Position paper on Breastfeeding, Breast Milk and Environmental Contaminants (2003).

Kangaroo Mother Care web site has downloadable resources on the research supporting Kangaroo Mother Care and experiences of implementing this practice. http://www.kangaroomothercare.com/

La Leche League International (LLLI) is a volunteer mother to mother support organisation. Materials, translations and links to groups around the world. http://www.llli.org//

LINKAGES is a USAID-funded program providing technical information, assistance, and training to organizations on breastfeeding, related complementary feeding and maternal dietary practices, and the

lactational amenorrhea method - a modern postpartum method of contraception for women who breastfeed. Linkages Project. http://www.linkagesproject.org/

Exclusive Breastfeeding: The Only Water Source Young Infants Need - Frequently Asked Questions. Languages Available: English (2004), French (2004), Spanish, Portuguese (2002).

Community-Based Strategies for Breastfeeding Promotion and Support in Developing Countries. Languages Available: English (2004).

Infant Feeding Options in the Context of HIV. Languages Available: English (2004).

Mother-to-Mother Support for Breastfeeding- Frequently Asked Questions. Languages Available: English (2004), French (1999), Spanish (1999).

World Alliance for Breastfeeding Action (WABA) was formed on 14 February, 1991. WABA is a global network of organizations and individuals who believe breastfeeding is the right of all children and mothers and who dedicate themselves to protect, promote and support this right. WABA acts on the Innocenti Declaration and works in liaison with UNICEF. http://www.waba.org.my/

Wellstart International's mission is to advance the knowledge, skills, and ability of health care providers regarding the promotion, protection, and support of optimal infant and maternal health and nutrition from conception through the completion of weaning.
http://www.wellstart.org/

Searching for journal references

A university or other health training institute library, ministry of health library or health NGO library may be able to assist with finding references.
Medline-National Library of Medicine: http://www.ncbi.nlm.nih.gov/sites/entrez
EMBASE: http://www.embase.com/
Google are developing a free web searcher that searches research journals on open access.
http://scholar.google.com/
The publishers of most of the journals have a searchable web site where the abstract and sometimes the full text of an article can be viewed or downloaded.
Example, Journal of Human Lactation. http://jhl.sagepub.com/

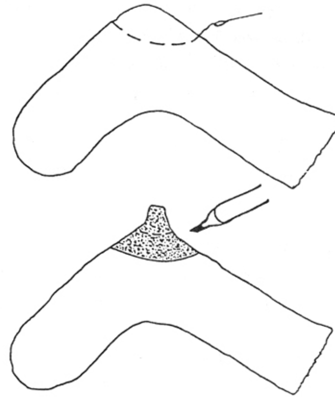
There are additional Committees, National Authorities and other useful sources of information that may be identified by a local UNICEF or WHO office.
If your committee would like to be listed, please let UNICEF know by email: Subject line: Attn. Nutrition Section at: pdpimas@unicef.org

Annex 4: Instructions to make a cloth breast model

Use two socks: one sock in a light brown or other colour resembling skin to show the outside of the breast, and the other sock white to show the inside of the breast.

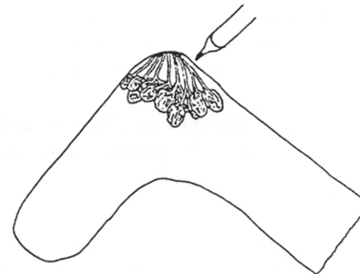
Skin-colour sock

Around the heel of the sock, sew a circular running stitch (= purse string suture) with a diameter of 4 cm. Draw it together to 1½ cm diameter and stuff it with paper or other substance to make a "nipple". Sew a few stitches at the base of the nipple to keep the paper in place.
Use a felt tip pen to draw an areola around the nipple.



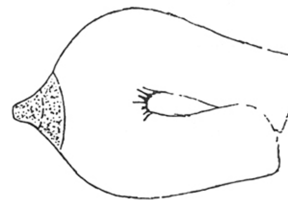
White sock

On the heel area of the sock, use a felt tip pen to draw a simple structure of the breast: alveoli, ducts, and nipple pores. Be sure the main ducts will be in the areola area.



Putting the two socks together

Stuff the heel of the white sock with anything soft. Hold the two ends of the sock together at the back and form the heel to the size and shape of a breast. Various shapes of breasts can be shown. Pull the brown sock over the formed breast so that the nipple is over the pores.



Making two breasts

If two breasts are made, they can be worn over clothing to demonstrate positioning and attachment. Hold them in place with an old nylon stocking tied around the chest. The correct position of the fingers for hand expression and massage can also be demonstrated.

Annex 5: Assessment of Learning Tools

PARTICIPANT END OF COURSE ASSESSMENT

Please answer the following questions. Your answers will help us improve this course. Thank you.

1. **On completion of this course:** (please put a X in the chosen column)

	I am NOT able to	**I am partly able to**	**I am fully able to**
Discuss with a pregnant woman at least: 2 reasons why breastfeeding is important for babies 2 reasons why breastfeeding is important for mothers 4 practices that support the initiation of breastfeeding			
Help mothers and babies to have: skin-to-skin contact immediately after birth an early start of breastfeeding			
Assist a mother to learn the skills of: positioning and attaching her baby for feeding hand expression of her milk			
Discuss with a mother how to find support for feeding her baby after she leaves the maternity unit			
List what needs to be discussed with a women who is not breastfeeding and know to whom to refer this woman for further assistance with feeding her baby (if you are not trained in HIV Infant Feeding Counselling)			
Identify practices in your facility that support and those that interfere with breastfeeding			
Work with co-workers to highlight barriers to breastfeeding and seek ways to overcome those barriers			
Follow the Ten Steps to Successful Breastfeeding			
Abide by the International Code of Marketing of Breast-milk Substitutes			

2. Overall I would rate this course as: Excellent Good Poor

3. The educational level of these materials is: Too simple Suitable Too difficult

4. Participant's self-evaluation
   The work I did during this course was: Too much Suitable Very little
   I learned from this course: Very much Moderate Very little

5. What have you learned from this course that would be most useful in your work with pregnant women, new mothers, and newborn infants?

   ____

   ____

Your comments are very important to us. Please write any additional comments or observations that you have about the training, including suggestions for improvements, on the back. Thank you.

Annex 6: Picture credits

Cover image "Maternity", 1963, © 2003 Estate of Pablo Picasso/Artists Rights Society (ARS), New York

Slide 3/1: Original illustration by Jenny Corkery, Dublin, Ireland
Slide 5/1: ©UNICEF C107-2
Slide 5/2: UNICEF/HQ92-0369/ Roger Lemoyne, Thailand
Slide 5/3: Dr Nils Bergman, Cape Town, South Africa
Slide 6/1: Adapted from *Breastfeeding Counselling: a training course,* WHO/CHD/93.4, UNICEF/NUT/93.2
Slide 6/2: *Breastfeeding Counselling: a training course,* WHO/CHD/93.4, UNICEF/NUT/93.2
Slide 6/3: *Breastfeeding Counselling: a training course,* WHO/CHD/93.4, UNICEF/NUT/93.2
Slide 6/4: *Breastfeeding Counselling: a training course,* WHO/CHD/93.4, UNICEF/NUT/93.2
Slide 7/1: *Breastfeeding Counselling: a training course,* WHO/CHD/93.4, UNICEF/NUT/93.2
Slide 7/2: *adapted from Integrated Infant Feeding Counselling: a training course*, WHO/UNICEF (2005)
Slide 7/3: ©UNICEF C107-5
Slide 7/4: ©UNICEF C107-7
Slide 7/5: ©UNICEF C107-9
Slide 7/6: UNICEF/HQ91-0168/ Betty Press, Kenya
Slide 8/1: Original illustration by Jenny Corkery, Dublin, Ireland
Slide 9/2: *Breastfeeding Counselling: a training course,* WHO/CHD/93.4, UNICEF/NUT/93.2
Slide 10/1: Dr Nils Bergman, Cape Town, South Africa
Slide 10/2: Dr Nils Bergman, Cape Town, South Africa
Slide 10/3: UNICEF/HQ93-0287/ Roger Lemoyne, China
Slide 10/4: UNICEF/HQ92-0260/ Lauren Goodsmith, Mauritania
Slide 10/5: ©UNICEF C107-21
Slide 10/6: Kay Hoover and Barbara Wilson-Clay, from *The Breastfeeding Atlas*
Slide 11/1: ©UNICEF 910164F
Slide 11/2: *Promoting breastfeeding in health facilities: A short course for administrators and policy makers* WHO/NUT/96.3, Wellstart International
Slide 11/3: Dr Ruskhana Haider, Dhaka, Bangladesh
Slide 12/1: *Breastfeeding Counselling: a training course,* WHO/CHD/93.4, UNICEF/NUT/93.2
Slide 12/2: ©UNICEF C107-19
Slide 12/3: ©UNICEF C107-25
Slide 12/4: ©UNICEF C107-39
Slide 12/5: ©UNICEF C107-31
Slide 12/6: ©UNICEF C107-32
Slide 12/7: *Breastfeeding Counselling: a training course,* WHO/CHD/93.4, UNICEF/NUT/93.2
Slide 12/8: ©UNICEF C107-34
Slide 12/9: ©UNICEF C107-33
Slide 12/10: ©UNICEF C107-35
Slide 13/1: Institute for Reproductive Health, Georgetown, Washington, DC
Slide 14/1: Original illustration by Jenny Corkery, Dublin, Ireland
Slides 15/1-15/6: Originally developed by Genevieve Becker for BFHI in Ireland

Annex 7: Notes for an orientation session for non-clinical staff

Target audience: staff that do not have clinical responsibility for assisting breastfeeding. This may include clerical workers, catering staff, cleaners, laboratory staff, storeroom, porters or other staff.

Time: 15 to 20 minutes

Objectives: At the end of this session, participants will be able to:
Indicate where a copy of the facilities breastfeeding/infant feeding policy can be found;
List two reasons why supporting breastfeeding is important;
List two practices in the facility that support breastfeeding;
List two things that they can do (or avoid doing) as part of their own work that can help implement the policy and support breastfeeding.

Key points:

- Breastfeeding is important to the short and long term health and well being of mother and child. Exclusive breastfeeding is recommended for the first six months, this means no other food or drinks aside from breast milk. Following the introduction of other foods from six months, breastfeeding is still important. It can continue into at least the second year.
- Mothers and babies who are not breastfeeding need extra care to be healthy.
- Most women are able to breastfeed.
- If a pregnant woman or a mother has a question about feeding her baby, suggest that she talk to (who ever are relevant in this facility such as the midwife or clinic nurse or the doctor).
- This health facility works to support breastfeeding and has a policy which you are required to abide by (the same as you abide by policies about confidentiality, safety, timekeeping and other policies). This policy includes: … (discuss some practices such as antenatal information, rooming-in, and demand feeding).
- Hospital practices can help (or hinder) baby and mother friendly practices. Implementing the Baby-friendly Hospital Initiative helps good practices to happen.

In your general work, this means:

- No advertising/marketing of formula, bottles, or teats will be allowed in the health facility. This includes no pens, calendars, magazines or other printed marketing materials, no samples, no equipment marketing a formula related product, no presents, etc, from companies related to formula, bottles, teats, or pacifiers. No displays of bottles in ward areas, visible stores or returns area - watch for window sills that are visible from outside, and bottles stacked in wards. When parents see these products displayed in the hospital, they think the hospital supports their use. While the health facility realises these products are needed at times, it does not want to be seen as endorsing particular brands. Your help is requested to keep the health facility a marketing-free zone.
  Contact ... if you see marketing of these products in the health facility (main point to get across is marketing, not if the use of the product is good or bad).
- All health facility materials will promote breastfeeding as the normal and optimal way to care for a baby.

- Mothers will be supported to breastfeed if they are patients, staff or visitors. No mother will be asked to leave a public area if she is breastfeeding. Staff mothers will be supported to continue breastfeeding after returning to work by … (such as information during pregnancy on breastfeeding, maternity leave, time and a place to express milk on return, support group for staff, etc.) Discuss this with your supervisor before you go on maternity leave.
- If your work brings you into contact with a breastfeeding mother/child, be supportive. A smile and maybe an offer of help such as a drink of water or a seat can shown the mother that you know she is doing something good.
- If you work in maternity or paediatric areas more specific information will be provided on your role in supporting the policy (for example what to say if a mother asks you to get her formula, if you notice a mother with difficulties, or labour ward practices).
- If you want further information or someone asks you a question, information is available from .... (give specific names).

Answer any questions from the participants.

<u>Notes:</u>
Keep the session very brief, informal and related to their work, rather than a theory classroom session. The participants do not need to know how breast milk is made, how to position a baby, detail on Ten Steps, or the Code for their work role. If they want more information personally, this can be provided afterwards.

Further information on the importance of breastfeeding and how supportive practices can be implemented can be found in the main session of the course: *Breastfeeding Promotion and Support in a Baby-friendly Hospital.*

BABY-FRIENDLY HOSPITAL INITIATIVE

Revised Updated and Expanded
for Integrated Care

SECTION 3.2 SESSION OUTLINES

BREASTFEEDING PROMOTION AND SUPPORT IN A BABY-FRIENDLY HOSPITAL

A 20-HOUR COURSE FOR MATERNITY STAFF

2009

Original BFHI Course developed 1993

SECTION 3.2: SESSION OUTLINES

3.1 Guidelines for Course Facilitators

3.2 Session Outlines

Welcome Session 23
Session 1: BFHI: a part of the Global Strategy 25
Session 2: Communication skills 33
Session 3: Promoting breastfeeding during pregnancy – Step 3 55
Session 4: Protecting breastfeeding 77
Session 5: Birth practices and breastfeeding - Step 4 85
Session 6: How milk gets from breast to baby 97
Session 7: Helping with a breastfeed - Step 5 105
Session 8: Practices that assist breastfeeding – Steps 6, 7, 8, & 9 123
Session 9: Milk supply 135
Session 10: Infants with special needs 145
Session 11: If baby cannot feed at the breast – Step 5 157
Session 12: Breast and nipple conditions 169
Session 13: Maternal health concerns 189
Session 14: On-going support for mothers – Step 10 199
Session 15: Making your hospital baby-friendly 213
Closing Session 233
Clinical practice 1 - Observing and assisting breastfeeding 235
Clinical practice 2 - Talking with a pregnant woman 239
Clinical practice 3 - Observing hand expression and cup feeding 243
Appendix 1: Acceptable medical reasons for use of breast-milk substitutes 249
Appendix 2: Knowledge Checks 255

3.3 PowerPoint slides for the course

Each Section is a separate file and may be downloaded from UNICEF Internet at http://www.unicef.org/nutrition/index_24850.html, or the WHO Internet at www.who.int/nutrition

WELCOME SESSION

Time:

15 minutes
If there are opening speeches or ceremonies, additional time is needed.

Materials:

Prepare a course timetable and make a copy for each participant or post a copy in the classroom.

Welcome participants to the course

- Introduce yourself and say what you would like to be called. Ask the other facilitators introduce himself or herself to the rest of the group.
- Ask each participant to introduce himself or herself to the rest of the group and to say what they hope to learn during the course.

Describe course methods and timetable:

- The course will include some talks and some discussion. We will also have role-plays and demonstrations. You will do some work in groups. There will be clinical practices when you work with pregnant women and breastfeeding mothers.
- During the course, you are expected to contribute to the learning of the whole group by sharing your ideas and comments.
- There will be a time for questions at the end of each section. However, if there is a point you need to clarify during the session, please ask. It is hard to learn if you have a question stuck in your mind.
- The course will run for three days[3]. Today we will finish at … with a break at …. Tomorrow, we will start at … until ….

- *Give out Course Timetable or indicate where it is posted.*
- *If there is a course evaluation sheet, explain it.*
- *Agree 'rules' such as cell/mobile phones turned off.*
- *Indicate facilities such as toilets, drinking water and highlight any safety issues.*
- *Check if there are any points that need to be clarified before moving to the next session.*

3 Adapt as needed to reflect the format of the course. It may be useful to 'negotiate' break times with the participants.

SESSION 1
THE BABY-FRIENDLY[4] HOSPITAL INITIATIVE: A PART OF THE GLOBAL STRATEGY

Session Objectives:

On completion of this session, participants will be able to:

1. State the aim of the WHO/UNICEF Global Strategy for Infant and Young Child Feeding.	5 minutes
2. Outline the aims of the Baby-friendly Hospital Initiative (BFHI).	5 minutes
3. Describe why BFHI is important in areas of high HIV prevalence.	5 minutes
4. Explain how this course can assist this facility at this time.	10 minutes
5. Review how this course fits with other activities.	5 minutes
Total session time	**30 minutes**

Materials:

Slide 1/1: Global Strategy

Slide 1/2: Aim of BFHI

Slide 1/3: Course Aims

Prepare slides or posters with country or region data showing:

- The number of baby-friendly hospitals accredited in the area/country, and what percentages of births are in baby-friendly accredited hospitals.
- Any national programmes to implement the Global Strategy.

Display a copy of the WHO/UNICEF Global Strategy for Infant and Young Child Feeding.

Display a copy of national or local health facility's breastfeeding policy.

Display a poster of the Ten Steps to Successful Breastfeeding and/or a handout for each participant.

Further reading for facilitators:

Global Strategy for Infant and Young Child Feeding. Geneva, World Health Assembly, May 2002.

WHO. *Protecting, Promoting and Supporting Breastfeeding - The special role of maternity services.* A joint WHO/UNICEF Statement, 1989.

WHO. *Evidence for the Ten Steps to Successful Breastfeeding.* WHO/CHD/98.9

UNAIDS/UNICEF/WHO *HIV and Infant Feeding: Framework for Priority Action (2003)*
HIV and Infant Feeding - Guidelines for decision-maker (updated 2005);
A guide for health care managers and supervisor (updated 2005);
A review of HIV transmission through breastfeeding (updated 2007).

Link session content to the opening speeches as relevant.

4 The terms Baby-friendly, Baby Friendly, and Baby-friendly hospital are trademarks of UNICEF, and can only be used as related to official designation or with expressed permission from UNICEF.

1. Global Strategy for Infant and Young Child Feeding 5 minutes

- About 5500 children die every day because of poor infant feeding practices. In addition, many children suffer long-term effects from poor infant feeding practices including impaired development, malnutrition, and increased infectious and chronic illness. Rising rates of obesity in children are also linked with lack of breastfeeding. Improved infant and young child feeding is relevant in all parts of the world.

Ask: What are the effects on families, communities and health services from poor infant feeding practices?

Wait for a few responses and then continue.

- The World Health Assembly and UNICEF endorsed the Global Strategy on Infant and Young Child Feeding in 2002.

- *Show Slide 1/1 and read it out*

> The aim of the Global Strategy is to improve – through optimal feeding – the nutritional status, growth and development, health, and thus the survival of infants and young children.
>
> It supports exclusive breastfeeding for 6 months, followed by timely, adequate, safe and appropriate complementary feeding, while continuing breastfeeding for two years and beyond.
>
> It also supports maternal nutrition, and social and community support.

- The Global Strategy does not replace, but rather builds upon existing programmes including the Baby-friendly Hospital Initiative.

2. Baby-friendly Hospital Initiative 5 minutes

- The BFHI is a global initiative of the World Health Organization and UNICEF that aims to give every baby the best start in life by creating a health care environment that supports breastfeeding as the norm.
- The Initiative was launched in 1991 and by the end of 2007 more than 20,000 health facilities worldwide had been officially designated baby-friendly.
- The Initiative includes a global assessment and accreditation scheme that recognises the achievements of health facilities whose practices support breastfeeding and encourages health facilities with less than optimal practices to improve[5].

- *State how many health facilities in the area/country are officially accredited as baby-friendly, and what proportion this is of births in the country.*
- *Show Slide 1/2 and read it out*

> The aim of the Baby-friendly Hospital Initiative is to implement the Ten Steps to Successful Breastfeeding and to end the distribution of free and low-cost supplies of breast milk substitutes to health facilities.

5 The Self-Appraisal and External Assessment are discussed further in Session 15.

- The BFHI provides a framework for enabling mothers to acquire the skills they need to breastfeed exclusively for six months and continue breastfeeding with the addition complementary foods for 2 years or beyond.
- A baby-friendly hospital also assists mothers who are not breastfeeding to make informed decisions and to care for their babies as well as possible.
- The Global Strategy calls for further implementation of BFHI, for breastfeeding in the curriculum for health worker training, and for better data on breastfeeding.

3. BFHI is important in areas of high HIV prevalence 5 minutes

- Some people are confused about the role of BFHI in areas where there is a high prevalence of HIV infection in mothers. BFHI is more important than ever in these areas. The special needs of HIV-positive women can be fully accommodated without compromising baby-friendly hospital status.
- The WHO/UNICEF/UNAIDS policy statement on HIV and infant feeding states that mothers have a right to information and support that will enable them to make fully informed decisions about infant feeding[6].
- In addition, it is important to continue to support breastfeeding for women who are HIV-negative or of unknown HIV status. If the emphasis is only on the risks of mother to child transmission of HIV through breastfeeding it may be forgotten that breastfeeding remains the best choice for most mothers and babies.

4. How this course can assist this health facility 10 minutes

- During this course we will discuss what the Ten Steps mean, how to implement them and the importance to staff members in making a health facility Baby-friendly. We will also talk about practices related to marketing of breast-milk substitutes later in the course and what the assessment process involves.

- *Show poster of the Ten Steps to Successful Breastfeeding and/or give a handout of the Ten Steps.*
- *Ask a participant to read out the first Step.*

- The first of the Ten Steps is to have a policy.
  Have a written policy that is routinely communicated to all health care staff.
- A policy helps to:
  - ensure consistent, effective care for mothers and babies;
  - provide a standard of practice that can be measured;
  - support actions.
- A policy is not a treatment protocol or a standard of care. "Policy" means that all staff agree to follow the protocols and standards, and that staff are required to do so by those in authority. It is not a personal decision to follow policy or not to follow it. This is similar to other policies – an individual does not decide whether to give a vaccine or what information to record on a birth certificate. If a policy is not followed on a specific occasion, the reason for not following it needs to be recorded.

6 This recommendation is discussed more in later sessions.

- A policy incorporates the Ten Steps and the International Code and expands on how the Steps are implemented in the health facility.

- *Refer to the health facility's breastfeeding or infant feeding policy briefly. Ask participants to look at the policy during the course (not during this session) and consider how it is implemented.*

- *Point to Step Two and ask a participant to read it out:*

- The second step is about training.
  Train all health care staff in skills necessary to implement the policy.
- The policy should support all of the Ten Steps and training assists to implement these Steps. This course aims to help you feel confident in your knowledge and skills to care for mothers and infants in everyday practice.

- *Show Slide 1/3 and read it out*

The aim of this course is that every staff member will confidently support mothers with early and exclusive breastfeeding, and that this facility moves towards achieving baby-friendly designation.

- During this course we will discuss the rest of the Steps in detail. You will have an opportunity to learn and practice how to:
  - use communication skills to talk with pregnant women, mothers and co-workers;
  - implement the Ten Steps to Successful Breastfeeding and abide by the International Code of Marketing of Breast-milk Substitutes;
  - discuss with a pregnant woman the importance of breastfeeding and outline practices that support the initiation of breastfeeding;
  - facilitate skin-to-skin contact and early initiation of breastfeeding;
  - assist a mother to learn the skills of positioning and attaching her baby as well as the skill of hand expression;
  - discuss with a mother how to find support for breastfeeding after she returns home;
  - outline what needs to be discussed with a mother who is not breastfeeding and know to whom to refer this mother for further assistance with feeding her baby:
  - identify practices that support and those that interfere with breastfeeding;
  - work with co-workers to highlight barriers to breastfeeding and seek ways to overcome those barriers.
- Participation in this course helps to increase the level of knowledge, skill, and confidence, and provide consistency of information and practice throughout the health facility.
- This course provides a foundation in baby-friendly practices. There are further specialised courses available. In addition your local resource person has more information.

- *Give information regarding the local resource person.*

5. How the Global Strategy fits with other activities 5 minutes

- The Global Strategy is supported by national policies, laws and programmes to promote, protect and support breastfeeding, and protect the rights of working women to maternity protection.

- *List and briefly discuss, if time allows, any national programmes or activities to implement the Global Strategy, for example, national infant feeding policy and national authority, Code of Marketing of Breast-milk Substitutes, maternity leave laws, BFHI, data collection in the health system on breastfeeding, curriculum reform, community mobilization efforts, and other programmes, policies and activities.*

- *Ask if there are any questions. Then summarise the session.*

Session 1 Summary

- The Global Strategy of Infant and Young Child Feeding builds on existing programmes to assist optimal nutrition and thus give children a health start in life.

  The aim of the Global Strategy is to improve – through optimal feeding – the nutritional status, growth and development, health, and thus the survival of infants and young children.

  It supports exclusive breastfeeding for 6 months, followed by timely, adequate, safe and appropriate complementary feeding, while continuing breastfeeding for two years and beyond.

  It also supports maternal nutrition, and social and community support.

- The Baby-friendly Hospital Initiative (BFHI) involves Ten Steps as well as protection from marketing of breast-milk substitutes, to help provide a supportive health facility.

  The aim of the Baby-friendly Hospital Initiative is to implement the Ten Steps to Successful Breastfeeding and to end the distribution of free and low-cost supplies of breast-milk substitutes to health facilities.

- Support for exclusive breastfeeding and BFHI continue to be important everywhere, even in areas of high HIV prevalence.
- Participation in this course can help to ensure that you are confident in your skills in breastfeeding support and that best practice is consistent in the health facility. You will have an opportunity to learn and practice how to:
  - use communication skills to talk with pregnant women, mothers and co-workers;
  - implement the Ten Steps to Successful Breastfeeding and abide by the International Code of Marketing of Breast-milk Substitutes;
  - discuss with a pregnant woman the importance of breastfeeding and outline practices that support the initiation of breastfeeding;
  - facilitate skin-to-skin contact and early initiation of breastfeeding;
  - assist a mother to learn the skills of positioning and attaching her baby as well as the skill of hand expression;
  - discuss with a mother how to find support for breastfeeding after she returns home;
  - outline what needs to be discussed with a mother who is not breastfeeding and know to whom to refer this mother for further assistance with feeding her baby:
  - identify practices that support and those that interfere with breastfeeding;
  - work with co-workers to highlight barriers to breastfeeding and seek ways to overcome those barriers.

Session 1 Knowledge Check

A colleague asks you why this course is taking place and how it would help mothers and babies that you care for. What will you reply?

TEN STEPS TO SUCCESSFUL BREASTFEEDING
A Joint WHO/UNICEF Statement (1989)

Every facility providing maternity services and care for newborn infants should:

1. Have a written breastfeeding policy that is routinely communicated to all health care staff.
2. Train all health care staff in skills necessary to implement this policy.
3. Inform all pregnant women about the benefits and management of breastfeeding.
4. Help mothers initiate breastfeeding within a half-hour of birth.
5. Show mothers how to breastfeed, and how to maintain lactation even if they should be separated from their infants.
6. Give newborn infants no food or drink other than breast milk unless *medically* indicated.
7. Practise rooming in - allow mothers and infants to remain together - 24 hours a day.
8. Encourage breastfeeding on demand.
9. Give no artificial teats or pacifiers (also called dummies or soothers) to breastfeeding infants.
10. Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or clinic.

SESSION 2
COMMUNICATION SKILLS

Session Objectives:

On completion of this session, participants will be able to:

1.	Identify communication skills of listening and learning, and building confidence.	30 minutes
2.	Practice the use of these skills with a worksheet.	30 minutes
	Total session time	**60 minutes**

The practice of the skills can be a separate session. If this practice is some time after the first part, briefly review the communication skills before starting the worksheet.

Materials:

A doll for use in the demonstration.

Two chairs that can be brought to the front of the room.

Copy the parts to be read in the demonstrations. The text of the demonstrations is all together at the end of the session to make it easier to copy for those reading the lines.

Prepare a list of the communication skills (see session summary) and display on the wall or flip chart from the beginning of the session. Uncover each point as needed.

Copy the Communication Skills Worksheet 2.1 (without answers) – one for each participant.

The concept of 'judging words' may need to be explained more in the local language. Refer to Session 7 of Breastfeeding Counselling: a training course (WHO/UNICEF, 1993) or Session 5 of Infant and young child feeding counselling: an integrated course (WHO/UNICEF, 2006) for more information on translating judging words.

Preparation for the demonstrations:

These demonstrations are very short. The facilitator introduces each demonstration pointing out what the participants are to focus on. After each demonstration, the facilitator makes the comment indicated to emphasize or clarify what the point was in the demonstration.

The first demonstration of non-verbal communication needs to be at the front of the room because participants need to see the actions. Before the session ask a participant to assist with the demonstration of non-verbal communication.

To save time during the other demonstrations, do not ask participants to come to the front of the room. Distribute the lines for the roles that the people read for the parts to people sitting next to each other. Ask the participants in each demonstration to read the parts loudly from their seats, at the appropriate time.

Further reading for facilitators:

Session 7 and Session 11 in *Breastfeeding Counselling: a training course* WHO/UNICEF, (1993).

Session 5 and Session 10 of *Infant and young child feeding counselling : an integrated course* WHO/UNICEF, (2006).

1. Communication skills 30 minutes

- Often health workers are trained to look for problems and to fix those problems. Good communication means that you respect the women's own thoughts, beliefs, and culture. It does not mean that you tell or advise a person what you think they *should* do or to push a woman towards a particular action.
- Health workers need to be able to do more than just offer information. It is part of their job to help mothers look at the cause of any difficulties they have (diagnosis) and to suggest courses of action that can help fix the problem. Often there is no problem to be fixed; the mother just needs assurance that she is doing well.
- You can use communication skills to:
  - Listen and learn about the woman's beliefs, level of knowledge and her practices.
  - Build her confidence and praise practices that you want to encourage.
  - Offer information.
  - Suggest changes the woman could consider if changes are needed.
  - Arrange follow up with her.
- You can also use these skills to:
  - Communicate with co-workers who resist changing their practices towards baby-friendly.
  - Communicate with family members who are supporting the mother especially those that may negatively influence her feeding practices with her baby.
  - Communicate with policy makers to advocate towards baby-friendly workplaces.
- Communication skills are introduced at a basic level in this course. These skills feel more natural to use and improve as you use them. You can use these communication skills at home with your family and friends as well as in work situations.

Skills to Listen and Learn

- Communication can be what we say – verbal communication. Equally important is non-verbal communication – the body language that we use and what we observe of the mother's body language.
- We may observe that a mother is sitting in an uncomfortable position, or that she is looking around concerned that others are listening, and is not able to concentrate on feeding her baby. We are receiving these very useful non-verbal communications from the mother.
- When you talk with the mother in a place that is comfortable and where she feels safe, this helps her to feel more like talking with you.

1. Use helpful non-verbal communication.

- Our non-verbal communication to the mother can help her to feel calm and able to listen.

Ask: What are some ways of providing helpful non-verbal communication during a discussion?

Wait for a few responses.

- Some ways of providing helpful non-verbal communication during a discussion with a mother are:
  - Sit at the same level and close to the mother.
  - Remove any physical barriers such as a desk or folders of papers in your arms.
  - Pay attention to the mother, avoid getting distracted, and show you are listening by nodding, smiling, and other appropriate gestures.
  - Take time without hurrying or looking at your watch.
  - Only touch her in an appropriate way (such as a hand on her arm). Do not touch her breasts or her baby without her permission.

Demonstration 1:

- *Introduce the demonstration: In this demonstration the health worker is greeting the mother using the same words but in various ways. Look at the non-verbal communication in each greeting.*

A participant plays the part of the mother and sits on a chair in front of the group with a doll as her baby, held in a feeding position.

A facilitator plays the health worker and says exactly the same words several times:
"Good morning, how is breastfeeding going?"
but says them with different non-verbal communication each time. For example: stand over the mother or sit beside her; or look at your watch as you ask the question; or lean forward and poke at the baby feeding (discuss this touching with the participant first).

- *Discuss how the non-verbal communication makes a difference. Ask the "mother" how she felt when greeted each way. Ask participants what they have learned from this demonstration about non-verbal communication.*

---

2. Ask open questions

- When you are helping a mother, you want to find out what the situation is, if there is a difficulty, what the mother has done, what worked and what did not work. If you ask questions in a way that encourages the mother to talk to you, you do not need to ask too many questions.
- Open questions are usually most helpful. They encourage a mother to give more information. Open questions usually start with "How? What? When? Where? Why?". For example, "How are you feeding your baby?"
- Closed questions can be answered by a yes or no and may not give you very much information. Closed questions usually start with words such as "Are you? Did you? Has the baby?" For example, "Did you breastfeed your previous baby?"
- You may think the mother is not willing to talk to you. The mother may feel frightened that she will give the wrong answer. Sometimes the closed question suggests the 'correct' answer and the mother may give this answer whether it is true or not, thinking this is what you want to hear.

Demonstration 2A:

- *Introduce the demonstration: In this demonstration listen to whether the health worker is asking open questions or closed questions and how the mother responds to the questions.*

Health worker	Good morning. Are you and your baby well today?
Mother	Yes, we are well.
Health worker	Do you have any difficulties?
Mother	No
Health worker	Is baby feeding often?
Mother	Yes

Comment: The closed questions got replies of yes and no. The health worker did not learn much and it is difficult to continue the conversation.
Let us see another way of doing this.

Demonstration 2B:

- *Introduce the demonstration: In this demonstration listen to whether the health worker is asking open questions or closed questions and how the mother responds to the questions.*

Health worker	Good morning. How are you and your baby today?
Mother	We are well.
Health worker	Tell me, how are you feeding your baby?
Mother	I breastfeed her often with one bottle in the evening.
Health worker	What made you decide to give a bottle in the evening?
Mother	My baby wakes during the night, so my milk must not be enough for her/him.

Comment: The health worker asked open questions. The mother offered information in her reply. The health worker learnt more.

3. Encourage the mother to talk – show interest and reflect back

Ask: How can we show that we are interested in what a mother is saying?
Wait for a few replies.

- We can show we are interested in what a woman is saying by using responses such as nodding, smiling and phrases such as "Um Hmm", "or "Go on …".If you repeat or reflect back what the mother is saying this shows that you are listening and encourages the mother to say more. You can use slightly different words than the mother used so it does not sound like you are copying her.
- It is helpful to mix reflecting back with other responses, for example, "Oh, really, go on", or to ask an open question.

Demonstration 3:

- *Introduce the demonstration: In this demonstration, watch how the health worker is showing that she/he is listening to the mother and if using these skills helps the health worker to learn more from the mother.*

Health worker	Good morning, how are you both today?
Mother	I am very tired; the baby was awake a lot.
Health worker	Oh, dear *(looks concerned)*
Mother	My sister says he shouldn't be still waking at night, that I'm spoiling him.
Health worker	Your sister says you are spoiling him?
Mother	Yes, my sister is always making some comment about how I care for him.
Health worker	Mmm. *(Nods)*
Mother	I don't see why it is any of her business how I care for my baby.
Health worker	Oh, tell me more.

Comment: Responses such as Oh dear and Mmm show that you are listening. Reflecting back can help to clarify the person's statement. We see here that the waking baby may not be the main problem – it may be the sister's comments that are bothering the mother.

4. Empathise to show you are trying to understand her feelings

- Empathy shows that you are hearing what the mother is saying and trying to understand how she feels. You are looking at the situation from her point of view. Sympathy is different. When you sympathise with a person, you are looking at it from your point of view.
- It is helpful to empathise with the mother's good feelings too, not just her bad feelings.
- You might need to ask for more facts but do this after you have found out how she feels about the situation.

Demonstration 4A:

- *Introduce the demonstration: In this demonstration, watch to see if the health worker is showing empathy- that she/he is trying to understand how the mother feels.*

Health worker	Good morning (name). How are you and (child's name) today?
Mother	(Child's name) is not feeding well for the last few days. I don't know what to do.
Health worker	*I* understand how you feel. When *my* child doesn't feed *I* get worried too. *I* know exactly how you feel.
Mother	What do *you* do when *your* child doesn't feed?

Comment: What did they see? Here the focus has moved from the mother to the Health Worker. This was not empathy – it did not focus on how the mother was feeling.
Let us see another way of doing this.

Demonstration 4B:

- *Introduce the demonstration: In this demonstration, watch to see if the health worker is showing empathy- that she/he is trying to understand how the mother feels.*

Health worker	Good morning (name). How are you and (child's name) today?
Mother	(Child's name) is not feeding well for the last few days and I don't know what to do.
Health worker	You are worried about (name).
Mother	Yes, I am worried he/she might be sick if he/she is not feeding well.

Comment: In this second version, the mother is the focus of the conversation. This Health Worker showed empathy with the mother by picking up her feeling and reflecting back this emotion to show that she or he has really listened. This encourages the mother to share more of her own feelings and to continue talking with the health worker.

5. Avoid words which sound judging

- Words that may sound like you are judging include: right, wrong, well, bad, good, enough, properly, adequate, problem. Words like this can make a woman feel that she has a standard to reach or that her baby is not behaving normally.
- For example: "Is your baby feeding well?" implies that there is a standard for feeding and her baby may not meet that standard. The mother may hide how things are going if she feels she will be judged as inadequate. In addition, the mother and the health worker may have different ideas about what "feeding well" means. It is more helpful to ask an open question such as "How does your baby feed? or Can you tell me about your baby's feeding?"

Demonstration 5A:

- *Introduce the demonstration: In this demonstration, watch to see if the health worker is using judging words or avoiding them.*

Health worker	Good morning. Did your baby gain enough weight since she was last weighed?
Mother	Well, I am not sure. I think so.
Health worker	Well, does she feed properly? Is your milk good?
Mother	I don't know… I hope so, but I am not sure (looks worried)

Comment: The health worker is not learning anything and is making the mother very worried. Let us look at another way of doing this.

Demonstration 5B:

- *Introduce the demonstration: In this demonstration, watch to see if the health worker is using judging words or avoiding them.*

Health worker	Good morning. How is your baby growing this month? Can I see her growth chart?
Mother	The nurse said she has gained half a kilo this month, so I am pleased.
Health worker	She is obviously getting the breast milk she needs.

Comment: The health worker learnt what she needed to know without worrying the mother.

Skills to Build confidence and give support

- Your communication skills can help the mother to feel good about herself and confident that she will be a good mother. Confidence can help a mother to carry out her decisions and to resist pressures from other people. To help to build confidence and support, we need to:

6. Accept what a mother thinks and feels

- We can accept a mother's ideas and feelings without disagreeing with her or telling her there is nothing to worry about. Accepting what a mother says is not the same as agreeing that she is right. You can accept what she is saying and give correct information later. Accepting what a mother says helps her to trust you and encourages her to continue the conversation.

Demonstration 6A:

- *Introduce the demonstration: In this demonstration, watch to see if the health worker is accepting what the mother says, or disagreeing or agreeing.*

Mother	I give my baby a bottle of formula every evening because I don't have enough milk for her.
Health Worker	I am sure your milk is enough. Your baby does not need a bottle of formula.

Comment: Is this health worker accepting what the mother feels?
The health worker is disagreeing or dismissing what the mother is saying.

Let us look at another way of doing this.

Demonstration 6B:

- *Introduce the demonstration: In this demonstration, watch to see if the health worker is accepting what the mother says, or disagreeing or agreeing.*

Mother	I give my baby a bottle of formula every evening because I don't have enough milk for her.
Health Worker	Yes, a bottle feed in the evening seems to settle some babies.

Comment: Is this health worker accepting what the mother says? The health working is agreeing with a mistaken idea. Agreeing may not help the mother and baby.

Let us look at another way of doing this.

***Demonstration 6C*:**

- *Introduce the demonstration: In this demonstration, watch if the health worker is accepting what the mother says, or disagreeing or agreeing.*

Mother	I give my baby a bottle of formula every evening because I don't have enough milk for her.
Health Worker	I see. You think you may not have enough milk in the evening.

Comment: Is this health worker accepting what the mother thinks or feels? The health working is accepting what the mother says but not agreeing or disagreeing. The health worker accepts the mother and acknowledges her viewpoint. This means the mother will feel she has been listened to. They can now continue to talk about breastfeeding in the evening and discuss correct information about milk supply.

7. Recognise and acknowledge what is right

- Recognise and praise what a mother and baby are achieving. For example, tell the mother how you notice that she waits for her baby to open his/her mouth wide to attach, or point out how her baby detaches him or herself when he or she is finished feeding on one breast and ready for the other breast.

8. Give practical help

- If the mother is comfortable, this will help her milk to flow. She may be thirsty or hungry; she may want another pillow; or for someone to hold the baby while she goes to wash or to the toilet. Or the mother may have a clear practical breastfeeding problem, for example that she wants to learn how to express her milk. If you can give this practical help, she will be able to relax and focus better on her baby.

9. Provide relevant information using suitable language

- Find out what she needs to know at this time.
- Use suitable words that the mother understands.
- Do not overwhelm her with information.

10. Make suggestions rather than commands

- Provide choices and let her decide what will work for her.
- Do not tell her what she should do or must not do.
- Limit your suggestions to one or two suggestions that are relevant to her situation.

Demonstration 7A:

- *Introduce the demonstration: In this demonstration, watch to see whether the health worker is giving relevant information using suitable language and making suggestions not commands.*

Health worker	Good morning. What can I do for you today?
Mother	I'm not sure if I should breastfeed my baby or not when he is born. I'm worried the baby might get HIV.
Health worker	Well now, the situation is this. Approximately 5-15% of mothers who are HIV-positive transmit the virus through breastfeeding. However, the rate varies in different places. It may be higher if the mother has acquired the infection recently or has a high viral load or symptomatic AIDS. If you have unsafe sex while you are breastfeeding, you can pick up HIV and then you are more likely to transmit it to your baby. However, if you don't breastfeed, your baby may be at risk of other potentially deadly illnesses such as gastrointestinal and respiratory infections. Now, you have left it very late to come for counselling, so if I were you, I would decide ...
Mother	Oh.

Ask: What do participants think about this communication? Is the health worker giving a suitable amount of information?
The health worker is providing too much information. It is not relevant to the woman at this time. She is using words that are unlikely to be familiar. Some information is given in a negative way and sounds critical. The health worker is telling her what to do rather than helping her to make her own decision.
Let us see another way of doing this.

Demonstration 7B: *(if testing is available)*

- *Introduce the demonstration: In this demonstration, watch to see if the health worker is giving relevant information using suitable language and making suggestions not commands.*

Health worker	Good morning. What can I do for you today?
Mother	I'm not sure if I should breastfeed my baby or not when he is born. I'm worried the baby might get HIV.
Health worker	If you have HIV there is a risk this could be passed to your baby. Have you had a test for HIV?
Mother	No. I don’t know where to get the test.
Health worker	It is best to know if you have HIV or not before you decide how to feed your baby. I can give you the details of who to talk to about getting a test. Would you like that?
Mother	Yes, I would like to hear more about the test.

Comment: The health worker gave the information that was most important at that time – that it is important to know if you have HIV before you make a decision about feeding. The health worker used simple language, was not judgemental, and referred the woman to a HIV counselling and testing service.

Demonstration 7B: *(if testing is not available)*

- *Introduce the demonstration: In this demonstration, watch to see if the health worker is giving relevant information using suitable language and making suggestions not commands.*

Health worker	Good morning. What can I do for you today?
Mother	I'm not sure if I should breastfeed my baby or not when he is born. I'm worried the baby might get HIV.
Health worker	If you have HIV there is a risk this could be passed to your baby. There is no testing available here to find out for sure if you have HIV. When you don’t know for sure if you have HIV and can’t get tested, it is recommended that you breastfeed your baby.
Mother	Oh, I didn’t know that.
Health worker	Yes, giving only breast milk, with no other foods or water, for the first six months, protects your baby from many other illnesses such as diarrhoea.

Comment: The health worker gave the information that was most important at that time and relevant to the situation – that if you do not know if a mother is HIV positive, the exclusive breastfeeding is the recommendation. The health worker used simple language and was not judgemental. It is likely that this woman and health worker can continue to communicate and discuss more information.

Arrange follow-up and on-going support

- Often when the discussion is over, the mother may still have questions that there was not time to discuss, she may think of something else she wanted to talk about or she may find it is difficult to put a practice into action. It is important to arrange follow-up and on-going support:
  - Learn what help may be available from her family and friends.
  - Offer a time when you will see her or talk with her again.
  - Encourage her to see you or another person for help if she has doubts or questions.
  - Refer her to a community support group if possible.
  - Refer her for more specialised counselling if needed.
- Many women are not able to do what they want to do or what you may suggest they do. A discussion needs to consider the woman’s situation at home. Family members, the household’s money and time, the mother’s health and the common practices in the family and community are important influences on what a mother can do.
- Remember, you should not make a decision for a mother or try to make her do what you think is best. You can listen to her and build her confidence so that she can decide what is best for her and her baby.

2. Practice communication skills 30 minutes

Divide the participants into small groups or pairs and explain that each group will do the exercises that are on the worksheet.

Each exercise has an example and then an exercise for the group to complete. Read the first example and check that participants understand what to do.

Ask the other facilitators to circulate between the groups during the activity to see that the participants understand the activities and the skills. In each small group the facilitator can explain the other examples when the small group is ready. Ask the participants to try to say the words as well as writing them down.

Allow about 25 minutes for the worksheet.

At the end of the time, summarise the session and respond to any questions. You do not need the group to go through each item to ‘correct’ the exercises in the activity.

This is a vital part of the course as health workers adopt new ways of communicating with mothers. If possible extra time should be devoted to these skills.

Session 2 Summary

Communication involves listening and building confidence, and not just giving information.

Listening and Learning

Use helpful non-verbal communication
Ask open questions
Show interest and reflect back what the mother says
Empathise to show that you understand her feelings
Avoid words that sound judging

Building Confidence and Giving Support

Accept what a mother thinks and feels
Recognise and acknowledge what a mother and baby are doing right
Give practical help
Give a little relevant information using suitable language
Make one or two suggestions, not commands

Arranging follow-up and support suitable to the mother's situation

Communication Skills Worksheet 2.1 *(with possible answers)*

Open questions:

For each closed question, **write** a new question that is an open question.

Example

Are you breastfeeding your baby? (closed) How are you feeding your baby? (open)

Re-write these questions as an open question:

Does your baby feed often? *When does your baby feed?*

Are you having any feeding problems? *How is feeding going?*

Is your baby gaining weight? *How is your baby's weight?*

Empathising with the mother's feelings:

The statements below are made by a mother. **Pick** the response that you might make to show empathy and understanding of the mother's feelings.

Example:

My baby feeds all night and I am exhausted.
- How many times does she feed?
- Does this happen every night?
- √- You really feel tired.

Pick the response that shows empathy:

My breast milk looks thin – it cannot be good.
- Breast milk always looks thin.
- (√)- You are worried about your milk?
- How much does your baby weigh?

I am afraid to breastfeed in case I have HIV.
- (√)- You are concerned about HIV?
- Have you had a test?
- Then use formula instead.

Avoid judging words:

Re-write each question to avoid a judging word and to also ask an open question

Example:

Is your baby feeding well? How is your baby feeding?

Change to avoid a judging word:

Does your baby cry too much at night? *How is your baby at night?*

Do you have any problems with breastfeeding? *How is breastfeeding going?*

Is the baby's weight gain good? *How is your baby growing?*

Accepting what a mother thinks:
Draw a line to link which response is accepting, agreeing to a mistaken idea or disagreeing with the mother's statement.
Example:
Mother: "I give drinks of water if the day is hot."
Response:
"That isn't necessary! Breast milk has enough water." → Disagreeing
"Yes, babies need water in hot weather." → Agreeing (to mistaken idea)
"You feel the baby needs some water if it is hot?" → Accepting

Link with the answer with the type of response:
Mother: "My baby has diarrhoea, so I am not breastfeeding until it is gone."

Answer:	*Type of response*
"You don't like to give breast milk now?"	Agreeing (to mistaken idea)
"It is quite safe to breastfeed when he has diarrhoea."	Disagreeing
"It is best to stop breastfeeding during diarrhoea."	Accepting

(Lines drawn: "You don't like to give breast milk now?" → Accepting; "It is quite safe to breastfeed when he has diarrhoea." → Disagreeing; "It is best to stop breastfeeding during diarrhoea." → Agreeing)

Mother: "The first milk is not good, so I will need to wait until it has gone."

Answer:	*Type of response*
"First milk is very important for the baby."	Agreeing (to mistaken idea)
"You think the first milk is not good for the baby."	Disagreeing
"It will only be a day or two before the first milk is gone."	Accepting

(Lines drawn: "First milk is very important for the baby." → Disagreeing; "You think the first milk is not good for the baby." → Accepting; "It will only be a day or two before the first milk is gone." → Agreeing)

Provide relevant information using suitable language:
Re-write the statement to use words that are easy for the mother to understand.

Example:
"You can tell that the hormone oxytocin is working if you notice the milk ejection reflex."
Using suitable language:
"You may notice the opposite breast leaks when the baby is suckling. This is a sign that the milk is flowing well."

Change these statements to words easy to understand:
"Exclusive breastfeeding provides all the nutrients that your baby needs for the first 6 months."
Breastfeeding alone is all your baby needs for health and growth in the first six months.

"The immunoglobulins in human milk provide your baby with protection from viral and bacterial infections."
Your milk helps protect your baby from illness.

Offer suggestions, not commands:
Re-write each command changing it to a suggestion rather than a command.

Example:
"Do not give your baby drinks of water." (command)
Change to a suggestion:
"Have you thought of giving only your milk?" (suggestion)

Change each command to a suggestion:
"Hold him close so that he takes enough of the breast into his mouth." (command)
"*Would you like to hold him close so that he can take more of the breast into his mouth?*"

"Feed her more often, then your milk supply will increase." (command)
"*Do you think you could feed her more often? This will help to make more milk.* "

"Do not give any foods to your baby until after 6 months." (command)
"*Most babies don't need any other foods or water until after 6 months. Does this sound like something you could try?* "

Communication Skills Worksheet 2.1

Open questions:
For each closed question, **write** a new question that is an open question.

Example
Are you breastfeeding your baby? (closed) How are you feeding your baby? (open)

Re-write these questions as an open question:
Does your baby feed often?

Are you having any feeding problems?

Is your baby gaining weight?

Empathising with the mother's feelings:
The statements below are made by a mother. **Pick** the response that you might make to show empathy and understanding of the mother's feelings.

Example:
My baby feeds all night and I am exhausted.
- How many times does she feed?
- Does this happen every night?
√- You really feel tired.

Pick the response that shows empathy:
My breast milk looks thin – it cannot be good.
- Breast milk always looks thin.
- You are worried about your milk?
- How much does your baby weigh?

I am afraid to breastfeed in case I have HIV.
- You are concerned about HIV?
- Have you had a test?
- Then use formula instead.

Avoid judging words:
Re-write each question to avoid a judging word and to also ask an open question.
Example:

Is your baby feeding well? How is your baby feeding?

Change to avoid a judging word:
Does your baby cry too much at night?

Do you have any problems with breastfeeding?

Is the baby's weight gain good?

Accepting what a mother thinks:
Draw a line to link which response is accepting, agreeing or disagreeing with the mother's statement.

Example:
Mother: "I give drinks of water if the day is hot."

Answer:	*Type of response*
"That isn't necessary! Breast milk has enough water."	Agreeing
"Yes, babies need water in hot weather."	Disagreeing
"You feel the baby needs some water if it is hot?"	Accepting

Link with the answer with the type of response:
Mother: "My baby has diarrhoea, so I am not breastfeeding until it is gone."

Answer:	*Type of response*
"You don't like to give breast milk now?"	Agreeing
"It is quite safe to breastfeed when he has diarrhoea."	Disagreeing
"It is best to stop breastfeeding during diarrhoea."	Accepting

Mother: "The first milk is not good, so I will need to wait until it has gone."

Answer:	*Type of response*
"First milk is very important for the baby."	Agreeing
"You think the first milk is not good for the baby."	Disagreeing
"It will only be a day or two before the first milk is gone."	Accepting

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Provide relevant information using suitable language:
Re-write the statement to use words that are easy for the mother to understand.

Example:
"You can tell that the hormone oxytocin is working if you notice the milk ejection reflex."
Change to words easy to understand:
"You may notice the opposite breast leaks when the baby is suckling. This is a sign that the milk is flowing well."

Change these statements to words easy to understand:
"Exclusive breastfeeding provides all the nutrients that your baby needs for the first 6 months."

"The immunoglobulins in human milk provide your baby with protection from viral and bacterial infections."

Offer suggestions, not commands:
Re-write each command changing it to a suggestion rather than a command.

Example:
"Do not give your baby drinks of water." (command)
Change to a suggestion:
"Have you thought of only giving breast milk?" (suggestion)

Change each command to a suggestion:
"Hold him close so that he takes enough of the breast into his mouth." (command)

"Feed her more often, then your milk supply will increase." (command)

"Do not give any foods to your baby until after 6 months." (command)

Session 2 Demonstrations

Cut and give relevant parts to those playing the parts in the demonstrations.

Demonstration 1:

A participant plays the part of the mother and sits on a chair in front of the group with a doll as her baby, held in a feeding position.

A facilitator plays the health worker and says exactly the same words several times:

"Good morning, how is breastfeeding going?"

But says them with different non-verbal communication each time. For example: stand over the mother or sit beside her; look at your watch as you ask the question; lean forward and poke at the baby feeding (discuss this touching with the participant first).

Demonstration 2A:

Health worker	Good morning. Are you and your baby well today?
Mother	Yes, we are well.
Health worker	Do you have any difficulties?
Mother	No
Health worker	Is baby feeding often?
Mother	Yes

Demonstration 2B:

Health worker	Good morning. How are you and your baby today?
Mother	We are well.
Health worker	Tell me, how are you feeding your baby?
Mother	I breastfeed her often with one bottle in the evening.
Health worker	What made you decide to give a bottle in the evening?
Mother	My baby wakes during the night, so my milk must not be enough for her/him.

Demonstration 3:

Health worker	Good morning, how are you both today?
Mother	I am very tired; the baby was awake a lot.
Health worker	Oh, dear *(looks concerned)*
Mother	My sister says he shouldn't be still waking at night, that I'm spoiling him.
Health worker	Your sister says you are spoiling him?
Mother	Yes, my sister is always making some comment about how I care for him.
Health worker	Mmm. *(nods)*
Mother	I don't see why it is any of her business how I care for my baby.
Health worker	Oh, tell me more.

Demonstration 4A:

Health worker	Good morning (name). How are you and (child's name) today?
Mother	(Child's name) is not feeding well for the last few days. I am very worried.
Health worker	*I* understand how you feel. When *my* child doesn't feed *I* get worried too. *I* know exactly how you feel.
Mother	What do *you* do when *your* child doesn't feed?

Demonstration 4B:

Health worker	Good morning (name). How are you and (child's name) today?
Mother	(Child's name) is not feeding well for the last few days and I don't know what to do.
Health worker	You are worried about (name).
Mother	Yes, I am worried he/she might be sick if he/she is not feeding well.

Demonstration 5A:

Health worker	Good morning. Did your baby gain enough weight since she was last weighed?
Mother	Well, I am not sure. I think so.
Health worker	Well, does she feed properly? Is your milk good?
Mother	I don't know… I hope so, but I am not sure (looks worried)

Demonstration 5B:

Health worker	Good morning. How is your baby growing this month? Can I see her growth chart?
Mother	The nurse said she has gained half a kilo this month, so I am pleased.
Health worker	She is obviously getting the breast milk she needs.

Demonstration 6A:

Mother	I give my baby a bottle of formula every evening because I don't have enough milk for her.
Health Worker	I am sure your milk is enough. Your baby does not need a bottle of formula.

Demonstration 6B:

Mother	I give my baby a bottle of formula every evening because I don't have enough milk for her.
Health Worker	Yes, a bottle feed in the evening seems to settle some babies.

Demonstration 6C:

Mother	I give my baby a bottle of formula every evening because I don't have enough milk for her.
Health Worker	I see. You think you may not have enough milk in the evening.

Demonstration 7A:

Health worker	Good morning. What can I do for you today?
Mother	I'm not sure if I should breastfeed my baby or not when he is born. I'm worried the baby might get HIV.
Health worker	Well now, the situation is this. Approximately 5-15% of mothers who are HIV-positive transmit the virus through breastfeeding. However, the rate varies in different places. It may be higher if the mother has acquired the infection recently or has a high viral load or symptomatic AIDS. If you have unsafe sex while you are breastfeeding, you can pick up HIV and then you are more likely to transmit it to your baby. However, if you don't breastfeed, your baby may be at risk of other potentially deadly illnesses such as gastrointestinal and respiratory infections. Now, you have left it very late to come for counselling, so if I were you, I would decide ...
Mother	Oh.

Demonstration 7B: *(if testing is available)*

Health worker	Good morning. What can I do for you today?
Mother	I'm not sure if I should breastfeed my baby or not when he is born. I'm worried the baby might get HIV.
Health worker	If you have HIV there is a risk this could be passed to your baby. Have you had a test for HIV?
Mother	No. I don't know where to get the test.
Health worker	It is best to know if you have HIV or not before you decide how to feed your baby. I can give you the details of who to talk to about getting a test. Would you like that?
Mother	Yes, I would like to hear more about the test.

Demonstration 7B: *(if testing is not available)*

Health worker	Good morning. What can I do for you today?
Mother	I'm not sure if I should breastfeed my baby or not when he is born. I'm worried the baby might get HIV.
Health worker	If you have HIV there is a risk this could be passed to your baby. There is no testing available here to find out for sure if you have HIV. When you don't know for sure if you have HIV and can't get tested, it is recommended that you breastfeed your baby.
Mother	Oh, I didn't know that.
Health worker	Yes, giving only breast milk, with no other foods or water, for the first six months, protects your baby from many other illnesses such as diarrhoea.

SESSION 3
PROMOTING BREASTFEEDING DURING PREGNANCY – STEP 3

Session Objectives:

On completion of this session, participants will be able to:

Objective	Time
1. Outline what information needs to be discussed with pregnant women.	20 minutes
2. Explain what kind of antenatal breast preparation women need for breastfeeding, what is effective and what is not effective.	5 minutes
3. Identify women who need extra attention.	5 minutes
4. Outline what information needs to discuss with pregnant women who are HIV-positive.	10 minutes
5. Practise communication skills to use to discuss breastfeeding with a pregnant woman.	50 minutes
Total session time	**90 minutes**

Materials:

Slide 3/1: mothers in antenatal clinic.

Slide 3/2: recommendation for mothers who are HIV-positive.

If possible, display the picture of two mothers in antenatal clinic (slide 3/1) as a poster and leave displayed during the session.

Write on a flipchart – acceptable, feasible, affordable, sustainable, safe, so that the first letter of each word forms AFASS.

Information on how to obtain HIV counselling and testing in the local area.

Information on how infant feeding counselling is provided for women who are tested and shown to be HIV-positive.

Antenatal checklist – one copy for each participant (optional).

Optional activity: Cost of Not Breastfeeding – find information before the session.

Further reading for facilitators:

*The optimal duration of exclusive breastfeeding. Report of an expert consultation.*Geneva, WHO March 2001.

The optimal duration of exclusive breastfeeding, A systematic review WHO/FCH/CAH/01.23

Butte, N et al, (2001) *Nutrient Adequacy of Exclusive Breastfeeding for the Term Infant during the First Six Months of Life.* WHO, Geneva.

Diet, Nutrition and the Prevention of Chronic Diseases. Report of a Joint WHO/FAO Expert Consultation. Geneva, WHO Technical Report Series, No. 916.

Related to HIV:

HIV and Infant Feeding Counselling : a training course WHO/UNICEF/UNAIDS, 2000.

Integrated Infant Feeding Counselling: a training course WHO/UNICEF, 2005.

UNAIDS/UNICEF/WHO. *HIV and Infant Feeding: Framework for Priority Action (2003).*
HIV and Infant Feeding - Guidelines for decision-makers (updated 2003).
A guide for health care managers and supervisors (updated 2005).
A review of HIV transmission through breastfeeding (updated 2007).

WHO/UNICEF/USAID. *HIV and infant feeding counselling aids (2005).*

Counsellors using the tools should have received specific training through such courses as the WHO/UNICEF *Breastfeeding Counselling: A training course* and the WHO/UNICEF/UNAIDS *HIV and Infant Feeding Counselling: A training course,* or the "*Infant and Young Child Feeding Counselling: An integrated course".* The tools consist of the following parts:

- A Flipchart (ISBN 92 4 159249 4) to use during counselling sessions with HIV-positive pregnant women and/or mothers.
- Take-home flyers. The counsellor should use the relevant flyer, according to the mother's decision, to teach the mother, and she can then use it as a reminder at home.
- A Reference guide (ISBN 92 4 159301 6) that provides more technical and practical details than the counselling cards. Counsellors can use it as a handbook.

Additional information related to emergency situations:

Guiding principles for feeding infants and young children during emergencies. Department of Nutrition for Health and Development, WHO 2003.

Infant Feeding in Emergencies. Nutrition Unit, WHO European Office 1997.

Infant Feeding in Emergencies, Module1, Emergency Nutrition Network. http://www.ennonline.net/

Additional information related to risks of formula use:

Guidelines for the safe preparation, storage and handling of powdered infant formula. Food Safety, WHO (2007).

- How to Prepare Powdered Infant Formula in Care Settings
- How to prepare formula for use at home

Introduction

- *Show Fatima and Miriam- slide 3/1or poster and introduce the 'story mothers'.*

It is important to be able to apply theory to everyday practice. Therefore, in this course we use a story about two women, Fatima and Miriam[7] who are coming to the health facility. Fatima is expecting her first baby and Miriam is expecting her second baby. We follow Fatima and Miriam through their pregnancy, the births of their babies and the early days after birth and look at the situations and practices that they encounter.

As we go through the course, think how a mother or baby would view the information and practices that we discuss.

1. Discussion of breastfeeding with pregnant women 20 minutes

- Step 3 of the Ten Steps to Successful Breastfeeding states:
  Inform all pregnant women of the benefits and management of breastfeeding.
- In many cultures, women assume that they will breastfeed. In other cultures, where breast milk substitutes are widely advertised and promoted, most women decide whether or not to breastfeed before their baby is born. It is important for health workers to educate women about breastfeeding as early as possible and to identify mothers and babies who may be at risk of breastfeeding difficulties.
- In order to make an informed decision about feeding her baby a woman needs:
  - Information that is accurate and factual about the importance of breastfeeding and the risks of replacement feeding - not the health worker's personal opinion or marketing information from a formula company.
  - Understanding of the information in her individual situation – this means giving information in words that are suitable for the woman and discussing the information in the context of her situation.
  - Confidence, which means building the woman's confidence in her ability to exclusively breastfeed. If she is not breastfeeding, she needs to be confident that she can find a replacement feeding method that is as safe as possible in her situation.
  - Support to carry out her feeding decision. This includes support to successfully feed her baby and to overcome any difficulties.
- The woman needs to believe that she can carry out her decision. It is not enough for the health worker to think that she or he has provided sufficient information or support; the health worker needs to check with the woman that her information and support needs are met.

Fatima and Miriam are at the antenatal clinic. While they are waiting, there is a nurse talking with a group of pregnant women about feeding their baby. Fatima and Miriam listen to the talk.

7 Use other names as culturally appropriate.

Group talk during pregnancy

Ask: What do you think are the main points to include in a group talk about feeding a baby?
Wait for participants to respond.

Give an antenatal group talk

- During a group talk to pregnant women, pregnant women in the group who breastfed before can be asked to discuss their positive experiences and identify causes why others had problems and how to prevent them.
- The pregnant women can be given more information on managing breastfeeding such as by using dolls to show how to position the infant for breastfeeding.

- *Facilitator presents the following information as if it was a talk to a group of pregnant women.*

<u>Why breastfeeding is important</u>

- Breastfeeding is important to children, to mothers and to families. Breastfeeding protects infant's health. Children who are not breastfed are more likely to be:
  - Ill or to die from infections such as diarrhoea and gastrointestinal infections, and chest infections.
  - Underweight and not grow well, if they live in poor circumstances.
  - Overweight and to have later heart problems, if they live in rich circumstances.
- Breastfeeding is important to mothers. Women who do not breastfeed are more likely:
  - To develop anaemia and to retain fat deposited during pregnancy, which may result in later obesity.
  - To become pregnant soon after the baby's birth.
  - To develop breast cancer.
  - To have hip fractures in older age.
- In addition:
  - Breast milk is readily available. There is nothing to buy and it needs no preparation or storage.
  - Breastfeeding is simple, with no equipment or preparation needed.
  - If a baby is not breastfed, the family will need to buy replacement milk for the baby and find time to prepare feeds and keep feeding equipment clean.
  - If a baby is not breastfed, there may be loss of income through a parent's absence from work to care for an ill child.
- <u>Mother's milk is all a baby needs</u>:
  - Exclusive breastfeeding is strongly recommended for the first six months. The baby does not need water, other fluids, or foods during this time.
  - Breastfeeding continues to be important after the first six months when other foods are given to the baby.
  - A mother's milk is especially suited for her own baby and changes from day to day, month to month, and feed to feed to meet the baby's needs. The baby learns the tastes of the family foods through the flavours of breast milk.

  - Mother's milk is unique (special). Human milk is a living fluid that actively protects against infection. Artificial formula provides no protection from infections.

Practices that can help breastfeeding to go well

- Hospital practices can help breastfeeding to go well. These practices include to:
  - Have a companion with you during labour, which can help you to be more comfortable and in control.
  - Avoid labour and birth interventions such as sedating pain relief and caesarean sections unless they are medically necessary.
  - Have skin-to-skin contact immediately after birth, which keeps the baby warm and gives an early start to breastfeeding.
  - Keep the baby beside you (rooming-in or bedding-in), so that your baby is easy to fed as well as safe.
  - Learn feeding signs in your baby so that feeding is baby-led rather than to a schedule.
  - Feeding frequently, which helps to develop a good milk supply.
  - Breastfeeding exclusive with no supplements, bottles, or artificial teats.
- It is important to learn how to position and attach the baby for feeding and a member of staff will help after the baby is born. Most women can breastfeed and help is available if needed[8].

Information on HIV testing

- All pregnant women are offered voluntary and confidential HIV counselling and testing. If a woman is HIV-infected there is a risk of transmission to the baby during the pregnancy and birth, as well as during breastfeeding. If the pregnant woman knows that she is HIV-positive then she can make informed decisions.
- About 5-15% of babies (one in 20 to one in seven) born to women who are HIV-infected will become HIV-positive through breastfeeding[9].This means most infants born to women who are HIV-positive will not be infected through breastfeeding.
- In some settings, the risk to the child of illness and death from not exclusively breastfeeding is higher than the risk of HIV transmission from breastfeeding. One of the reasons that individual counselling is so important is that it gives mothers the information they need to make the informed choices about how to feed their babies in their own situations.
- The majority of women are not infected with HIV. Breastfeeding is recommended for:
  - women who do not know their status, and
  - women who are HIV-negative.

Assistance is available

- More information is available and a pregnant woman or mother can discuss any questions with a staff member.
- A skilled staff member will be available to assist with breastfeeding after the baby is born.

8 We will discuss these practices more in later sessions of this course.
9 To estimate the percentage of infants at risk of HIV through breastfeeding in the population, multiply the prevalence of HIV by 15%. For example, if 20% of pregnant women are HIV-positive, and every woman breastfeeds, about 3% of infants may be infected by breastfeeding. (*Infant Feeding in Emergencies, Module1*).

- Before a mother leaves the birth facility she will be told how to find on-going help and support with feeding her baby.

- *End of talk ask if there are any questions on the points in the talk.*

Individual discussion during pregnancy

Fatima goes in to see her pregnancy care provider. He or she does not know if Fatima heard the group talk on breastfeeding and if she has any questions.

Ask: How can the pregnancy care provider find out if a pregnant woman knows about the importance of breastfeeding or has questions?
Wait for participants to respond.

Start the discussion with an open question

- Begin with an open question such as:
  "What do you know about breastfeeding?"
  This type of open question gives an opportunity to reinforce a decision to breastfeed, to discuss any barriers that the woman may see to breastfeeding, or to discuss problems the woman may have had with previous breastfeeding.

Ask: If you asked a question such as "Are you going to breastfeed?" or "How do you plan to feed your baby?" what might the mother reply?
Wait for participants to respond.

- If you ask a question such as "Are you going to breastfeed your baby" it is difficult to continue the discussion if the pregnant woman says that she is not going to breastfeed.

Use your communication skills to continue the discussion

- Let the pregnant woman discuss her individual worries and concerns about feeding her baby. It is important that the discussion is two-way between the pregnant woman and the health worker, rather than a lecture to the woman.
- If the woman's comments tell you that she already knows much about early and exclusive breastfeeding, you can reflect and reinforce her knowledge. You do not need to give her information that she already knows.
- A woman's decision about how to feed her baby may be influenced by the baby's father, her own mother or another family member. It can be helpful to ask:
  "What people are there who are close to you who will support you to feed your baby?"
  You may suggest that a family member who is important to the woman comes with her to hear more about feeding her baby.

Antenatal discussion is an important part of care

- An individual discussion on breastfeeding does not need to take a long time. A short focused discussion for three minutes can achieve much.
- A pregnant woman may see different health workers during her antenatal care. All health workers have a role in promoting and supporting breastfeeding. Some hospitals use an Antenatal Check List[10] in the woman's file to record discussions and highlight points to discuss further at another visit.

[10] An example of an Antenatal Checklist is at the end of this session.

- *(Optional) Give participants a copy of the Antenatal Checklist and discuss if it would be useful in their work setting.*

2. Antenatal breast and nipple preparation 5 minutes

Fatima tells you that her neighbour told her that she must prepare her nipples for breastfeeding, as some women's breasts are not good for breastfeeding.

Ask: What can you say to Fatima who is concerned if her breasts will be 'correct' for breastfeeding?

Wait for participants to respond.

Reassure her that most women breastfeed with no problems.

- Other body parts, such as ears, nose, fingers, or feet, come in various shapes and sizes and no-one asks if big ears hear better than small ears. Breasts and nipples can look different and still work perfectly well, except in very rare cases.
- Antenatal practices such as wearing a bra, using creams, performing breast massage or nipple exercises, or wearing breast shells, do not assist breastfeeding.
- Practices such as 'toughening' of the nipples by rubbing with rough towel or putting alcohol on the nipples or excessive pulling are not necessary and may damage the skin and tiny muscles that support breastfeeding, and should not be encouraged.

Further information for the health worker:

- Breast examination during pregnancy can be helpful if it is used to:
  - Point out to a woman how her breasts are increasing in size, that there is more blood flow to them and changes in sensitivity, and how these are all signs that her body is getting ready to breastfeed.
  - Check for any previous chest or breast surgery, trauma or other problem (e.g. lumps in breast).
  - Talk to the mother about regular breast self-examination and why it can be useful.
- Breast examination during pregnancy can be harmful if it is used to judge a woman's nipples or breasts as suitable or unsuitable for breastfeeding. It is very rare for a woman to be unable to breastfeed due to the shape of her breasts or nipples.
- The ideal antenatal preparation is to use the time to discuss the woman's knowledge, beliefs and feelings about breastfeeding and to build the woman's confidence in her ability to exclusively breastfeed her baby.

3. Women who need extra attention 10 minutes

Ask: What pregnant women may need extra counselling and support on feeding their babies?
Wait for a few replies.

- Identify women with special concerns. Help them to talk about issues that may affect their plans about feeding their baby. Offer to talk also to significant family members as needed so that they can support the woman. A woman may need special counselling and support if she:
  - Had difficulties breastfeeding a previous baby and gave up and started formula feeding quickly, or never started breastfeeding.
  - Must spend time away from her baby because she works away from home or is attending school. Assure women that they can breastfeed with separations[11].
  - Has a family difficulty. Help her to identify non-supportive family members, and try to meet with them to discuss their concerns.
  - Is depressed.
  - Is isolated, without a social support.
  - Is a young or single mother.
  - Has an intention to leave the baby for adoption.
  - Had previous breast surgery or trauma that could interfere with milk production.
  - Has a chronic illness or needs medication[12].
  - Is at high risk of her baby needing special care after birth, or twin pregnancy.
  - Is tested and shown to be HIV-positive.
- There is generally no need to stop breastfeeding an older baby during a succeeding pregnancy. If the woman has a history of premature labour or experiences uterine cramping while breastfeeding, she should discuss this with her doctor. Similar to all pregnant women, the mother who is breastfeeding and pregnant needs to take care of herself, which includes eating well and resting. Sometimes the breasts feel more tender, or the milk seems to decrease in the mid-trimester of the pregnancy; but these are not reasons of themselves to stop breastfeeding.
- Whether there is a shortage of food in the family or not, breast milk may be a major part of the young child's diet. If breastfeeding stops, the young child will be at risk, especially if there are no animal foods in the diet. Feeding the mother is the most efficient way of nourishing the mother, the unborn baby, and the young breastfeeding toddler. Abrupt cessation of breastfeeding should always be avoided.
- If a pregnant woman feels that exclusive breastfeeding is impossible for her to do, talk with her about why she feels exclusive breastfeeding is impossible. You can suggest that she start with exclusive breastfeeding. If it is too difficult in her situation to continue, then some breastfeeding is better than not breastfeeding at all. However, if the woman is HIV-positive, partial breastfeeding has been shown to carry a higher risk of HIV transmission than exclusive breastfeeding.
- If a mother is not breastfeeding, for a medical reason such as HIV or her informed personal decision, then it is important that she knows how to feed her baby. These women need individual discussion about replacement feeding and assistance to learn how to prepare feeds.

11 Continuing to breastfeed if there is separation will be discussed in Session 11.
12 Maternal illness and breastfeeding is discussed in Session 13.

4. Antenatal discussion with women who are HIV-positive 10 minutes

- Offer all pregnant women counselling and voluntary testing for HIV. Women who are tested and found to be HIV-positive need extra care and attention during their pregnancies.

Ask: How can a pregnant woman get counselling and testing for HIV in this local area?
Wait for participants to respond. Give further information as needed.

- In the situation where the woman is tested and found to be HIV-positive, the recommendation regarding infant feeding is:

- *Show slide 3/2*

> **Infant Feeding Recommendation for HIV-positive Women**
>
> Exclusive breastfeeding is recommended for HIV-infected mothers for the first six months of life unless replacement feeding is acceptable, feasible, affordable, sustainable and safe for them and their infants before that time. When replacement feeding is acceptable, feasible, affordable, sustainable and safe, avoidance of all breastfeeding by HIV-infected mothers is recommended.

- All HIV-positive women need counselling that includes:
  - ***information*** *about the risks and benefits of various infant feeding options;*
  - ***guidance*** *in selecting the most suitable option for their situation; and*
  - ***support*** *to carry out their choice.*
- Ideally, a woman is first counselled about infant feeding options during antenatal care, although it is possible that some will not learn their HIV status until they give birth or until their babies are a few months old.

- *Show flipchart with AFASS written on it*

- If after counselling, a woman who is HIV-positive decides that for her replacement feeding can be acceptable, feasible, affordable, safe, and sustainable (**AFASS**), then she needs help to learn how to obtain, prepare, store and feed it. She should learn before her baby is born, so that she is ready to give her baby replacement feeds immediately after birth.
- A woman who is not planning to breastfeed needs to discuss:
  - What are the replacement feeding options and which, if any, are acceptable, feasible, affordable, sustainable and safe in her situation.
  - What she will need in order to use the method she chooses – source of milk, water, equipment, cost, time.
  - If commercial formula is used, the difference between types of formula and what types are suitable for her infant.
  - If home-prepared formula is used, what are the available sources of milk and whether they are they suitable and safe?
  - Is the household water supply accessible and safe? If it is not safe, what water can the mother use?
  - Water will need to be boiled to mix formula and hot water is needed for washing the equipment. Is there fuel available?
  - How will she keep the equipment clean?
  - Who will help her learn to prepare and to feed the formula and when will she learn these things?

- The woman who is HIV-positive will also need to discuss avoidance of mixed feeding and care of her breasts until the milk is gone[13].
- If replacement feeding is not suitable, then the mother should not attempt it. Instead, she can consider "safer breastfeeding," which means exclusive breastfeeding, followed by safe transition to exclusive replacement feeding. A mother may decide to express her milk and heat-treat it to kill the HIV. If a woman decides on "safer breastfeeding," then she will need guidance and support on how to do that.
- Some women may decide to breastfeed exclusively and to stop breastfeeding as soon as a replacement feeding method becomes acceptable, feasible, affordable, sustainable and safe in her situation.
- Exclusive breastfeeding carries a lower risk of HIV transmission than mixed breastfeeding.

Ask: Where can a woman who is HIV-positive obtain infant feeding counselling in this local area?

Wait for responses. Provide further information as needed.

Detailed information on counselling women who are HIV-positive, how to assist them to decide on a feeding option and learn to use that option, are covered in the WHO/UNICEF course: *Infant and Young Child Feeding Counselling: An integrated course* and training on the use of *HIV and Infant Feeding job aids.* Job aids to counsel women who have already been tested and found to be HIV-positive are available to assist those who are trained in infant feeding counselling.

5. Discuss breastfeeding with a pregnant woman 50 minutes

Explain the activity – 5 minutes

Later the participants will have a clinical practice where they will talk with pregnant women. This activity is preparation for the clinical practice.

Divide the participants into groups of three. One person plays the role of the 'pregnant woman', one person is the 'health worker', and one person is the 'observer'. The health worker listens to the pregnant woman and her views and concerns about breastfeeding. The 'health worker' discusses with the pregnant woman the importance of breastfeeding and some practices that help establish breastfeeding in the first days. The Antenatal Checklist can help the 'health worker' to remember the points to discuss[14].

The 'observer' should watch and note when the 'health worker':

- Uses open questions to encourage the woman to talk.
- Responds to the woman by reflecting, praising and using other counselling skills as appropriate.
- Provides correct information in a way that is easy to understand, including the importance of breastfeeding for the mother as well as the baby and some information on why practices are recommended.
- Offers opportunities for the woman to ask questions or discuss the information further.

Then the three people discuss the skills used and information given.

13 Care of the breast for a non-breastfeeding woman is discussed in a later session.
14 The Antenatal Checklist is at the end of this session.

Pair practice – 30 minutes

About every 5 minutes, ask the participants to swap roles so that they all have a turn in each role. Facilitators stay with groups to see if they are managing the activity.

Class discussion – 10 minutes

How can women discuss breastfeeding if there is limited time in antenatal services or if the women do not come to the services?

When are individual talks appropriate and feasible?

When should group talks be given?

If group talks are given, how can the antenatal serviced help insure that pregnant women hear all they need to know about feeding their babies?

What do you say to a woman that you know has been tested and is HIV-positive about feeding her baby?

What if the woman does not want to listen to any information?

- *Ask if there are any questions. Then summarise the session.*

Session 3 Summary

- A pregnant woman needs to understand that:
  - breastfeeding is important for her baby and for herself;
  - exclusive breastfeeding for 6 months is recommended;
  - frequent breastfeeding continues to be important after complementary foods are added;
  - practices such as early skin to skin contact after birth, early initiation of breastfeeding, rooming-in, frequent baby-led feeding, good positioning and attachment, and exclusive breastfeeding without any supplements are beneficial and can assist in establishing breastfeeding;
  - support is available to her.

- The ideal antenatal preparation is that which builds the woman's confidence in her ability to breastfeed. Breast and nipple preparation are not needed and can be harmful.
- Some women will need extra attention if they have had previous poor experiences of breastfeeding or are at risk of difficulties.
- Offer all pregnant women voluntary and confidential HIV counselling and testing.
- A woman who is HIV-positive needs individual counselling to help her to decide the best way to feed her baby that is acceptable, feasible, affordable, sustainable, and safe (AFASS) in her circumstances.

Session 3 Knowledge Check

List two reasons why exclusive breastfeeding is important for the child.

List two reasons why breastfeeding is important for the mother.

What information do you need to discuss with a woman during her pregnancy that will help her to feed her baby?

List two antenatal practices that are helpful to breastfeeding and two practices that might be harmful.

If a woman is tested and found to be HIV-positive, where can she get infant feeding counselling?

Antenatal Checklist – Infant Feeding

All of the following should be discussed with all pregnant women by 32 weeks of pregnancy. The health worker discussing the information should sign and date the form.

Name:

Expected date of birth:

Topic	Discussed or note if mother declined discussion	Signed	Date
Importance of exclusive breastfeeding to the baby (protects against many illnesses such as chest infections, diarrhoea, ear infections; helps baby to grow and develop well; all baby needs for the first six months, changes with baby's needs, babies who are not breastfed are at higher risk of illness)			
Importance of breastfeeding to the mother (protects against breast cancer and hip fractures in later life, helps mother form close relationship with the baby, artificial feeding costs money)			
Importance of skin-to-skin contact immediately after birth (keeps baby warm and calm, promotes bonding, helps breastfeeding get started)			
Importance of good positioning and attachment (good positioning and attachment helps the baby to get lots of milk, and for mother to avoid sore nipples and sore breasts. Help to learn how to breastfeed is available from …)			
Getting feeding off to a good start - baby-led feeding; - knowing when baby is getting enough milk; - importance of rooming-in/keeping baby nearby; - problems with using artificial teats, pacifiers.			
No other food or drink needed for the first 6 months – only mother's milk **Importance of continuing breastfeeding after 6 months while giving other foods**			
Risks and hazards of not breastfeeding - loss of protection from illness and chronic diseases; - contamination, errors of preparation; - costs; - difficulty in reversing the decision not to breastfeed.			

Other points discussed and any follow-up or referral needed:

Additional Information - Session 3

Antenatal discussion

- Antenatal education is especially important with maternity stays of less than 24 hours because there is little time after birth to learn about breastfeeding. During antenatal visits, health workers can find out what women already know about breastfeeding and begin to help them learn breastfeeding management.
- In addition, a woman needs to be confident that she will be able to breastfeed. This means talking about the concerns she has and talking about the practices that assist breastfeeding to get well established.
- Pregnant women are not children in school who need a teacher at the front of the class. Adults learn best when the information is relevant to their needs, they can link it to other information they know, and they can talk about it with others in the group. Group discussion can also be a useful way to bring out cultural issues such as embarrassment in front of men, fear of losing their figure, worries about not being able to be away from the baby if breastfeeding, what parents/partners think, balancing work inside or outside of household with feeding. Some topics may be easier to discuss as part of a group with peers rather than one to one with a health worker.
- Remember to include women who are in-patients during their pregnancy in both individual and group discussions.
- If the baby is likely to need special care after birth, for example if a preterm birth expected, it is good to talk to the pregnant woman more about the importance of breastfeeding for her baby and about the supports that are available to help her feed her baby receiving special care.
- Unfortunately, some women do not come to many antenatal preparation sessions, and when they do come there may be little time for discussion.
- If a woman asks, information can be given on the difference between breast milk and infant formula[15], the cost of using formula, and the need to learn how to prepare it in a safe manner if it is used.
- An antenatal group session is NOT the place to teach preparation of formula. Mothers who decide not to breastfeed need to learn safe preparation of replacement feeds one-to-one with a health worker so that they are able to learn at their own speed and to ask questions about their own situation. They may learn best close to the time when they need to know this information (near the time of the baby's birth), not several weeks before the baby is born.
- In addition, teaching replacement feeding as a routine part of antenatal education gives women the impression that it is expected that they will prepare formula for their baby. This influences some women who might otherwise exclusively breastfeed to use formula.

The importance of breastfeeding and breast milk

- Breastfeeding is important for the short and long term health of children and women. Both the action of breastfeeding and the composition of breast milk are important.

The action of breastfeeding

- The action of breastfeeding helps the child's jaw to develop as well as muscles such as the tongue and muscles of the Eustachian tube. This development:
  - reduces the incidence of ear infections;
  - assists with clear speech;
  - protects against dental caries and reduces risk of orthodontic problems.

15 Remember to use breast milk as the ideal or norm and compare infant formula to breast milk, rather than comparing breast milk to formula. Formula may have a high level of a particular ingredient but this does not mean a high level is better than the level in breast milk.

- Infants appear to be able to self-regulate their milk intake. This may have an effect on later appetite regulation and obesity. This appetite control does not appear to happen with bottle-fed milks - where the person feeding the baby controls the feed, rather than the baby.
- Breastfeeding also provides warmth, closeness and contact, which can help physical and emotional development of the child. Mothers who breastfed are less likely abandon or abuse their babies.

Breast milk is important for children

- Human milk:
  - Provides ideal nutrition to meet the infant's needs for growth and development.
  - Protects against many infections, and may prevent some infant deaths.
  - Reduces risk of allergies and of conditions such as juvenile-onset diabetes, in families with a history of these conditions.
  - Programmes body systems that may assist in blood pressure regulation and reduction of obesity risk in later life.
  - Is readily available, needing no preparation.
- A mother's own milk is best suited to the individual child, changing to meet the baby's changing needs.
- Many of the effects of breastfeeding are 'dose responsive'. This means that longer and exclusive breastfeeding shows a greater benefit.
- Children who do not breastfeed or receive breast milk may be at increased risk of:
  - Infections such as diarrhoea and gastrointestinal infections, respiratory infections, and urinary tract infections.
  - Eczema and other atopic conditions.
  - Necrotising enterocolitis, in preterm infants.
  - Lower developmental performance and educational achievement, thus reducing earning potential.
  - Developing juvenile onset insulin dependant diabetes mellitus, higher blood pressure and obesity in childhood, all markers of later heart disease.
  - Dying in infancy and early childhood.
- The dangers of not breastfeeding occur with all social and economic circumstances. Many studies indicate that a non-breastfed child living in disease-ridden and unhygienic conditions is between six and 25 times more likely to die of diarrhoea and four times more likely to die of pneumonia than breastfed infants. These risks even lower with exclusive breastfeeding.
- If every baby were exclusively breastfed from birth for six months, an estimated 1.3 million additional lives would be saved world wide and millions more lives enhanced every year.

Breastfeeding is important for mothers, families and communities

- Compared to women who breastfeed, not breastfeeding may increase the risk of:
  - Breast cancer, and some forms of ovarian cancer.
  - Hip fractures in older age.
  - Retention of fat deposited during pregnancy which may result in later obesity.
  - Anaemia due to low contraction of the uterus following birth and early return of menses.
  - Frequent pregnancies due to lack of child spacing effect of breastfeeding.
  - Fewer opportunities to be close to their baby.
- Families are affected too. When a baby is not breastfed there may be:
  - Loss of income through a parent's absence from work to care for an ill child.
  - Higher family expenses to purchase and prepare artificial feeds as well as extra time needed to give these feeds, as well as extra expense of the child's illnesses.
  - Worry about infant formula shortages or about an ill baby.
- Children who are not breastfed have increased illness, therefore increased use of health care services, and increased health care costs, both as infants and later. In addition, healthy infants grow to become healthy, intelligent adults in the workforce, contributing to the well being of their community.

The risks of not breastfeeding

- The risks from not breastfeeding are due to:
  - The lack of the protective elements of breast milk, resulting in a higher illness rate.
  - The lack of optimal balance of nutrients, for example those needed for brain growth and intestinal development.
- In addition, there are the dangers from the use of breast-milk substitutes themselves. These dangers may include:
  - Infant formula may be contaminated through manufacturing error.
  - Powdered infant formula is not sterile and during manufacture may be contaminated with bacteria such as *Enterobacter sakazakii* and *Salmonella enterica*, which has been associated with serious illness and death in infants. WHO has developed guidelines[16] for careful formula preparation in order to minimize the risk to infants.
  - Infant formula may contain unsafe ingredients or may lack vital ingredients.
  - Water used for washing bottles or mixing infant formula may be contaminated.
  - Errors in mixing formula, over concentration or under concentration, may cause infant illness.
  - Families may dilute the formula to make it last longer.
  - Formula may be given to settle a crying baby which can lead to overweight and food being seen as the solution to unhappiness.
  - Water and teas may be given instead of breast milk or formula resulting in less milk consumed overall and low weight gain.
  - Purchase of infant formula creates unnecessary expenses for the family and means less food for other members.
  - Frequent pregnancies may burden the family and society.
  - Hospital costs are higher for staff and supplies to treat health problems.
- Some of the risks from using breast-milk substitutes can be reduced by attention to the *process* of using breast-milk substitutes - the preparation and hygiene elements. However, the differences in the constituents of breast milk and formula still remain.

Class discussion

Does it make a difference if you say, “Breastfed babies may have less illness” or if you say, “Babies who are not breastfed may have more illness”?
Bring out in the discussion that the first phrase implies that illness is normal in babies and breastfed babies have less illness than normal rates found in babies who are not breastfed. The second phrase implies that breastfeeding is the norm and not breastfeeding has the risk.

How would you reply to a colleague who says, “You make mothers feel bad if you tell them that there are dangers if they do not breastfeed”?
Health workers do not hesitate to tell women that there is a risk if they smoke during pregnancy or if do not have a trained person at the birth or if they leave their infant in the house alone. There are many risks to a baby that we tell women to try to avoid. Women have a right to know what is best for baby and may feel angry if you withhold information from them.

16 *Guidelines for the safe preparation, storage and handling of powdered infant formula.* Food Safety, WHO (2007)

> ***Optional Activity- additional time will be needed***
>
> Ask participants if they know the costs to a family of using breast-milk substitutes for six months. The Worksheet 3.1 at the end of this session can be used to discuss this further. Time is not allocated in this session for this discussion.

Breastfeeding and emergency situations

- Increasingly, mothers and infants are affected by emergency situations worldwide. Natural disasters, such as earthquakes, storms, and floods as well as armed conflicts displace millions of families and cut them off from their usual food supplies.
- In many cases the immediate problem of securing food is complicated by outbreaks of illnesses such as cholera, diphtheria and malaria following disruption of power, water and sewage services.
- In these emergency situations, breastfeeding, especially exclusive breastfeeding, is the safest and often the only reliable food for infants and young children. It provides both nutrition and protection from illness as well as having no financial cost or extra water needed for preparation.
- A mother does not need perfect calm to breastfeed. Many women breastfeed easily in extremely stressful situations. Some women find that breastfeeding soothes and helps them to cope with stress. However, stress may decrease a woman's ability to letdown, so it is important to create safe areas in emergency settings where pregnant and breastfeeding mothers may gather to support each other. If health workers are supportive and build a mother's confidence, this can help her milk to flow well.
- Any infant who is not breastfeed is at high risk in an emergency situation. Their mothers should be referred for full assessment of risk, for relactation if possible, and for other needed support.

How breast milk is unique

- Breast milk has over 200 known constituents as well as constituents that are not yet identified. Each animal has milk specific to the needs of that species – calves grow quickly with large muscles and bones, human babies grow slowly with rapid brain development.
- A mother's milk is especially suited for her own baby. It changes to provide nutrition suitable for the baby's needs. Colostrum and breast milk are adapted to gestational age, and mature breast milk changes from feed to feed, day to day, and month to month to meet the baby's needs. Breast milk is a living fluid that actively protects against infection.

How breast milk protects

- A child's immune system is not fully developed at birth and takes to age three or more to fully develop. Breast milk provides protection for the baby in a number of ways:
    - When the mother is exposed to an infection her body produces antibodies (infection fighting substances) to that infection. These antibodies are passed to the baby through her breast milk.
    - Mother's milk stimulates the baby's own immune system.
    - Factors in breast milk help the growth of the cell walls of the baby's gut thus aiding the development of a barrier to micro-organisms and allergens, as well as aiding the repair of damage from infections.
    - White cells present in breast milk are able to destroy bacteria.
    - Components in breast milk also prevent the micro-organisms from attaching to the cell walls. If they do not attach they pass out of the baby's system.
    - The growth of beneficial bacteria in the breastfed baby's system (*lactobacillus bifidus*) leaves little room for the growth of harmful bacteria.
    - Nutrients are not available for harmful bacteria to grow, for example, lactoferrin binds to iron preventing disease-causing bacteria from using this iron to multiply.

- Artificial formula contains no living cells, no antibodies, no live anti-infective factors and cannot actively protect the baby from infections.

What is breast milk

Colostrum: the first milk

- Colostrum is produced in the breasts by the seventh month of pregnancy and continues through the first few days after birth. In appearance, colostrum is thick, sticky, and clear to yellowish in color.
- Colostrum acts like a 'paint' coating the babies gut to protect it. If any water or artificial feeds are given, some of this 'paint' can be removed, allowing infections to get into the baby's system. Colostrum is a baby's first immunization against many bacteria and viruses. Colostrum helps to establish good bacteria in the baby's gut.
- Colostrum is the perfect first food for babies, with more protein and vitamin A than mature breast milk. Colostrum is laxative, and helps the baby to pass meconium (the first sticky black stools). This helps to prevent jaundice.
- Colostrum comes in very small amounts. This suits the baby's very small stomach and the immature kidneys that cannot handle large volumes of fluid. Breastfed newborns should not be given water or glucose water unless medically necessary.

Preterm breast milk

- The milk of a mother giving birth before 37 weeks gestation, preterm breast milk, has more protein, higher levels of some minerals including iron, and more immune properties than mature milk, making it more suited for the needs of a premature baby.
- A mother's milk can even be used before the baby is able to breastfeed. The mother can express her milk, and it can be fed to the baby with a cup, spoon or tube.

Mature breast milk

- Mature breast milk contains all of the major nutrients – protein, carbohydrates, fat, vitamins, minerals and water in the amounts the baby needs. It changes in relation to the time of day, the length of a breastfeed, the needs of the baby, and diseases with which the mother has had contact.
- The components of breast milk provide nutrients as well as substances that help in digestion, growth, development and provide protection from infections. Breast milk continues to provide these nutrients, protection, and other benefits as the child grows, these components do not disappear at a certain age.

Nutrients in breast milk

Protein

- The amount of protein in breast milk is perfect for infant growth and brain development. It is easy to digest and can thus quickly supply nutrients to the baby. Artificial formulas have different proteins from human milk that can be slow and difficult to digest, which can put a strain on the baby's system. Some babies can develop intolerance to the proteins in formula resulting in rashes, diarrhoea and other symptoms. The level of protein in breast milk is not affected by the mother's food consumption.

Fat

- Fat is the main source of energy (calories) for the infant. Enzymes in breast milk (lipase) start the digestion of the fat, so that it is available quickly to the baby as energy.
- Fat in breast milk contains very long-chain fatty acids for brain growth and eye development as well as cholesterol and vitamins. The high level of cholesterol may help the infant to develop body systems to handle cholesterol throughout life.
- The level of fat is low in the milk at the beginning of a feed — this is called foremilk, and quenches the baby's thirst. The level of fat is higher in the milk later in the feed — this is called hind milk, and gives satiety. Fat content can vary from feed to feed.
- Artificial formula does not change during the feed and lacks digestive enzymes. Artificial formulas have little or no cholesterol. Some brands may have fatty acids added; however these may come from fish oils, egg fat or vegetable sources.

- The type of fat in breast milk can be affected by the mother's diet. If a mother has a high level of polyunsaturated fats in her diet, her milk will be high in polyunsaturated fats. However the total amount of fat in the milk is not affected by the mother's diet unless the mother is severely malnourished with no body fat stores.

Carbohydrate

- Lactose is the main carbohydrate in breast milk. It is made in the breast and is constant through out the day. Lactose helps calcium absorption, provides fuel for brain growth and retards the growth of harmful organisms in the gut. It is digested slowly. Lactose in the breastfed baby's stool is not a sign of intolerance.
- Not all artificial formulas contain lactose. The effects of feeding healthy infants breast milk substitutes without lactose are unknown.

Iron

- The amount of iron in breast milk is low. However it is well absorbed from the baby's intestine if the baby is exclusively breastfed, partly because breast milk provides special transfer factors to help this process. There is a high level of iron added to formula because it is not absorbed well. The excess added iron can feed the growth of harmful bacteria.
- Iron-deficiency anaemia is rare in the first six to eight months in exclusively breastfed babies who were born healthy and full term, without premature cord clamping.

Water

- Breast milk is very rich in water. A baby, who is allowed to breastfeed whenever the baby wants, needs no supplemental water even in hot, dry climates. Breast milk does not overload a baby's kidneys and the baby does not retain unnecessary fluid.
- Giving water or other fluids such as teas, may disrupt the breast milk production, decrease the infant's nutrient intake, and increase the infant's risk of infections.

Flavour

- The flavour of breast milk is affected by what the mother eats. The variation in flavour can help the baby get used to the tastes of the family foods and ease the transition to these foods at after six months of age. Artificial formula tastes the same for every feed, and throughout the feed. The taste of formula is not related to any foods the baby will eat when older.

Exclusive breastfeeding for the first six months

- Exclusive breastfeeding provides all the nutrients and water that a baby needs to grow and develop in the first six months. This means to the end of six completed months – 26 weeks or 180 days, not the start of the sixth month.
- Exclusive breastfeeding means that no drinks or foods other than breast milk are given to a baby. Vitamins, mineral supplements or medicines can be given, if needed. Most exclusively breastfed young infants feed at least eight to twelve times in 24 hours, including night feeds.
- Any of the following interferes with exclusive breastfeeding:
  - A baby is given any drinks or foods other than breast milk.
  - A baby is given a pacifier/dummy/soother.
  - Limits are placed on the number of breastfeeds.
  - Limits are placed on suckling time or the length of a breastfeed.
- After six months, children should receive complementary foods in addition to breast milk. Breast milk continues to be important, often providing one-third to one-half the calories for the child at twelve months of age, and should be continued up to 2 years of age and beyond.

Recommendations related to breastfeeding for women who are HIV-positive

- If a woman is HIV-infected, there is a risk of transmission to the baby during the pregnancy and birth, as well as during breastfeeding. About 5-15% of babies (one in 20 to one in seven) born to women who are HIV-infected will become HIV-positive through breastfeeding[17]. To reduce this risk, mothers may choose to avoid breastfeeding altogether or to breastfeed exclusively and stop as soon as replacement feeding is feasible.
- In some settings, the risk of not exclusively breastfeeding is just as high or higher than the risk of HIV transmission from breastfeeding. This is part of the reason that individual counselling is so important.
- In the situation where the woman is tested and found to be HIV-positive, the recommendation is:

Infant Feeding Recommendation for HIV-positive Women
Exclusive breastfeeding is recommended for HIV-infected mothers for the first six months of life unless replacement feeding is acceptable, feasible, affordable, sustainable and safe for them and their infants before that time. When replacement feeding is acceptable, feasible, affordable, sustainable and safe, avoidance of all breastfeeding by HIV-infected mothers is recommended.

- This recommendation does not say that all women who are HIV-positive must avoid breastfeeding. A decision not to breastfeed has disadvantages, including increased risks to the infant's health.
- It is important to ensure that replacement feeding is
  - acceptable,
  - feasible,
  - affordable,
  - sustainable, and
  - safe, in the specific family.
- Each woman who is HIV-positive needs an individual discussion with a trained person to help her to decide the best way to feed her child in her individual situation.
- The majority of women are not infected with HIV. Breastfeeding is recommended for:
  - women who do not know their status, and
  - women who are HIV-negative.
- If testing for HIV is not possible, all mothers should breastfeed. Breastfeeding should continue to be protected, promoted, and supported as a general population recommendation.

Class discussion

What could you reply to a colleague who said, "It would be better if any mother at risk of being HIV-infected was advised not to breastfeed, this would protect more babies."

Modified breastfeeding

- If the mother is HIV-positive, her own expressed milk can be heat-treated, which kills the HIV virus. Expressed breast milk from another woman can also be used, either through an organised milk bank that tests and heat-treats the milk, or informally from a woman tested and HIV-negative.

17 To estimate the percentage of infants at risk of HIV through breastfeeding in the population, multiply the prevalence of HIV by 15%. For example, if 20% of pregnant women are HIV-positive, and every woman breastfeeds, about 3% of infants may be infected by breastfeeding. (*Infant Feeding in Emergencies, Module1*).

Replacement feeding options – sources of milk

- Replacement feeding options include:
    - Formula prepared from powder (or sometimes concentrated liquid) that needs only water added.
- Commercial infant formula is made from animal milk. The fat content is altered and often a vegetable fat is added, a form of sugar is added and micronutrients are added. You may have generic formula available; which is the same composition to commercial formula. It is simply labelled and distributed without marketing it.
- A commercial formula has been modified so that the proportions of different nutrients are appropriate for infant feeding, and micronutrients have been added. Formula needs only to be mixed with the correct amount of water.
- It is important to remember however, that although the *proportions* of nutrients in either commercial or home-prepared formula can be altered, their *quality* cannot be made the same as breast milk. Also, the immune factors and growth factors present in breast milk are not present in animal milk or formula, and they cannot be added.
- Other types of formula are available and should only be discussed with mothers if the infant has a medical need for these specialised products:
    - *Soy infant formula* uses processed soybeans as the source of protein and come in powdered form. Usually it is lactose-free and has a different sugar added instead. Infants who are intolerant of cows' milk protein may also be intolerant of soy protein[18].
    - *Low birth weight or preterm formula* is manufactured with higher levels of protein and certain minerals and a different mixture of sugars and fats than ordinary formula for full-term infants. Low birth weight formula is not recommended for healthy, full term infants. The nutritional needs of low birth weight infants should be individually assessed.
    - *Specialised formulas* are available to use in conditions such as reflux, high-energy need, lactose intolerance, allergic conditions and metabolic diseases like phenylketonuria. These formulas are altered in one or more nutrients and should only be used for infants with the specific conditions under medical/nutritional supervision.
    - *Follow-on (or follow-up) milks* are marketed for older infants (over six months). They contain higher levels of protein and are less modified than infant formula. Follow-on milks are not necessary. A range of ordinary milk products can be used over six months of age and micronutrients supplements also given if needed.
- Products that are not suitable for making infant formula include:
    - skimmed milk – fresh or dried powder;
    - condensed milk (very high in sugar and the fat content may be low);
    - creamers used for 'whitening' tea or coffee.

Water for preparing formula

- Infant formula requires water to be added. All water used for making infant formula needs to be boiled – brought to a full rolling, bubbling boil. Run the tap for a while to remove water standing in the pipe before boiling.
- Use water that has low levels of contamination from organisms that could cause illness as well as safe from pesticides, lead, and other contaminants. 'Mineral' water that is sold in bottles needs to be checked as it can have a high level of sodium (above 20 milligrams of sodium per litre of water is too high for infants) or other minerals. Do not use artificially softened water for making feeds.
- The correct proportions of water to formula powder are extremely important for child health.

18 There are also soy milks available that are not specially formulated for babies and if used, need special modification and the addition of micronutrients. Soy milk is not a good milk for young children as it does not include sufficient calcium and other animal products for good growth.

Optional Activity: Cost of Not Breastfeeding

The International Code of Marketing of Breast-milk Substitutes asks all health workers to know the financial implications of any decision not to breastfeed, and to inform parents. Do you know? This worksheet is based on a UNICEF/WHO training activity[19] and has been simplified to only include the direct cost of preparing feeds. The value of breastfeeding extends past the first six months. To make calculations easier this chart only relates to the first six months.

Milk costs
One tin of formula costs ______ for ______ grams.
For the first six months, about 20 kg. of powdered infant formula are needed.
That will cost Infant formula cost _______

Fuel costs
Following label instructions, the mother must give about _____ artificial milk feeds during the first six months. ____ litres of water will be boiled to make up these feeds, plus the extra water for warming and washing ______(approx. 1 litre per feed for washing and warming) It costs _____ to boil a litre of water x _____ litres per day, multiplied by 180 days. Fuel cost _____

Caregiver's time:
Following label instructions, the caregiver must prepare feeds____ times a day, and preparation takes ____ minutes each time, or a total of ___ hours per day.

Cost of preparing artificial feeds for a baby for six months ________
Minimum wage of a nurse is ________
Minimum wage of a female factory worker is ________
Artificial feeding for one six months costs ________ % of a nurse's wage
________ % of a factory worker's wage
plus the additional time in preparation that keeps mother from other family or financial pursuits.

There are also long term costs of not breastfeeding. Health care costs are increased by not breastfeeding, which affect the family, the health and social welfare services and the taxpayers. A monetary figure cannot be put on the psychological cost of illness or death of the baby or the mother, though this is obviously great, be it an acute infection or a chronic condition.

The use of feeding bottles is not recommended as they are difficult to keep clean. However if they are used additional costs are:
Equipment costs
____ feeding bottles, at ______ each, will cost Bottles ________
____ teats at ______ each, will cost Teats ________
____bottle brush for cleaning at ______ each, will cost Brush ________

Sterilising costs
Cost ____ per day to use chemical solution x 180 days. Sterilising ______
If chemical sterilising is used, another litre of boiled water will be needed per bottle to rinse the sterilant from the bottles and teats before use.
(or calculate other methods such as boiling bottles and teats)

19 Adapted from Helen Armstrong, *Training Guide in Lactation Management,* IBFAN/UNICEF. New York, 1992, p.43. Further activities on the cost of not breastfeeding can be found in *HIV and Infant Feeding Counselling: a training course*, Session 13. WHO/FCH/CAH/2000, UNICEF/PD/NUT/(J)2000.

SESSION 4
PROTECTING BREASTFEEDING

Session Objectives:

On completion of this session, participants will be able to:

1.	Discuss the effect of marketing on infant feeding practices.	5 minutes
2.	Outline the key points of International Code of Marketing of Breast-milk Substitutes.	15 minutes
3.	Describe actions health workers can take to protect families from marketing of breast-milk substitutes.	5 minutes
4.	Outline the care needed with donations of breast-milk substitutes in emergency situations.	5 minutes
5.	Discuss how to respond to marketing practices.	15 minutes
	Total session time	**45 minutes**

Materials:

Slide 4/1: Picture of mothers in antenatal clinic.

Slide 4/2: Aim of Code.

Gather examples of advertising of breast-milk substitutes to mothers and to health professionals.

Gather examples of presents/gifts to health workers from companies.

Further reading for facilitators:

The International Code of Marketing of Breast-milk Substitutes. WHO, 1981 and Relevant WHA resolutions at: http://www.ibfan.org/English/resource/who/fullcode.html

The International Code of Marketing of Breast-milk Substitutes. A common review and evaluation framework. Geneva, World Health Organization, 1996.

Infant Feeding During Emergencies – training manual. www.ennonline.net

Booklet (not on internet): *Protecting Infant Health. A Health Workers' Guide to the International Code of Marketing of Breastfeeding Substitutes*, 10th edition, IBFAN/ICDC, 2002.

Introduction

- *Show Picture 4/1 of Miriam and Fatima and tell the story.*

Miriam is expecting her second baby. Miriam's previous baby was born in a different hospital. In that hospital, Miriam received colourful leaflets about using formula including discount coupons during her pregnancy. She also received a tin of formula, and a high quality bottle and teat set when she was going home after the birth.

1. The effect of marketing on infant feeding practices 5 minutes

Ask: What might be the effect of these gifts on Miriam's infant feeding decisions?
Wait for a few responses

- The marketing and promotion of commercial breast-milk substitutes can undermine breastfeeding and has contributed substantially to the global decline in breastfeeding.

- *Ask participants to mention some ways that breast-milk substitutes are promoted, advertised, or marketed locally. The following is your checklist; only mention these strategies if the participants do not include them.*

MARKETING PRACTICES CHECK LIST
□ television and radio advertising □ newspapers and magazines advertising □ bill board advertising □ promotional websites □ special offers □ reduced prices □ mailings to pregnant women and mothers □ discount coupons □ phone help lines □ posters, calendars etc. in doctors offices and hospitals □ doctor's and nurse's endorsements □ free gifts □ free samples □ special offers □ educational materials

- Women are not able to make informed choices about infant feeding if they receive biased and incorrect information. A company provides information on its products with the aim of selling more of its products, so companies are biased sources of information.
- Moreover, if good breastfeeding information and education does not reach society as a whole, even well informed women will not get the personal and social support essential for exclusive breastfeeding. Badly-informed families, friends and health professionals can undermine the confidence even of a well-informed woman; conflicting advice and subtle pressures may make her doubt her ability to breastfeed her baby.

2. The International Code of Marketing of Breast-milk Substitutes 15 minutes

- A Baby-friendly hospital abides by the International Code of Marketing of Breast-milk Substitutes (the Code). The International Code was agreed at the World Health Assembly (WHA) in 1981 by Member States as one step to protect breastfeeding and to protect the minority of infants who might need artificial feeding. Subsequent resolutions (about every two years) are also agreed at WHA and have the same status as the original Code.
- The International Code is not a law; it is a recommendation based on the judgment of the collective membership of the highest international body in the field of health, the World Health Assembly.

- *Show slide 4/2 and read out the points below.*

- The overall aim of the International Code of Marketing of breast-milk Substitutes is the safe and adequate nutrition of all infants. To achieve this aim we must:
  - Protect, promote and support breastfeeding.
  - Ensure that breast-milk substitutes (BMS) are used properly when they are necessary.
  - Provide adequate information about infant feeding.
  - Prohibit the advertising or any other form of promotion of BMS.
- The Code does not aim to compel women to breastfeed against their will. The Code aims to ensure that everyone receives unbiased and correct information about infant feeding.
- The Code also protects artificially fed infants by ensuring that the choice of products is impartial, scientific and protects these children's health. The Code ensures that labels carry warnings and the correct instructions for preparation, so they are prepared in a safe manner if they are used.
- The Code is clear that the manufacture of BMS and making safe and appropriate products available are acceptable practices, but promoting them in the way most consumer products are marketed is unacceptable.

The Code and local implementation

- Member States (individual countries) are honour-bound to implement the Code, but they may implement it in the way that they think is best for their countries. If a Member State uses laws to enforce health protection practices, they can make their Code a law, but if their custom is to issue edicts from the head of state or to issue rules at Ministry level, then they may do so.
- The Code was adopted as a MINIMUM standard and Member States are expected to implement the basic principles and strengthen the provisions according to their society's needs. They may make the Code stronger in any way they see fit in order to protect infant and young child health and survival, but they may not weaken it or omit any provisions.
- The responsibility for monitoring the application of the Code lies with Governments, although manufacturers and distributors, professional groups and NGOs should collaborate with Governments to this end. The monitoring should be free from commercial influence.

- *Mention any national laws, decrees or other implementation of the International Code that apply in the country.*

Products that are covered by the Code (Scope of the Code)

- The Code applies to the marketing, and related practices, of the following products:
  - breast-milk substitutes, including infant formula;
  - other milk products, foods (cereals) and beverages (teas and juices for babies), when marketed or otherwise represented to be suitable for use as a partial or total replacement of breast milk;
  - feeding bottles and teats.
- According to recommendations for optimal infant feeding, infants should be exclusively breastfed for the first 6 months. That means that any other food or drink given to them before that age will replace breast milk and is therefore a breast-milk substitute.
- After the age of six months, anything that replaces the milk part of the child's diet, which would ideally be fulfilled by breast milk, is a breast-milk substitute, for example Follow-on milks or cereals promoted to be offered by bottle.
- The Code does not:
  - Prohibit the production and availability of breast-milk substitutes.
  - Affect the appropriate use of complementary foods after 6 months of age.

Promotion and providing information

- Product labels must clearly state the superiority of breastfeeding, the need for the advice of a health care worker, and a warning about health hazards. They may show no pictures of babies, or other pictures or text idealizing the use of infant formula.
- Advertising of breast-milk substitutes to the public is not permitted under the Code.
- Companies can provide necessary information to health workers on the ingredients and use of their products. This information must be scientific and factual, not marketing materials. This product information should not be given to mothers.
- If any educational materials are provided for parents, the materials must explain:
  - the importance of breastfeeding;
  - the health hazards associated with bottle-feeding;
  - the costs of using infant formula;[20] and
  - the difficulty of reversing the decision not to breastfeed.

Samples and supplies

- There should be no free or low-cost supplies of breast-milk substitutes in any part of the health care system. Health facilities should buy the small amount of formula needed for any babies who are not breastfeeding through regular purchasing channels.
- Free samples should not be given to mothers, their families or health care workers. Small amounts of formula given to mothers as a present or gift when going home from hospital or in the community are not allowed, as these are samples to encourage mothers to use those products.
- Sometimes the government procures breast-milk substitutes to be given for free or at a reduced price to mothers or caregivers for social welfare purposes (for example, mothers who have tested HIV-positive and have made an informed decision not to breastfeed). In this situation, the supply must be reliably sustained for each infant for as long as the infant needs it.

20 Mention the cost if using infant formula, if known.

- Supplies given for a baby should not be dependent on donations. Donations might stop at any time and then the baby would have no formula. A baby who is not breastfed will need 20 kg of powdered formula in the first 6 months and a suitable breast-milk substitute up until 2 years of age.
- All products should be of a high quality and take account of the climatic and storage conditions of the country where they are used. Out of date products should not be distributed.

3. How health workers can protect families from marketing 5 minutes

How promotion is channelled through Health Systems

- *Ask participants to mention some ways that breast-milk substitutes are promoted, advertised, or marketed through hospitals and health facilities. The following is your checklist; only mention methods of marketing if the participants do not include them.*

HEALTH SYSTEM MARKETING CHECK LIST
□ Free samples □ Free supplies to hospitals and to individual health professionals □ Small gifts such as pens, prescription pads, growth charts, calendars, posters and less expensive medical equipment □ Large gifts such as incubators, machines, fridges, air conditioners, computers □ Gifts of professional services such as architectural design of hospitals, organisation of events or legal services □ Personal gifts such as holiday trips, electrical goods, meals, and entertainment □ Sponsorship of hospitals, clinics or projects, health worker associations □ Funding of research grants and salaries □ Support to attend professional events and for professional associations □ Financial sponsorship of students and the presence of company representatives in health training establishments, which may include actual teaching in infant feeding courses □ Sponsorship of conferences, seminars and publications □ Advertisements in journals and similar publications, 'advertorial' articles that look like information but are advertising □ Research reports that are really promotional materials □ Friendly relations that encourage health workers to feel well disposed to the company, sending cards, bringing sweets or other food to the staff at work □ Close relationships with Ministries of Health and their employees □ Visits by company representatives to doctors in private practice, health institutions and ministries

Ask: What can you do to help protect babies and their families from marketing practices?
Wait for a few replies.

What health workers can do:

- Health workers as individuals and as a group can help to protect infants and their mothers from marketing. They can and should:
  - Remove posters that advertise formula, teas, juices or baby cereal, as well as any that advertise bottles and teats and refuse any new posters.
  - Refuse to accept free gifts from companies.
  - Refuse to allow free samples, gifts, or leaflets to be given to mothers.
  - Eliminate antenatal group teaching of formula preparation to pregnant women, particularly if company staff provides the teaching.
  - Do individual private teaching of formula use if a baby has a need for it.
  - Report breaches of the Code (and/or local laws) to the appropriate authorities.
  - Accept only product information from companies for their own information that is scientific and factual, not marketing materials.
- Hospitals must abide by the International Code and the subsequent resolutions in order to be recognised as baby-friendly.

4. Donations in emergency situations 5 minutes

- In emergencies the basic resources needed for safe artificial feeding, such as clean water and fuel, are scarce or nonexistent. Attempts at artificial feeding in such situations increase the risk of malnutrition, disease, and death. In addition, young children not breastfed miss its protective effects and are far more vulnerable to infection and illness.
- In emergencies, donations of infant formula, foods and feeding bottles may come from many sources, including well-intentioned but poorly informed small groups or individuals. Media coverage may have led these donors to believe that women cannot breastfeed in the crisis.
- These donations should be refused since they can result in:
  - Too much infant formula sent, which may result in babies who do not need formula receiving it, as well as problems with storage and disposal of excess formula and disposal of packaging waste.
  - Advertising brands, which mothers may then think are recommended brands.
  - Donations of out of date or unsuitable formula, making them unsafe to use.
- Additional problems can arise:
  - No instructions in local languages provided for the formula preparation.
  - Bottles and teats included though cup feeding is recommended in emergencies.

Additional dangers of unlimited supplies in emergencies

- If supplies of infant formula are widely available and uncontrolled, there may be *spillover*. **Spillover** means that mothers who would otherwise breastfeed lose their confidence and needlessly start to give artificial feeds.
- **Infants and their families become dependent** on infant formula. If the free supply is unreliable, they are put at risk of malnutrition in addition to the health risks of artificial feeding.
- Large donations may come from companies who, by donating formula to the area in crisis, intend to **create a new market** for later sale of their products to the emergency-affected population or the host population.
- If donations are unavoidable, they should be used to prepare cooked foods or porridges for older children or others, or be used with a relactation device to relactate or induce lactation.

5. How to respond to marketing practices 15 minutes

Class discussion

A company representative visits the nutritionists at a nutritional rehabilitation centre to promote the use of a new, improved infant formula. He says that this formula is especially useful for malnourished babies. He offers to provide enough so that every mother may be given two free tins. If the staff is implementing the Code, how can they respond?

- *Write responses on the blackboard or flipchart.*
- *Key points: Staff should refuse the donation. Breastfeeding should be encouraged for these babies. Two tins would only feed a baby for a short time. What would happen after the two tins were used up?*

Wambui runs a private maternity home. Her friend, Wanjike, works for an infant formula company and offers to give the home posters and leaflets on breast and bottle- feeding, and supplies of formula. What can Wambui say to her friend?

- *Write responses on the blackboard or flipchart.*
- *Key points: Wambui can explain to her friend that breastfeeding is important for the health of the babies and mothers. Posters and free formula undermine the importance of breastfeeding. If there are any mothers who do not breastfeed, free formula will only last a short time. These mothers need a discussion with an infant feeding counsellor about sustainable ways to feed their baby. The posters and free formula are not needed.*

Sam is training to be a paediatrician. He is very interested in infant nutrition. A formula company offers to fund his travel to a free conference that the company is holding and provide him with accommodation at the conference hotel. If Sam accepts this funding, what might happen?

- *Write responses on the blackboard or flipchart.*
- *Key points: Sam needs to think carefully about accepting this funding. At the conference, will he hear information that is scientific and factual, or information marketing the company's products? Will there be 'gifts' at the conference of pens, prescription pads, posters and other materials marketing the products from that company? Will Sam refuse to accept these 'gifts' or will he bring them back to his workplace? Will the company representatives come to visit Sam after the conference expecting that he will help them to get their products used in the health facility because they helped him to get to the conference? Article 7 of the Code states that no financial or material inducement to promote products should be offered to health workers or accepted by them. If funding is provided for a conference, the company should disclose this funding to the health facility where the person is employed and the health worker receiving the funding should also inform their supervisor.*
- *Ask if there are any questions. Then summarise the session.*

Session 4 Summary

- Marketing of breast-milk substitutes and bottles can undermine confidence in breastfeeding for mothers and the wider community.
- The International Code and its subsequent resolutions assist the safe and adequate nutrition of infants by reducing health worker and mothers' exposure to misinformation that undermines breastfeeding, ensuring that breast-milk substitutes are used properly when they are necessary, providing adequate information about infant feeding, marketing and distributing breast-milk substitutes appropriately.
- Health workers can help to protect families from marketing of breast-milk substitutes by following the Code, refusing to accidentally endorse formula by accepting gifts from companies and refusing to distribute items with brand markings, marketing materials and samples to mothers.
- Donations of breast-milk substitutes in emergencies need to be treated with extreme care as they can make the nutrition and health of infants worse.

***Session 4 Knowledge Check** - mark the answer True (T) or False (F)*

1. Giving mothers company-produced leaflets about breast-milk substitutes can affect infant feeding practices.	T	F
2. Breast-milk substitutes include formula, teas, and juices (as well as other products)	T	F
3. The International Code and BFHI prohibit the use of formula for infants in maternity wards	T	F
4. Health workers can be given any publication or materials by companies as long as they do not share these publications with mothers	T	F
5. Donations of formula should be given to mothers of infants in emergency situations	T	F

Answers:

1. T The purpose of company-produced leaflets is to increase sales of their products.
2. T Breast-milk substitutes include infant formula, other milk products, foods and beverages (teas and juices for babies); bottle-fed complementary foods, (cereals and vegetable mixes for use before 6 months of age) when marketed or otherwise represented to be suitable, with or without modification, for use as a partial or total replacement of breast milk.
3. F Infants who are not breastfed can be fed on formula that the maternity unit has purchased in a similar way to other food purchases, not donated by a formula company.
4. F Publications for health workers from companies should contain only information about products that are scientific and factual.
5. F Donations may increase ill health. They should not be generally distributed.

SESSION 5
BIRTH PRACTICES AND BREASTFEEDING - STEP 4

Session Objectives:

On completion of this session, participants will be able to:

1. Describe how the actions during labour and birth can support early breastfeeding.	30 minutes
2. Explain the importance of early contact for mother and baby.	15 minutes
3. Explain ways to help initiate early breastfeeding.	5 minutes
4. List ways to support breastfeeding after a caesarean section.	15 minutes
5. Discuss how BFHI practices apply to women who are not breastfeeding.	10 minutes
Total session time	**75 minutes**

Materials:

Slides 5/1 – 5/3: Skin to skin contact.

Birth Practices Checklist (optional).

Further Reading for Facilitators:

WHO, *Pregnancy, childbirth, postpartum and newborn care - a guide for essential practice.* **(**2003) Department of Reproductive Health and Research (RHR), WHO.

Coalition for Improving Maternity Services (CIMS)
National Office, PO Box 2346, Ponte Vedra Beach, FL 32004 USA
www.motherfriendly.org info@motherfriendly.org

Optional book - Kroeger M, Smith L. *Impact of Birthing practices on breastfeeding – protecting the mother and baby continuum*. Jones & Bartlett Publishers, 2004.

1. Labour and birth practices to support early breastfeeding30 minutes

In an earlier session, the mother in our story, Miriam, was at the antenatal clinic. A few weeks have gone by and now her baby is ready to be born. She comes to the maternity facility.

Ask: What practices during labour and immediately after birth could help Miriam and her baby to start breastfeeding well?

Wait for a few responses.

- The care that a mother experiences during labour and birth can affect breastfeeding and how she cares for her baby.
- Step 4 of the Ten Steps to Successful Breastfeeding states:
  Help mothers to initiate breastfeeding within a half-hour of birth.
  To focus on the importance of skin-to-skin contact and watching for infant readiness, this step is now interpreted as:
  Place babies in skin-to-skin contact with their mothers immediately following birth for at least an hour and encourage mothers to recognise when their babies are ready to breastfeed, offering help if needed.

Ask: What practices may help a woman to initiate breastfeeding soon after birth?

Wait for a few replies

- Practices that may help a woman to feel competent, in control, supported and ready to interact with her baby who is alert, help to put this Step into action. These practices include:
  - Emotional support during labour.
  - Attention to the effects of pain medication on the baby.
  - Offering light foods and fluids during early labour.
  - Freedom of movement during labour.
  - Avoidance of unnecessary caesarean sections.
  - Early mother-baby contact.
  - Facilitating the first feed.

Ask: What practices may hinder early mother and baby contact?

Wait for a few replies.

- Practices that may hinder mother and baby early contact and the establishment of breastfeeding include:
  - Requiring the mother to lie in bed during labour and birth.
  - Lack of support.
  - Withholding food and fluids during early labour.
  - Pain medications that sedate mother or baby, episiotomy[21], intravenous lines, continuous electronic fetal monitoring and other interventions used as routine without medical reasons.
  - Wrapping the baby tightly after birth.
  - Separating the mother and baby after birth.

21 The perineum is cut to give more room for the baby's head. The perineum is then stitched after the birth.

- Take care that these practices that may hinder early contact are only used if medically necessary.

Miriam's sister comes with her to the maternity facility. Miriam wants her sister to stay with her during labour and the birth.

Ask: How might it make a difference to Miriam if her sister stays with her during labour and the birth?

Wait for a few responses.

Support during labour

- A companion during labour and birth can:
  - Reduce the perception of severe pain
  - Encourage mobility
  - Reduce stress
  - Speed labour and birth
  - Reduce the need for medical interventions
  - Increase the mother's confidence in her body and her abilities.
- The support can result in:
  - Increased alertness of baby as less pain relief drugs reach the baby
  - Reduced risk of infant hypothermia and hypoglycaemia because baby is less stressed and thus using less energy
  - Early and frequent breastfeeding
  - Easier bonding with the baby.
- The labour and birth companion can be a mother, sister, friend, family member or the baby's father or a member of the health facility staff. The support person needs to remain continuously with the woman through labour and the birth.
- The companion provides non-medical support that can include:
  - Encouragement to walk and move in labour
  - Offering light nourishment and fluids
  - Building the mother's confidence by focusing on how well she is progressing
  - Suggesting ways to keep pain and anxiety manageable
  - Providing massage, hand holding, cool cloths,
  - Using positive words.

Pain relief

Miriam asks about pain relief and its effect on the baby and breastfeeding.

Ask: What can you tell her about pain relief?

Wait for a few responses.

- Offer non-medication methods of pain relief before offering pain medications. These non-medication methods include:
  - Labour support
  - Walking and moving around
  - Massage
  - Warm water
  - Verbal and physical reassurances
  - Quiet environment with no bright lights and as few people as possible
  - Labouring and giving birth positioning a position of the mother's choice.

- Pain medications can increase the risk of:
  - Longer labour
  - Operative interventions
  - Delayed start to mother baby contact and breastfeeding
  - Separation of mother and baby after birth
  - Sleepy, hard to rouse baby
  - Diminished sucking reflex
  - Reduced milk intake increasing the risk of jaundice, hypoglycaemia, and low weight gain.
- Extra time and assistance may be needed to establish breastfeeding and bonding if pain medications are used.
- Discuss ways to cope with pain and discomfort and their risks and benefits during antenatal care. The need for pain relief is affected by stress, lack of support and other factors in the labour ward.

Light foods and fluids during labour

Miriam is progressing well in early labour and there are no medical problems. She asks you if she can continue to drink water.

Ask: What effect might giving fluid or withholding fluid have on Miriam's labour?
Wait for a few responses.

- Labour and birth are hard work. The woman needs energy to do this work. There is no evidence that withholding of light food and drink from low risk women in labour is beneficial as a routine practice. The desire to eat and drink varies and a woman should be allowed to decide if she wants to eat or drink. Restricting food and fluid can be distressing to the labouring woman.
- Intravenous (IV) fluids for woman in labour need to be used only for a clear medical indication. Fluid overload from the IV can lead to electrolyte imbalance in the baby, and high weight loss as the baby sheds the excess fluid. An IV drip may limit the woman's movement.
- Following a normal birth, a woman may be hungry and she should have access to food. If she gives birth during the night, some food should be available for her so that she does not need to wait many hours until the next meal is available.

Birth practices

Ask: What birth practices might help and what practices are better avoided unless there is a medical reason?
Wait for a few responses.

- When giving birth, all women need:
  - A skilled attendant present.
  - Minimal use of invasive procedures such as episiotomy[22].
  - Universal precautions to be followed to prevent transmission of HIV and blood-borne infections[23].

22 Invasive procedures include vaginal examinations, amniocentesis, cardiocentesis or taking a sample from the placenta, artificial rupture of membranes, episiotomy, and blood transfusions as well as suctioning of the newborn.
23 Universal Precautions protect the birth attendant so they do not need to fear the woman with HIV and also protect the woman from any infections that the birth attendant may have.

- Caesarean sections or any other intervention only used when medically required.

- Instrumental birth (forceps or vacuum extraction) can be traumatic, disrupt the alignment of the bones in the baby's head and affect nerve and muscle function, resulting in problems with feeding.
- Normal vaginal birth is assisted by the woman being mobile during early labour with access to fluids and food, and by being in an upright or squatting position for birth.
- Episiotomy will result in pain and difficulty in sitting during the early days after birth, which can affect early skin-to-skin contact, breastfeeding, and mother-baby contact. If the woman is sore, encourage her to lie down to feed and cuddle her baby.
- The cord should not be clamped until pulsing reduces and baby has received sufficient additional blood to boost iron stores.
- When considering birth practices remember that the practices have an effect on the baby as well as the mother.

2. Importance of early contact 15 minutes

Miriam has her baby. It is a healthy girl.

Ask: What are important practices immediately after birth that can help the mother and baby?

Wait for a few responses

Skin-to-skin contact

- Ensure uninterrupted, unhurried skin-to-skin contact between every mother and unwrapped healthy baby. Start immediately, even before cord clamping, or as soon as possible in the first few minutes after birth. Arrange that this skin-to-skin contact continue for at least one hour after birth. A longer period of skin-to-skin contact is recommended if the baby has not suckled by one hour after birth.

- *Show pictures of skin-to-skin contact and point out that the baby is not wrapped and both mother and baby are covered.*

- Skin-to-skin contact:
  - Calms the mother and the baby and helps to stabilise the baby's heartbeat and breathing.
  - Keeps the baby warm with heat from the mother's body.
  - Assists with metabolic adaptation and blood glucose stabilization in the baby.
  - Enables colonization of the baby's gut with the mother's normal body bacteria gut, provided that she is the first person to hold the baby and not a nurse, doctor, or others, which may result in their bacteria colonising the baby.
  - Reduces infant crying, thus reducing stress and energy use.
  - Facilitates bonding between the mother and her baby, as the baby is alert in the first one to two hours. After two to three hours, it is common for babies to sleep for long periods of time.
  - Allows the baby to find the breast and self-attach, which is more likely to result in effective suckling than when the baby is separated from his or her mother in the first few hours.

- All stable babies and mothers benefit from skin-to-skin contact immediately after birth. All babies should be dried off as they are placed on the mother's skin. The baby does not need to be bathed immediately after birth. Holding the baby is not implicated in HIV transmission. It is important for a mother with HIV to hold, cuddle and have physical contact with her baby so that she feels close and loving.
- Babies, who are not stable immediately after birth can receive skin-to-skin contact later when they are stable *(slide 5/3.)*

Ask: What could be barriers to ensuring early skin-to-skin contact is the routine practice after birth and how could these barriers be overcome?

Wait for a few responses.

Overcoming barriers to early skin-to-skin contact

- Many of the barriers to skin-to-skin contact are related to common practices rather than to a medical concern. Some changes to practices can facilitate skin-to-skin contact.
  - **Concern that the baby will get cold.** Dry the baby and place baby naked on the mother's chest. Put a dry cloth or blanket over both the baby and the mother. If the room is cold, cover the baby's head also to reduce heat loss. Babies in skin-to-skin contact have better temperature regulation than those under a heater.
  - **Baby needs to be examined.** Most examinations can be done with the baby on the mother's chest where baby is likely to be lying quietly. Weighing can be done later.
  - **Mother needs to be stitched.** The infant can remain on the mother's chest if an episiotomy or caesarean section needs to be stitched.
  - **Baby needs to be bathed.** Delaying the first bath allows for the vernix to soak into the baby's skin, lubricating and protecting it. Delaying the bath also prevents temperature loss. Baby can be wiped dry after birth.
  - **Delivery room is busy.** If the delivery room is busy, the mother and baby can be transferred to the ward in skin-to-skin contact, and contact can continue on the ward.
  - **No staff available to stay with mother and baby.** A family member can stay with the mother and baby.
  - **Baby is not alert.** If a baby is sleepy due to maternal medications it is even more important that the baby has contact as he/she needs extra support to bond and feed.
  - **Mother is tired.** A mother is rarely so tired that she does not want to hold her baby. Contact with her baby can help the mother to relax. Review labour practices such as withholding fluid and foods, and practices that may increase the length of labour, which can tire the mother.
  - **Mother does not want to hold her baby.** If a mother is unwilling to hold her baby it may be an indication that she is depressed and at greater risk of abandonment, neglect or abuse of the baby. Encouraging contact is important as it may reduce the risk of harm to the baby[24].
- With twins the interval between the births varies. Generally, the first infant can have skin to skin contact until the mother starts to labour for the second birth. The first twin can be held in skin to skin contact by a family member for warmth and contact while the second twin is born. Then the two infants are held by the mother in skin to skin contact and assisted to breastfeed when ready.

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24 If there is a risk of harm to the baby a support person needs to be present both to encourage the mother to hold her baby and for the baby's protection.

- It may be helpful to add an item to the mother's labour/birth chart to record the time that skin-to-skin contact started and the time that it finished. This is an indication that skin contact is as important as other practices of which a record is required.

- *Optional: Discuss Birth Practices Checklist (at end of this session).*

3. Helping to initiate breastfeeding 5 minutes

Miriam heard about skin-to-skin contact during her pregnancy and she is happy to have this contact. When Miriam had her previous baby in a different hospital, the baby was wrapped and taken to the nursery immediately, which she did not like. Miriam also heard that it was good to start breastfeeding soon after birth.

Ask: How can you help Miriam and her daughter to initiate breastfeeding?
Wait for a few responses.

How to assist to initiate breastfeeding

- When the baby is on the mother's chest with skin-to-skin contact the breast odour will encourage the baby to move towards the nipple.
- **Help a mother to recognise these pre-feeding behaviours or cues.** When a mother and baby are kept quietly in skin-to-skin contact, the baby typically works through a series of pre-feeding behaviours. This may be a few minutes or an hour or more. The behaviours of the baby include:
  - a short rest in an alert state to settle to the new surroundings;
  - bringing his or her hands to his or her mouth, and making sucking motions; sounds, and touching the nipple with the hand;
  - focusing on the dark area of the breast, which acts like a target;
  - moving towards the breast and rooting;
  - finding the nipple area and attaching with a wide open mouth.
- **There should be no pressure on the mother or baby** regarding how soon the first feed takes place, how long a first feed lasts, how well attached the baby is or how much colostrum the baby takes. The first time of suckling at the breast should be considered an introduction to the breast rather than a *feed.*
- More assistance with breastfeeding can be provided at the next feed to help the mother learn about positioning, attachment, feeding signs and other skills she will need.
- The role of the health worker at this time is to:
  - provide time and a calm atmosphere;
  - help the mother to find a comfortable position;
  - point out positive behaviours of the baby such as alertness and rooting;
  - build the mother's confidence;
  - avoid rushing the baby to the breast or pushing the breast into the baby's mouth.

4. Ways to support breastfeeding after a Caesarean section 15 minutes

Miriam and her baby are now happy with their early contact and breastfeeding. They are both resting on the postnatal ward. However, Fatima has now come to the maternity facility. Her baby is not due for a few weeks but there are some difficulties. The doctor decides that Fatima's baby needs to be born and that a caesarean section will be needed.

Ask: What effect could the caesarean section have on Fatima and her baby as regards breastfeeding?

Wait for a few responses.

- A Caesarean section is major abdominal surgery. The mother is likely to:
  - be frightened and stressed;
  - have an IV drip and urinary catheter inserted;
  - be confined to bed and restricted in movement;
  - have restricted fluid and food intake both before and after the birth, thus be deprived of energy to care for her baby;
  - receive anaesthetics and analgesia for pain, which can affect the responses of both the mother and baby;
  - have altered levels of oxytocin and prolactin, the hormones of lactation;
  - be at higher risk of infection, and bleeding;
  - be separated from her baby;
  - feel a sense of failure that her body was not able to work normally to give birth.
- The baby is also affected by a caesarean birth. The baby:
  - is a high risk of not breastfeeding or of breastfeeding for only short duration;
  - may have more breathing problems;
  - may need suction of mucus, which can hurt the baby's mouth and throat;
  - may be sedated from maternal medications;
  - is less likely to have early contact;
  - is more likely to receive supplements;
  - is more likely to have nursery care increasing the risk of cross-infection as well as restricting breastfeeding.

Fatima's baby is born. It is a boy. He is four weeks early and small but his breathing is stable. He is given to Fatima for skin-to-skin contact. This will help his breathing and temperature.

Ask: How can you help Fatima and her baby to initiate breastfeeding after a Caesarian section?

Wait for a few responses.

- The presence of a supportive health worker is important for helping a mother initiate breastfeeding after a Caesarean.
- Encourage the mother to have skin-to-skin contact as soon as possible.
  - In general, mothers who have spinal or epidural anaesthesia are alert and able to respond to their baby immediately, similar to mothers who give birth vaginally.
  - Following a general anaesthesia, contact can occur in the recovery room if the mother is responsive, though she may still be sleepy or under the influence of anaesthesia.

- The father or other family member can give skin-to-skin contact which helps keep the baby warm and comforted while waiting for the mother to return from the operating theatre.
- If contact is delayed, the baby should be wrapped in a way that facilitates unwrapping for skin-to-skin contact later when the mother is responsive.
- Babies who are premature or born with a disability also benefit from skin-to-skin contact. If a baby is not stable and needs immediate attention, skin-to-sin contact can be given when the baby is stable.

- **Assist with initiating breastfeeding** when the baby and mother show signs of readiness. The mother does not need to be able to sit up, to hold her baby or meet other mobility criteria in order to breastfeed. It is the baby that is finding the breast and suckling. As long as there is a support person with the mother and baby, the baby can go to the breast if the mother is still sleepy from the anaesthesia.
- **Help Caesarean mothers find a comfortable position for breastfeeding**. The I.V. drip may need adjustment to allow for positioning the baby at the breast.
  - Side-lying in bed. This position helps to avoid pain in the first hours and allows breastfeeding even if the mother must lie flat after spinal anaesthesia.
  - Sitting up with a pillow over the incision or with the baby held along the side of her body with the arm closest to the breast.
  - Lying flat with the baby lying on top of the mother.
  - Support (e.g. pillow) under her knees when sitting up, or under the top knee and behind her back when side lying.
- Provide rooming-in with assistance as needed until the mother can care for her baby.
- When staff are supportive and knowledgeable, the longer stay in hospital following a Caesarean section may assist in establishing breastfeeding.

5. BFHI practices and women who are not breastfeeding 10 minutes

- All mothers should have support during labour and birth. Harmful practices should be avoided. Early skin-to-skin contact benefits all mothers and babies.
- Unless there is a known medical reason for not breastfeeding, (for example that the woman has been tested and found to be HIV-positive and following counselling during pregnancy has decided not to breastfeed) all mothers should be encouraged to let their baby suckle at the breast. If a mother has a strong personal desire not to breastfeed, she can say so at this time.
- The breastfeeding baby receives colostrum in the first feeds in small amounts suitable for a newborn's stomach. If the baby is not breastfeeding, replacement feeds should start with small amounts[25]. Arrangements will need to be made to ensure there are replacement feeds available for any infants who are not breastfeeding.

- *Discuss how replacement feeds could be made and given in the first few hours after the woman has given birth.*

- *Ask if there are any questions. Then summarise the session.*

25 There is no research evidence to advise on when a full-term healthy baby who is not breastfed needs to get a first feed. Most healthy babies who are not breastfeeding do not need to be fed in the first hour or two after birth.

Session 5 Summary

- Step 4 of the Ten Steps to Successful Breastfeeding states: Help mothers to initiate breastfeeding within a half-hour of birth. This step is now interpreted as:
  Place babies in skin-to-skin contact with their mothers immediately following birth for at least an hour and encourage mothers to recognize when their babies are ready to breastfeed, offering help if needed.
- Practices that result in a woman feeling competent, in control, supported and ready to interact with her baby who is alert, help to put this Step into action. Encourage a family centred maternity care approach at birth with involvement of the father or close family member during labour and birth.
- Supportive practices include: support during labour, limiting invasive interventions, paying attention to the effects of pain relief, offering light food and fluids, avoiding unnecessary caesarean sections, and facilitating early mother and baby contact.
- Early contact and assistance with breastfeeding can be routine practice after a caesarean section also.
- Provide uninterrupted, unhurried skin-to-skin contact between every mother and her healthy baby. Start immediately or as soon as possible in the first few minutes after birth. The baby should be unwrapped, and the mother and baby both covered together. Provide this contact for at least one hour after birth.
- Encourage the mother to respond to the baby’s signs of readiness to go to the breast.
- These supportive practices do not need to change for women who are HIV-positive.

Session 5 Knowledge Check

List four labour or birth practices that can help the mother and baby get a good start with breastfeeding.

List three ways to assist a mother following a caesarean section with breastfeeding.

Name three possible barriers to early skin-to-skin contact and how each might be overcome.

Additional information – Session 5

Initiation of breastfeeding

- Encourage the mother to breastfeed when the baby shows that she or he is ready (usually within an hour). It is unnecessary to hurry and force babies to the breast. A mother and her baby should be quietly kept in skin-to-skin contact until they are both ready to breastfeed. This may be a few minutes or an hour or more.
- Early touch of the nipple and areola results in a release of the hormone oxytocin. Oxytocin helps:
  - The uterus to contract more quickly which may control bleeding. Routine use of synthetic oxytocin and ergometrine are not necessary when a mother is breastfeeding after birth.
  - The mother to feel more loving and attached to her baby.
- Colostrum, the first milk in the breast, is vitally important to the baby[26]. It provides many immune factors that protect the baby, and it helps to clear meconium from the baby's gut, which can keep levels of jaundice low. Colostrum provides a protective lining to the baby’s gut, and helps the gut to develop. Thus it should be the only fluid the baby receives.
- Prelacteal feeds are any fluid or feed given before breastfeeding starts. They might include water, formula, traditional feeds such as honey, dates or banana, herbal drinks or other substances. Even a few spoonfuls of these fluids or feeds can increase the risk of infection and allergy to the infant. If prelacteal feeds are used in the area, during pregnancy discuss with the mother the importance of exclusive breastfeeding and how she might achieve this.
- Newborn infants do not need water or other artificial feeds to ‘test’ their ability to suck or swallow. In the rare situation where a baby has an abnormality of swallowing, colostrum (a natural physiological substance) is less risk to a baby’s lungs than a foreign substance such as water or artificial formula.
- A mother who breastfeeds in the delivery room is more likely to breastfeed for more months than when the first breastfeed is delayed.
- If a baby has not started to breastfeed in the delivery room, ensure that the postnatal ward staff know this. Ask them to ensure that skin-to-skin contact continues, and to watch for signs of readiness to feed.

Optional activity
Observe a mother and baby in skin-to-skin contact soon after birth. What behaviours of the baby do you see that are leading to the baby going to the breast?

26 See section on colostrum in the Additional Information section of Session 3.

Birth Practices Checklist

Mother's name: ____

Date and time of infant's birth: ____

Type of birth:
___ Vaginal : Natural ___ Vacuum ___ Forceps ___
___ C-section with epidural/spinal
___ C-section with general anaesthetic

Skin-to-skin contact:
Time started: ______ Time ended: _______ Duration of contact: ________

Reason for ending skin-to-skin contact: __________________________________

____

Time of baby's first breastfeed: ______________

Date and time help offered with second breastfeed: _______________

Notes:

____

Skin to skin contact immediately after birth:
- keeps the baby warm;
- calms mother and baby and regulates breathing and heart rate;
- colonises the baby with the mother's normal body bacteria;
- reduces infant crying, thus reducing stress and energy use;
- allows the baby to find the breast and self-attach to start feeding;
- facilitates bonding between the mother and her baby.

No additional foods or fluids are needed by the newborn baby – just breast milk

SESSION 6
HOW MILK GETS FROM BREAST TO BABY

Session Objectives:

On completion of this session, participants will be able to:

1.	Identify the parts of the breast and describe their functions.	5 minutes
2.	Discuss how breast milk is produced and how production is regulated.	15 minutes
3.	Describe the baby's role in milk transfer;	20 minutes
4.	Discuss breast care.	5 minutes
	Total session time	**45 minutes**

Materials:

Slide 6/1: Parts of the Breast.
Slide 6/2: Back massage.
Slide 6/3: What can you see – inside view.
Slide 6/4: What can you see – outside view.

Cloth breast model.

Doll (optional).

Further reading for facilitators:

Session 3, How breastfeeding works, in *Breastfeeding Counselling: a training course.* WHO/UNICEF.

Introduction

In order to assist Miriam and Fatima with breastfeeding you need to know how the breast produces milk and how the baby suckles.

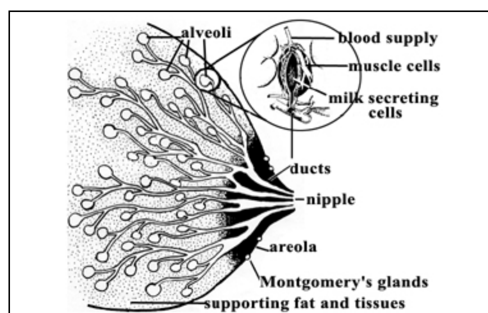
In normal breastfeeding, there are two elements necessary for getting milk from the breast to the baby:

- a breast that produces and releases milk, and
- a baby who is able to remove the milk from the breast with effective suckling.

The manner in which the baby is attached at the breast will determine how successfully these two elements come together. If the milk is not removed from the breast, more milk is not made.

1. Parts of the breast involved in lactation 5 minutes

- *Use slide 6/1 – to identify the parts of the breast*



- On the outside of the breast you can see the **Areola,** a darkened area around the nipple. The baby needs to get a large amount of the areola into his or her mouth to feed well. On the areola are the glands of Montgomery that provide an oily fluid to keep the skin healthy. The Montgomery glands are the source of the mother's smell, which helps the baby to find the breast and to recognise her.
- Inside the breast, are:
  - Fat and **supporting tissue** that give the breast its size and shape.
  - **Nerves**, which transmit messages from the breast to the brain to trigger the release of lactation hormones.
  - Little sacs of milk-producing cells or **Alveoli**[27] that produce milk.
  - Milk **ducts** that carry milk to the **nipple**. The baby needs to be attached to compress the milk ducts that are under areola in order to remove milk effectively.
- Surrounding each alveolus are little muscles that contract to squeeze the milk out into the ducts. There is also a network of blood vessels around the alveolus that brings the nutrients to the cells to make milk.
- It is important to reassure mothers, that there are many variations in the size and shape of women's breasts. The amount of milk produced does not depend on breast size[28]. Be sure to tell every mother that her breasts are good for breastfeeding, and avoid frightening words like "problem."

27 One gland is an alveolus and multiple glands are alveoli.
28 Small breasts may not be able to store as much milk between feeds as larger breasts. Babies of mothers with small breasts may need to feed more often, but the amount of milk produced in a day is as much as from larger breasts.

2. Breast milk production 15 minutes

- The first stages of milk production are under the control of hormones or chemical messengers in the blood.
  - During pregnancy, hormones help the breasts to develop and grow in size. The breasts also start to make colostrum.
  - After birth, the hormones of pregnancy decrease. Two hormones - prolactin and oxytocin become important to help *production* and *flow* of milk. Under the influence of prolactin, the breasts start to make larger quantities of milk. It usually takes 30-40 hours after birth before a large volume of milk is produced. Colostrum is already there when baby is born.

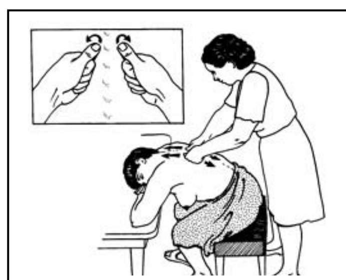
Prolactin

- Prolactin is a hormone that makes the alveoli produce milk. Prolactin works after a baby has taken a feed to make the milk for the next feed. Prolactin can also make the mother feel sleepy and relaxed.
- Prolactin is high in the first 2 hours after birth. It is also high at night. Hence, breastfeeding at night allows for more prolactin secretion.

Oxytocin

- Oxytocin causes the muscle cells around the alveoli to contract and makes milk flow down the ducts. This is essential to enable the baby to get the milk. This process is called the oxytocin reflex, milk ejection reflex, or letdown. It may happen several times during a feed. The reflex may feel different or be less noticeable as time goes by.
- Soon after a baby is born, the mother may experience certain signs of the oxytocin reflex. These include:
  - painful uterine contractions, sometimes with a rush of blood;
  - a sudden thirst;
  - milk spraying from her breast, or leaking from the breast which is not being suckled;
  - feeling a squeezing sensation in her breast.

  However, mothers do not always feel a physical sensation.
- When the milk ejects, the rhythm of the baby's suckling changes from rapid to slow deep, sucks (about one per second) and swallows.
- Seeing, hearing, touching and thinking lovingly about the baby, helps the oxytocin reflex. The mother can assist the oxytocin to work by:
  - Feeling pleased about her baby and confident that her milk is best.
  - Relaxing and getting comfortable for feeds.
  - Expressing a little milk and gently stimulating the nipple.
  - Keeping her baby near so she can see, smell, touch and respond to her baby.
  - If necessary, asking someone to massage her upper back, especially along the sides of the backbone.



- *Show slide 6/2*

- Oxytocin release can be inhibited <u>temporarily</u> by:
    - Extreme pain, such as a fissured nipple or stitches from a caesarean birth or episiotomy.
    - Stress from any cause, including doubts, embarrassment, or anxiet.,
    - Nicotine and alcohol.
- Remember that how you talk to a mother is important to help her milk flow – you learnt about this in the earlier session on communication skills. If you cause her to worry about her milk supply, this worry may affect the release of oxytocin.

Feedback Inhibitor of Lactation (FIL)

- You may have noticed that sometimes milk is produced in one breast but not the other – usually when a baby suckles only one side. This is because milk contains an **inhibitor** that can reduce milk production.
- If milk is not removed and the breast is full, this inhibitor decreases production of milk. If milk is removed from the breast, then the inhibitor level falls and milk production increases. Thus, the amount of milk that is produced depends on how much is removed. Therefore, to ensure plentiful milk production, make sure that milk is removed from the breast efficiently.
- To prevent the Feedback Inhibitor of Lactation from collecting and reducing milk production:
    - make sure that the baby is well attached;
    - encourage frequent breastfeeds;
    - allow baby to feed for as long as she or he wants at each breast;
    - let the baby finish the first breast before offering the second breast;
    - if baby does not suckle, express the milk so that milk production continues.

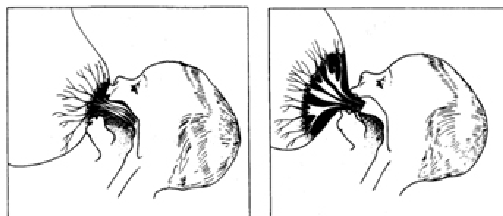
3. The baby's role in milk transfer 20 minutes

- The baby's suckling controls the prolactin production, the oxytocin reflex and the removal of the inhibitor within the breast. For a mother to produce the milk that her baby needs, her baby must suckle often and suckle in the right way. A baby cannot get the milk by sucking only on the nipple.

Good and poor attachment

- The next two pictures show what happens <u>inside</u> a baby's mouth, when she or he is breastfeeding.

Show slide 6/3

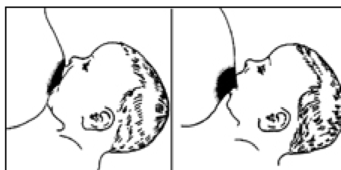


- In picture 1: Good attachment
  - The nipple and areola are stretched out to form a long “teat” in the baby’s mouth.
  - The large ducts that lie beneath the areola are inside the baby’s mouth.
  - The baby’s tongue reaches forward over the lower gum, so that it can press the milk out of the breast. This is called suckling.
  - When a baby takes the breast into his or her mouth in this way, the baby is well attached and can easily get the milk.
- In picture 2: Poor attachment
  - The nipple and areola are not stretched out to form a teat.
  - The milk ducts are not inside the baby’s mouth.
  - The baby’s tongue is back inside the mouth, and cannot press out the milk.
  - This baby is poorly attached. He or she is sucking only on the nipple, which can be painful for the mother. The baby cannot suckle effectively or get the milk easily.

How to decide if a baby is well or poorly attached

- You need to be able to decide about a baby’s attachment by looking at the outside. The next two pictures show what you can see on the outside.

Show figure 6/4



- In picture 1: Good attachment
  - The baby’s **mouth** is wide open.
  - The **lower lip** is turned out.
  - The **chin** is touching the breast (or nearly so).
  - More **areola** is visible above the baby’s mouth than below.
- Seeing a lot or a little of the areola is not a reliable sign of attachment. Some women have a large areola and some have a small areola. It is more reliable to compare how much areola you see above and below a baby’s mouth (if any is visible).
- These are the signs of <u>good attachment</u>. If you can see all these signs, then the baby is *well attached*. When the baby is well attached, it is comfortable and painless for the mother, and the baby can suckle effectively.
- In picture 2: Poor attachment
  - The **mouth** is not wide open.
  - The **lower lip** is pointing forward (it may also be turned in).
  - The **chin** is away from the breast.
  - More **areola** is below the baby’s mouth (you might see equal amounts of areola above and below the mouth).

These are the signs of <u>poor attachment</u>. If you see *any one* of these signs, then the baby is *poorly attached* and cannot suckle effectively. If the mother feels discomfort, that is also a sign of poor attachment.

The action of suckling

- When the breast touches the baby's lips (or the baby smells the milk), he or she puts their head back slightly, opens their mouth wide, and puts their tongue down and forward, to seek the breast. This is the rooting reflex.
- When the baby is close enough to the breast, and takes a large enough mouthful, the baby can bring the nipple back until it touches the soft palate. This stimulates the sucking reflex.
- The muscles then move the tongue in a wave from the front to the back of the mouth, expressing the milk from the ducts beneath the areola into the baby's mouth. At the same time, the oxytocin reflex makes the milk flow along the ducts.
- The baby swallows when the back of the mouth fills with milk, (the swallowing reflex). The rooting, sucking and swallowing reflexes happen automatically in a healthy, term baby. Taking the breast far enough into his or her mouth is not completely automatic, and many babies need help.
- A baby who is sleepy from his or her mother's labour medications, a premature or ill baby may need more help to attach effectively.

Signs that a baby is suckling effectively

- If a baby is well attached, she or he is probably suckling well and getting breast milk during the feed. Signs that a baby is getting breast milk easily are:
  - The baby takes **slow, deep sucks,** sometimes pausing for a short time.
  - You can see or hear the baby **swallowing**.
  - The baby's **cheeks** are full and not drawn inward during a feed.
  - The baby finishes the feed and **releases the breast by himself or herself** and looks contented.

  These signs tell you that a baby is "drinking in" the milk, and this is effective suckling.

Signs that a baby is NOT suckling effectively

- If a baby
  - makes only rapid sucks;
  - makes smacking or clicking sounds;
  - has cheeks drawn in;
  - fusses or appears unsettled at the breast, and comes on and off the breast;
  - feeds very frequently - more often than every hour or so EVERY day[29];
  - feeds for a very long time - for more than an hour at EVERY feed, unless low birth weight;
  - is not contented at the end of a feed.

  These are signs that suckling is ineffective, and the baby is not getting the milk easily. Even one of these signs indicates that there may be a difficulty.

Artificial teats and suckling difficulties

- Artificial teats and pacifiers may cause difficulties for the breastfeeding baby.
  - After sucking on an artificial teat, a baby may have difficulty suckling at the breast because there is a different mouth action.
  - The baby may come to prefer the artificial teat and find it difficult to breastfeed.
  - Use of pacifiers may reduce the suckling time at the breast thus reducing the breast stimulation, milk production and milk removal.

29 Cluster feeding – when baby feeds very frequently for a few hours and then sleeps for a few hours, is normal.

Ask: Fatima asks you what she can do to have plenty of milk. What are the main ways to ensure a good milk supply?

Wait for a few replies.

- Teach mothers how they can keep milk production plentiful:
  - Help the baby to breastfed soon after birth.
  - Make sure the baby is well attached at the breast and do not give any artificial dummies or teats that would confuse his or her suckling and reduce stimulation of the breast.
  - Breastfeed exclusively.
  - Feed the baby as frequently as he or she wants, usually every 1-3 hours, for as long as he or she wants at a feed.
  - Feed the baby at night, when prolactin release in response to suckling is high.

4. Breast care 5 minutes

Ask: What do mothers need to know about caring for their breasts when breastfeeding?

Wait for a few responses.

- Teach mothers how to care for their breasts.
  - Clean the breasts with water only. Soaps, lotions, oils, and Vaseline all interfere with the natural lubrication of the skin.
  - Washing the breasts once a day as part of general body hygiene is sufficient. It is not necessary to wash the breasts directly before feeds. This removes protective oils and alters the scent that the baby can identify as his or her mother's breasts.
  - Brassieres are not necessary, but can be used if desired. Choose a brassiere that fits well and is not too tight.

Ask: Some mothers may not be breastfeeding. Is there anything they need to know about caring for their breast in the days after birth?

Wait for a few responses.

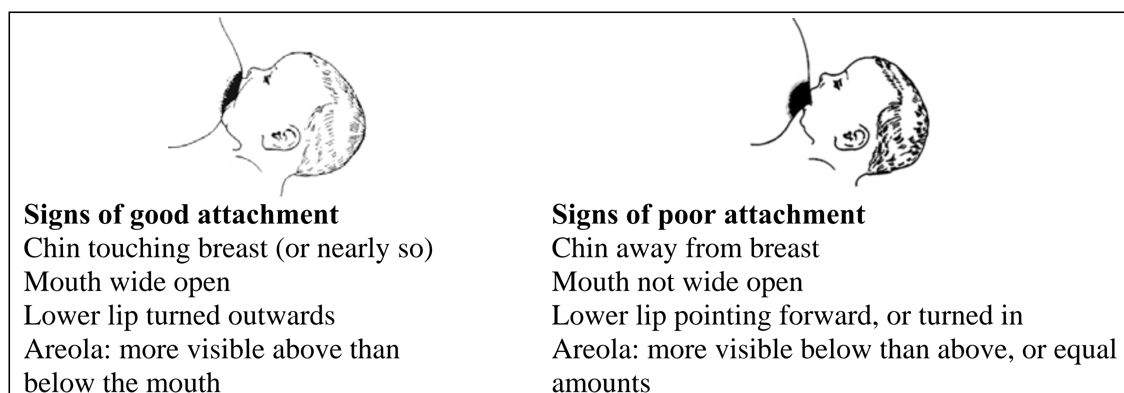
- A mother who is not breastfeeding also needs to care for her breasts. Her milk dries up naturally if her baby does not remove it by suckling[30], but this takes a week or more. She can express just enough milk to keep her breasts comfortable and healthy while her milk dries up. This milk can be given to the baby. If a mother is HIV-positive, she may decide to express and heat-treat her milk to give to her baby.

Ask if there are any questions. Then summarise the session.

30 The milk production stops because the Feedback Inhibitor of Lactation (FIL) stops the breast from producing milk if the breast is overfull. See Session 10 for information on relieving engorgement.

Session 6 Summary

- Size and shape of the breasts are not related to ability to breastfeed.
- Prolactin helps to produce milk and can make the mother feel relaxed.
- Oxytocin ejects the milk so that the baby can remove it through suckling. Relaxing and getting comfortable, and seeing, touching, hearing, thinking about baby can help to stimulate the oxytocin reflex. Pain, doubt, embarrassment, nicotine, or alcohol can temporarily inhibit oxytocin.
- If the breast gets overfull, feedback inhibitor of lactation will reduce milk production. Milk production only continues when milk is removed. The breasts make as much milk as is removed.
- Early feeding and frequent feeds help to initiate milk production.



Signs of good attachment	**Signs of poor attachment**
Chin touching breast (or nearly so)	Chin away from breast
Mouth wide open	Mouth not wide open
Lower lip turned outwards	Lower lip pointing forward, or turned in
Areola: more visible above than below the mouth	Areola: more visible below than above, or equal amounts

Signs of effective suckling

- Slow, deep sucks and swallowing sounds
- Cheeks full and not drawn in
- Baby feeds calmly
- Baby finishes feed by him/herself and seems satisfied
- Mother feels no pain.

Signs that a baby is not suckling effectively

- Rapid, shallow sucks and smacking or clicking sounds
- Cheeks drawn in
- Baby fusses at breast or comes on and off
- Baby feeds very frequently, for a very long time, but does not release breast and seems unsatisfied
- Mother feels pain.

Breast care is important

- Breasts do not need to be washed before feeds
- Mothers who are not breastfeeding need to care for their breasts until their milk dries up.

Session 6 Knowledge Check

Describe to a new mother how to tell if her baby is well attached and suckling effectively.

SESSION 7
HELPING WITH A BREASTFEED - STEP 5

Session Objectives:

At the end of this session, participants will be able to:

	Objective	Time
1.	List the key elements of positioning for successful and comfortable breastfeeding.	5 minutes
2.	Describe how to assess a breastfeed.	5 minutes
3.	Recognise signs of positioning and attachment.	20 minutes
4.	Demonstrate how to help a mother to learn to position and attach her baby for breastfeeding.	25 minutes
5.	Discuss when to assist with breastfeeding.	5 minutes
6.	Practice in a small group helping a 'mother'.	20 minutes
7.	List reasons why a baby may have difficulty attaching to the breast.	10 minutes
	Total session time	**90 minutes**

Materials:

Slide 7/1: Variety of positions for breastfeeding.
Slide 7/2: Breastfeeding Observation Aid.
Slide 7/3: Breastfeed Observation Aid Picture 1.
Slide 7/4: Wide mouth.
Slides 7/5: and 7/6: Breastfeed Observation Aid Pictures 2-3.

Breastfeed Observation Aid – a copy for each participant.

Helping a Mother to Position Her Baby – a copy for each participant.

Breastfeeding Positions - a copy for each participant (optional).

Cushions or pillows or rolled towel or cloth.

Low chair or ordinary chair and footstool or small box to support the 'mother's' feet.

Mat or bed for demonstrating lying down position.

One doll for each group of 4 participants or per pair.

Cloth breast model for each group of 4 participants or per pair.

Further reading for facilitators:

Session 10, Positioning the baby at the breast and Session 16, Breast refusal in *Breastfeeding Counselling: a training course.* WHO/UNICEF.

Preparation for the demonstration:

Ask two participants to help you with the demonstrations. Explain that you want the participants to play a mother who needs help to position her baby. One 'mother' will be sitting and one 'mother' will be lying down. Ask each 'mother' to decide on a name for herself and her 'baby'. She can use her real name if she likes. Always treat your 'doll' baby with gentleness as you are modelling the behaviour that you hope to promote.

Practice giving the demonstrations with the participants as it is given in the text, so that you know how to follow the steps. It may be easier if one facilitator explains the points as another facilitator assists the "mother" in the demonstration.

1. Positioning for breastfeeding 5 minutes

- Positioning means how the mother holds her baby to help the baby to attach well to the breast. If a baby is poorly attached, you can help the mother to position the baby so that she or he attaches better.
- If the baby is well attached and suckling effectively, do not interfere with the way she is breastfeeding. Tell the mother what key points you are observing, to build her confidence and her own ability to assess how breastfeeding is going.

Mother's position

- There are many positions that a mother may use – for example, sitting on the floor or the ground, or sitting on a chair, lying down, standing up, or walking. If the mother is sitting or lying down, she should be:
  - Comfortable with back supported.
  - Feet supported if sitting so that the legs are not hanging loose or uncomfortable.
  - Breast supported, if needed.

Baby's position (demonstrate with a doll)

- The baby also can be in different positions, such as along the mother's arm, under the mother's arm, or along her side. Whatever position is used, the same four key points are used to help the baby be comfortable. The baby's body needs to be:
  - **In line** with ear, shoulder and hip in a straight line**,** so that the neck is neither twisted nor bent forward or far back.
  - **Close** to the mother's body so the baby is brought to the breast rather than the breast taken to the baby.
  - **Supported** at the head, shoulders and if newborn, the whole body supported.
  -
  - **Facing** the breast with the baby's nose to the nipple as she or he comes to the breast.

- *Show slide 7/1 - pictures of variety of positions. Give handout (optional). Briefly point out how the mother is in a different position, however in each position the baby is in line, close, supported, and facing the breast.*

- You cannot help the mother well if you are in an uncomfortable position yourself. If your back is unsupported or your body is bent, you may try to hurry the process. Sit in a position where you are comfortable and relaxed in a convenient position to help.

2. How to assess a breastfeed 5 minutes

- Assessing a breastfeed can:
  - Help you to identify and praise what the mother and baby are doing well.
  - Give you information about current difficulties with breastfeeding.
  - Highlight practices that may result in problems later if not changed.
- Assessing a breastfeed involves watching what the mother and baby are doing and listening to what the mother tells you. It can help to put the mother at ease if you explain that you would like to watch the *baby* feeding, rather than saying you are watching what the *mother* is doing.

- If the baby is wrapped in heavy blankets, ask the mother to unwrap the baby so that you can see the baby's position.

- *Give out and explain the structure of the Breastfeed Observation Aid. Ask participants to look at it as you explain.*
- *Show slide 7/2*

- The Breastfeed Observation Aid can help health workers remember what to look for when observing and can help to recognise difficulties.
- The aid is divided into sections, each of which lists signs that breastfeeding is going well or signs of possible difficulty. A tick can be marked if the sign is observed. If all the ticks are on the left hand side then breastfeeding is probably going well. If there are ticks on the right hand side, there may be a difficulty that needs to be addressed.
- Look at the mother in general:
    - What do you notice about the mother – her age, general appearance, if she looks healthy or ill, happy or sad, comfortable or tense?
    - Do you see signs of bonding between mother and baby – eye contact, smiling, held securely with confidence, or no eye contact and a limp hold?
- Look at the baby in general:
    - What do you notice about the baby – general health, alert or sleepy, calm or crying, and any conditions that could affect feeding such as a blocked nose or cleft palate?
    - How does the baby respond – looking for the breast when hungry, close to mother or pulling away?
- As the mother prepares to feed her baby, what do you notice about her breasts?
    - How do her breasts and nipples look – healthy or red, swollen or sore?
    - Does she say that she has pain or act as if she is afraid to feed the baby?
    - How does she hold her breast for a feed? Are her fingers in the way of the baby taking a large mouthful of the breast?
- Look at the position of the baby for breastfeeding:
    - How is the baby positioned – head and body (spine) in line, body held close, body supported, facing the breast, and approaching nose to nipple? Or is the baby's body twisted, not close, unsupported, and chin to nipple?
- Observe the signs of attachment during the feed:
    - Can you see:
      more areola above the baby's top lip than below,
      mouth open wide,
      lower lip turned out, and
      chin touching breast?
- Observe the baby's suckling:
    - Can you see slow deep sucks? You may hear gentle swallowing or clicks and gulps, and see the baby's cheeks are rounded and not drawn inward during a feed.
    - Notice how the feed finishes - does baby releases the breast by himself or herself and look contented?
- Ask the mother how breastfeeding feels to her:
    - Can she feel any signs of oxytocin reflex, e.g. leaking or tingling?
    - Is there any discomfort or pain?

3. Recognise signs of positioning and attachment 20 minutes

- *Show the slides and ask the participants to go through the Breastfeed Observation Aid section by section looking for the signs. After they have described the signs that they can see, mention any that they missed.*
  You are not able to see all the signs in a picture; for example, you cannot see movement or see how the baby finishes a feed. When you see real mothers and babies, you can look for all the signs.

Slide7/3

Ask: Go through the sections of the Breastfeed Observation Aid. What can you see?
Give participants a few moments to look at the picture. Then go through each section and ask what they see. Suggest any points that they did not notice.

Signs that you can see are:
General:
Mother looks healthy overall.
She is sitting comfortably.
The mother is looking in a loving way at her baby
The baby looks healthy, calm, and relaxed.
Her breasts look healthy.
She is not supporting her breast. Her breast may be pushed out of line by her bra or a top that does not open wide.

Baby's position:
Baby's head and body are in a line.
Baby is not held close.
Baby is not well supported.
Baby is facing mother.

Baby's attachment:
This mother has a large areola. However, it looks like the baby does not have a large mouthful of breast.
The baby's mouth is open wide but not wide enough.
The baby's lower lip is turned out.
The baby's chin does not touch the breast.

We cannot see signs of suckling in a picture.

Ask: When talking to the mother remember to say something positive before suggesting changes. What positive signs could you point out to the mother?
- Her baby looks thriving and happy breastfeeding.
- She is looking lovingly at her baby.
- Baby's body is held in a line and facing mother.

Ask: What suggestions could you offer to the mother?
- You could suggest that the mother re-position and attach her baby again for more effective suckling.
- It may help if she takes off her top and bra so that the breast is less constrained.
- She can then easily support her breast with her one hand, use the other hand, and

arm to hold the baby close, so that the baby can take a large mouthful of breast.

- *Remind participants what a wide mouth looks like. Show slide 7/4.*

Slide 7/5

Ask: Go through the sections of the Breastfeed Observation Aid noting what you see.
Give participants a few moments to look at the picture. Then go through each section and ask what they see. Suggest any points that they did not notice.

Signs that you can see are:

General:
In this picture, you cannot see much of the mother or her position.
She is using two fingers to support her breast in a 'scissors hold'. It is difficult to keep fingers in this position for long and they may slip nearer the nipple, which could prevent the baby taking a big mouthful of the breast.
The baby looks healthy. However, the baby looks tense (note the hand in a tight fist).

Baby's position:
Baby's head and body are <u>not</u> in a line. The baby's head is far back.
Baby is <u>not</u> held close.
Baby is <u>not</u> well supported.
Baby is facing mother.

Baby's attachment:
You cannot see the areola well in this picture.
The baby's mouth is <u>not</u> open wide.
The baby's lower lip is <u>not</u> turned out.
The baby's chin does touch the breast.

We cannot see signs of suckling in a picture.

Ask: What positive signs could you point out to the mother?
- Her baby looks healthy.
- She is looking lovingly at her baby.
- Baby's body is held facing mother.

Ask: What suggestions could you offer to the mother?
- You could suggest that the mother re-position and attach her baby again for more effective suckling.
- If she held the baby closer and higher with his or her body supported (maybe with a rolled towel or pillow), the baby could reach the breast without straining and holding his or her head back.
- Holding her breast cupped in her hand might make it easier to help the baby to take a large mouthful of the breast.

Slide 7/6

Ask: Go through the sections of the Breastfeed Observation Aid noting what you see.

Give participants a few moments to look at the picture. Then go through each section and ask what they see. Suggest any points that they did not notice.

Signs that you can see are:

General:
In this picture, you cannot see much of the mother or her position.
She is using two fingers to support her breast, however they do not look like they are actually supporting her breast. It looks like the breast is hanging down to reach the baby rather than the baby is being brought up to the level of the breast.
This baby looks like there are some health concerns, so he or she may find it difficult to suckle for long at one time.

Baby's position:
Baby's head and body are in a line, the baby's neck is not twisted.
Baby is <u>not</u> held close.
Baby is supported, however he or she needs to be supported at the level of the breast and turned towards the mother.
Baby is <u>not</u> facing mother.

Baby's attachment:
You cannot see the areola well in this picture.
The baby's mouth is <u>not</u> open wide.
The baby's lower lip is turned out.
The baby's chin does <u>not</u> touch the breast.
We cannot see signs of suckling in a picture.

Ask: What positive signs could you point out to the mother?

- Her baby is being breastfed, which shows her care and love for her baby.

Ask: What suggestions could you offer to the mother?

- The mother may need to find a more comfortable position for herself so she is not bending over the baby. You could suggest that the mother re-position and attach her baby again for more effective suckling.
- If she held the baby closer, with the baby's whole body turned towards the breast, and higher with his or her body supported (maybe with a rolled towel or pillow), the baby could reach the breast easily and this might make it easier for the baby to take a large mouthful of the breast.

- These pictures showed a number of signs that could be improved. However, remember that many mothers and babies breastfeed with no difficulties. Notice the signs that breastfeeding is going well, not just the signs of possible difficulty.
- Later you will observe real mothers and babies.

4. Help a mother to learn to position and attach her baby 25 minutes

- *First explain these points:*

- The aim of helping the mother is so that she can position and attach her baby by herself. It does not help the mother's confidence if the health worker can position the baby but she is not able to herself.
- Remember these points when helping a mother:
  - Always observe a mother breastfeeding before you offer help. Offer a mother help only if there is a difficulty.
  - Help as much as possible in a "hands off" manner so that the mother attaches her own baby. If you need to show the mother, first try to show her by demonstrating with your hand on your own body. However, if necessary, you may need to use your hand to gently guide her arm and hand.
  - Talk about the key points the mother can see when breastfeeding – in line, close, supported, and facing, so that the mother is confident and effective on her own.
- All mothers are not the same. Some mothers and babies will need more time to learn to breastfeed and some mothers may only need a few words to build their confidence. The health worker needs to observe and listen to the mother so that practical help and psychological support are provided as appropriate.

Demonstrate how to help a mother who is sitting

- *Demonstrate helping a mother to position her baby. Explain to the 'mother' in a way that builds her confidence and helps her to understand, so the participants can see how good communication techniques are used. When you are explaining a point to the participants, move slightly away from the mother and face the participants to make it clear you are talking to them, not to the mother.*

  Ask the participant or facilitator who is helping you to sit on the chair or bed that you have arranged. She should hold the doll across her body in the common way, but in a poor position as you practised previously: loosely, supporting only the baby's head, with his or her body away from hers, so that she has to lean forward to get her breast into the baby's mouth.
  Tell her that you will ask her how breastfeeding is going, and she should say that it is painful when the baby suckles.

- *Make these points:*

- You will now see a demonstration of how to help a mother. First the mother will be in a sitting position.
- When you are helping a mother:
  - **Greet** the 'mother', introduce yourself, and ask her name and her baby's name.
  - **Ask her how she is** and ask one or two open questions about how breastfeeding is going.
  - **Ask her if you may see how her baby breastfeeds**, and ask her to put her baby to her breast in the usual way.
  - **Sit down yourself**, so that you also are comfortable and relaxed, and in a convenient position to help.
  - **Observe** her breastfeeding for a few minutes.

- *Go through these steps – greet, ask, observe – with the 'demonstration mother'.*
- *Then, explain to participants:*

- When you are observing the breastfeed, go through the Breastfeed Observation Aid. Observe:
    - the mother and baby in general;
    - the mother's breasts;
    - baby's position and attachment during the feed;
    - the baby's suckling.
- Ask the mother how breastfeeding feels to her.
- In this demonstration, we can see that the mother is bent over the baby, the baby is lying on his or her back away from the mother's body, and only the baby's head is supported. The mother says that it is painful when the baby suckles.
- After you have observed the breastfeed:
    - **Say something encouraging**. [for example: "Your baby really likes your milk, doesn't he/she?"].
    - **Explain what might help and ask if she would like you to show her.** If she agrees, you can start to help her. [for example: "Breastfeeding might be less painful if (baby's name) took a larger mouthful of breast when he/she suckles. Would you like me to show you how?"].

- *Go through these steps – say something encouraging, explain and offer help – with the 'demonstration mother'.*
- *Make these points that follow to the 'mother' and help her to do each suggestion before you offer the next suggestion or instruction. The 'mother' sits in a comfortable, relaxed position (as you decided when you practiced).*

- Mother's position is important. Sitting with back and feet supported is more comfortable. Bring the baby level with the breast, using a rolled up towel or clothes, cushion or pillow, if needed.
- There are **four key points** about the position of the baby:
    1. The baby's head and body should be in a line.
    2. Mother should hold baby's body close to hers.
    3. If the baby is newborn, support the whole body, and not just the head and shoulders.
    4. Baby's face should face the breast, with the baby's nose opposite the nipple.

- *Help the 'mother' to hold her baby straight, close, facing and supported.*
- *Then show her how to support her breast with her hand to offer it to her baby*[31].

- Many mothers support their breast by:
    - Resting the fingers on the chest wall under the breast, so that the first finger forms a support at the base of the breast.
    - Using the thumb to press the top of the breast slightly. This can improve the shape of the breast so that it is easier for the baby to attach well, however, this pressure should be light, and not always in the same spot.
    - Making sure that the fingers are not near the nipple so that they do not block the baby from getting a big mouthful of breast.

31 You may prefer to use a cloth model breast if the "mother" does not want to hold her breast in class.

- Then help the baby to come to the breast and attach by:
  - Touching the baby's lips with the nipple, so that the baby opens his or her mouth.
  - Waiting until the baby's mouth is opening wide, and then moving the baby onto the breast. Baby's mouth needs to be wide open to take a large mouthful of breast.
  - Aiming the baby's lower lip well below the nipple, so that his or her chin and lower lip will touch the breast first before the upper lip.
  - Bringing the baby to the breast. The mother should not move herself or her breast to her baby.

Explain to participants:

- Try not to touch the mother or baby if possible. But if you need to touch them to show the mother what to do:
  - Put your hand over her hand or arm, so that you hold the baby through her.
  - Hold the baby at the back of the baby's shoulders - *not the back of the baby's head.*
  - Be careful not to push the baby's head forward.
- A young infant needs their whole body supported, not just the head and neck. An older child may like to have his or her back supported even though he or she sits up to breastfeed. The mother's hand or arm should support the baby's head but she should not grip the head tightly. The baby needs to be able to bend his or her head back slightly as he or she latches on.
- The breast does not need to be held away from the baby's nose. The baby's nostrils are flared to help him or her breathe. If you are worried that the baby's nose is too close, pull the baby's hips closer to the mother's body. This tips the baby's head back slightly and the nose moves back from the breast.
- Notice how the mother responds to the changes that you are suggesting.

- *Ask the demonstration 'mother' how breastfeeding feels now. The participant playing the 'mother' should say, "Oh, that feels better!".*
- *Make these points to the participants:*

- If you improve a baby's poor attachment, a mother sometimes spontaneously says that it feels better.
- If suckling is comfortable for the mother, and she looks happy, her baby is probably well attached. If suckling is uncomfortable or painful, her baby is probably not well attached.
- Look for all the signs of good attachment (which of course you cannot see with a doll). If the attachment is not good, try again.
- It often takes several tries to get a baby well attached. You may need to work with the mother again at a later time, or the next day, until breastfeeding is going well.
- If she is having difficulty in one position, try to help her to find a different position that is easier or more comfortable for her.

- *Conclude the demonstration. Say to the demonstration mother something such as:*

  "That new position seems to be more comfortable for you and your baby. Will you try feeding that way for the next feed and let me know how it goes?"

- *Thank the demonstration mother for her assistance.*

Demonstrate how to help a mother who is lying down

Ask the participant who is helping you to demonstrate breastfeeding lying down, in the way that you practiced. She should lie down propped on one elbow, with the baby (doll) far from her body, loosely held on the bed.

- *Explain to the participants:*

- Now you will see how to help a mother who is breastfeeding lying down. Similar to the last demonstration:
  - greet the mother and introduce yourself;
  - ask her how breastfeeding is going;
  - ask if you can see her baby breastfeed;
  - observe a breastfeed.

Follow these steps when you demonstrate the 'mother':

Greet the mother, introduce yourself, ask her how breastfeeding is going. ['Mother' should say that it is painful]. Ask if you can see her baby breastfeeding.
Observe a breastfeed, say something encouraging, (for example, "Lying down to feed is a good way to get rest").

- *Explain to participants:*

- With this demonstration mother, we observe that the mother is lying with her head on her elbow. This position might be uncomfortable after a few minutes. The baby is lying away from the mother and is not supported well.
- After observing a feed,
  - say something encouraging;
  - explain what might help and offer to show her.

- *Speak to the demonstration 'mother':*

Explain what might help and offer to help (for example, "It might be more comfortable if you were in a slightly different position and your baby were nearer your body. Would you like me to show you how?").

- *Make these points to the 'mother' and help her to follow each suggestion before you offer the next suggestion or instruction.*

- To be relaxed, the mother needs to lie down on her side in a position in which she could sleep. Being propped on one elbow is not relaxing for most mothers.
- A rolled cloth or pillows, under her head and between her knees may help. Her back also needs support. This can be the wall next to the bed, a rolled cloth or her husband!

- *Show the mother how to hold her baby. Show her what to do if necessary.*

- Point out to the mother the same **four key points** about the baby's position: in line, close, facing, supported. She can support her baby's back with her lower arm.
- She can support her breast if necessary with her upper hand. If she does not support her breast, she can hold her baby with her upper arm.
- Show her how to help the baby to come to the breast and attach.
- A common reason for difficulty attaching when lying down, is that the baby is too 'high', (too near her shoulder) and the baby's head has to bend forwards to reach the breast.
- Notice how the mother responds to the changes that you are suggesting.

- *Ask the demonstration 'mother' how breastfeeding feels now. The participant playing the 'mother' should say, "Oh, that feels better!".*
- *Conclude the demonstration. Say to the demonstration mother such as:*

  "That new position seems to be more comfortable for you and your baby. Will you try feeding that way for the next feed and let me know how it goes?"
- *Thank the demonstration mother for her assistance.*

You can also demonstrate helping a mother in other positions such as holding baby in an underarm position, if you have time.

5. When to assist with breastfeeding 5 minutes

- The baby is finding the breast in the first hour after birth and may suckle at this time. This should be a relaxed time without emphasis on positioning the mother and baby or assessing a feed. Often the mother and baby will sleep for a few hours after this introduction time.
- When the baby wakes again a few hours later is a good time to help the mother to find a comfortable position and help her to position and attach her baby, if she needs help. Remember to observe first.
- Help the mother to position her baby rather than the health worker positioning the baby. The mother needs to be able to position the baby herself.
- If the baby is a full-term healthy baby there is no need to wake the baby in the first few hours. If the baby was exposed to sedation during labour, is preterm, or small for gestational age, or at risk of hypoglycaemia, the baby may need to be woken after 3-4 hours and encouraged to feed.

6. Practice in a small group helping a 'mother' 20 minutes

Divide the participants into small groups of four participants with one facilitator. Ask them to take turns working in pairs to help a mother position her baby.

Give each group or pair a doll and breast to work with. Give them a copy of the handout *Helping A Mother to Position Her Baby.*

The "health workers" should go through each step in the summary carefully so that they can remember them when they help a real mother in clinical practice later. The other participants in the small group observe and afterwards offer suggestions.

Make sure that each participant has a turn to play the part of the health worker helping the mother. Encourage the participants to use different positions.

7. Baby who has difficulty attaching to the breast 10 minutes

- A baby may seem reluctant to breastfeed for many reasons. The mother may feel that her baby is rejecting her and may be distressed. In the first few days, it may simply be that the mother and baby need time to learn how to breastfeed. Observe the mother and baby at a feed, including watching how the baby tries to attach.

Causes of reluctance to feed

Ask: Why might a baby be reluctant to breastfeed?
Wait for a few responses.

- **The baby may not be hungry at this time.** If a baby had a good feed recently, of course, he or she may simply not be hungry and ready for another feed – if this was a breastfeed, the mother will know. But you may need to check if someone else gave a bottle feed for some reason.
- **The baby may be cold, ill**, **or small and weak**. The baby may refuse to feed at all, or may attach without suckling, or may suckle very weakly or for only a short time.
- The mother may be **holding the baby in a poor position**, and the baby cannot attach properly. In this case, the baby may seem hungry and want to feed, but be unable to attach effectively.
- The mother may **move or shake the breast** or the baby, which makes it difficult for the baby to stay attached.
- The mother's **breast may be engorged** and hard, so it is difficult for the baby to attach to the breast.
- The milk may be **flowing too fast**, and the baby start to feed well but then come away from the breast crying or choking.
- The baby may have a **sore mouth or a blocked nose**, and suckle for a short time and then pull away, perhaps crying with frustration.
- The baby may **be in pain** when held in a certain way, for example after a forceps delivery, if there is pressure to a bruise on the baby's head, or if it hurts him to hold his head in a certain way.
- The baby may have **learned to suckle on an artificial teat**, and find it difficult to suckle on the breast.
- The mother may have used a different type of soap or have a new perfume on and the **baby does not like the smell**.
- If the **milk supply is very low**, the baby may not get any milk at first, and may stop feeding because he or she is frustrated.
- Sometimes a baby feeds well from one breast but **refuses the other breast.** The baby may find being held in one position painful, or the milk flow may be different, or one breast may be engorged.

Management of reluctance to feed

- Remove or treat the cause if possible:
  - Help the mother to position and attach the baby well.
  - Help the mother to express some milk before feeding if the milk is coming too fast or if the breast is too engorged.
  - Treat a sore mouth or thrush if you are able or refer the baby for medical help.
  - Provide pain relief if the baby is in pain.
  - Help the mother to hold the baby without causing pain, if the baby is bruised.
  - Avoid using artificial teats or pacifiers. If needed, give feeds by cup.
  - Stop using anything that is causing an unpleasant taste or smell to the breast.

- Encourage skin-to-skin contact between mother and baby in a calm environment when the baby is not hungry. This helps both the mother and baby to see the breast as a pleasant place to be. Then the baby can explore the breast and attach when he or she is ready. This may be an hour or more and may not happen on the first occasion there is skin-to-skin contact.
- Do not try to force the baby to the breast when the baby is crying. He or she needs to associate the breast with comfort. It may be necessary to express the milk and feed it by cup until the baby learns to breastfeed happily.

Prevention of reluctance to feed

- Many instances of breast refusal could be prevented by:
  - Early and frequent skin-to-skin contact that helps the baby to learn that the breast is a safe place from the first few hours.
  - Helping the mother to learn the skill of positioning and attachment in a calm unhurried environment.
  - Being patient while the baby learns to breastfeed.
  - Caring for the baby in a gentle confident manner.

- *Ask if there are any questions. Then summarise the session.*

Session 7 Summary

Positioning for breastfeeding

- Position for the mother:
  - Comfortable with back, feet, and breast supported, as needed.
- Position for the baby:
  - Baby's body in line.
  - Baby's body close to mother's body bring the baby to breast.
  - Baby supported – head, shoulders, and if newborn, whole body supported.
  - Facing the breast with baby's nose opposite the nipple.
- Position for the helper:
  - Comfortable and relaxed, not bending over.

Assessing a breastfeed

- Observe:
  - the mother and baby in general;
  - the mother's breasts;
  - the position of the baby;
  - attachment during the feed;
  - the baby's suckling.
- Ask the mother how breastfeeding feels to her.

Help a mother to learn to position and attach her baby

- Remember these points when helping a mother:
  - Always observe a mother breastfeeding before you help her.
  - Give a mother help only if there is a difficulty.
  - Let the mother do as much as possible herself.
  - Make sure that she understands so that she can do it herself.

Baby who has difficulty attaching to the breast

- Observe the baby going to the breast and if suckling. Ask open questions and determine a possible cause.
- Management:
  - Remove or treat the cause if possible.
  - Encourage skin-to-skin contact between mother and baby in a calm environment.
  - Do not force the baby to the breast.
  - Express and feed breast milk by cup if necessary.
- Prevention:
  - Ensure early skin-to-skin contact to help the baby learn that the breast is a safe place.
  - Help the mother to learn the skill of positioning and attachment in a calm unhurried environment.
  - Be patient while the baby learns to breastfeed.
  - Care for the baby in a gentle confident manner.

Session 7 Knowledge Check

What are the four key points to look for with regard to the baby's position?

You are watching Donella breastfeed her four-day old baby. What will you look for to indicate that the baby is suckling well?

Breastfeeding Positions

Lying down on side position
Helps a mother to rest. Comfortable after a caesarean section.
Take care that the baby's nose is on a level with mother's nipple, and that baby does not need to bend his or her neck to reach the breast.

Cradle position
The baby's lower arm is tucked around the mother's side. Not between the baby's chest and the mother.
Take care that the baby's head is not too far into the crook of the mother's arm that the breast is pulled to one side making it difficult to stay attached.

Cross arm position
Useful for small or ill baby. Mother has good control of baby's head and body, so may be useful when learning to breastfeed.
Take care that the baby's head is not held too tightly preventing movement.

Underarm position
Useful for twins or to help to drain all areas of the breast. Gives the mother a good view of the attachment.
Take care that baby is not bending his or her neck forcing the chin down to the chest.

Adapted from Breastfeeding Counselling: a training course,
WHO/CHD/93.4, UNICEF/NUT/93.2

BREASTFEED OBSERVATION AID

Mother's name ________________________________ Date ____________________

Baby's name __________________________________ Baby's age ______________

Signs that breastfeeding is going well:	Signs of possible difficulty:
GENERAL	
Mother:	*Mother:*
☐ Mother looks healthy	☐ Mother looks ill or depressed
☐ Mother relaxed and comfortable	☐ Mother looks tense and uncomfortable
☐ Signs of bonding between mother and baby	☐ No mother/baby eye contact
Baby:	*Baby:*
☐ Baby looks healthy	☐ Baby looks sleepy or ill
☐ Baby calm and relaxed	☐ Baby is restless or crying
☐ Baby reaches or roots for breast if hungry	☐ Baby does not reach or root
BREASTS	
☐ Breasts look healthy	☐ Breasts look red, swollen, or sore
☐ No pain or discomfort	☐ Breast or nipple painful
☐ Breast well supported with fingers away from nipple	☐ Breasts held with fingers on areola
☐ Nipple protractile	☐ Nipple flat, not protractile
BABY'S POSITION	
☐ Baby's head and body in line	☐ Baby's neck and head twisted to feed
☐ Baby held close to mother's body	☐ Baby not held close
☐ Baby's whole body supported	☐ Baby supported by head and neck only
☐ Baby approaches breast, nose to nipple	☐ Baby approaches breast, lower lip/chin to nipple
BABY'S ATTACHMENT	
☐ More areola seen above baby's top lip	☐ More areola seen below bottom lip
☐ Baby's mouth open wide	☐ Baby's mouth not open wide
☐ Lower lip turned outwards	☐ Lips pointing forward or turned in
☐ Baby's chin touches breast	☐ Baby's chin not touching breast
SUCKLING	
☐ Slow, deep sucks with pauses	☐ Rapid shallow sucks
☐ Cheeks round when suckling	☐ Cheeks pulled in when suckling
☐ Baby releases breast when finished	☐ Mother takes baby off the breast
☐ Mother notices signs of oxytocin reflex	☐ No signs of oxytocin reflex noticed

Notes:

HELPING A MOTHER TO POSITION HER BABY

- Greet the mother and ask how breastfeeding is going.
- Sit down yourself in a comfortable, convenient position.
- Observe a breastfeed.
- Notice something positive and say something to encourage the mother.
- If you notice a difficulty, explain what might help, and ask the mother if she would like you to show her.
- Make sure that she is in a comfortable and relaxed position.
- Explain how to hold her baby, and show her if necessary. The **four key points** are:
    - with baby's head and body straight;
    - with baby's body close to her body;
    - supporting baby's whole body (if newborn);
    - with baby's face facing her breast, and baby's nose opposite her nipple.
- Show her how to support her breast:
    - with her fingers flat against her chest wall below her breast;
    - with her first finger supporting the breast;
    - with her thumb above;
    - her fingers should not be too near the nipple.
- Explain or show her how to help the baby to attach:
    - touch her baby's lips with her nipple;
    - wait until her baby's mouth is opening wide;
    - move her baby quickly onto her breast, aiming baby's lower lip below the nipple.
- Notice how she responds and ask her how her baby's suckling feels.
- Look for signs of good attachment – more areola seen above baby's top lip, wide mouth, lip turned outwards, chin touching breast.

SESSION 8
PRACTICES THAT ASSIST BREASTFEEDING – STEPS 6, 7, 8 AND 9

Session Objectives:

On completion of this session, participants will be able to:

	Objective	Time
1.	Describe their role in practices that assist rooming-in.	10 minutes
2.	Describe their role in practices that assist baby led (demand) feeding.	15 minutes
3.	Suggest ways to wake a sleepy baby and to settle a crying baby.	10 minutes
4.	List the risks of unnecessary supplements.	5 minutes
5.	Describe why it is important to avoid the use of bottles and teats.	5 minutes
6.	Discuss removing barriers to early breastfeeding.	15 minutes
	Total session time	**60 minutes**

Materials:

Slide 8/1 -Picture 2: mothers talking to nurse. If possible, display the picture as a poster through the session.

Further Reading for facilitators:

Breastfeeding and the use of water and teas. Division of Child Health and Development Update, No. 9 (reissued, Nov. 1997). World Health Organization.

Linkages/AED *Exclusive Breastfeeding: The Only Water Source Young Infants Need. Frequently Asked Questions* (FAQ) SHEET 5. Reprinted June 2004.

Academy of Breastfeeding Medicine. *Clinical Protocol Number 3 −Hospital Guidelines for the Use of Supplementary Feedings in the Healthy Term Breastfed Neonate* (2002).

1. Rooming-in 10 minutes

- Step 7 of the Ten Steps to Successful Breastfeeding states:
  Practise rooming-in – allow mothers and infants to remain together 24 hours a day. Routine separation should be avoided. Separation should only occur for an individual clinical need.

- *Show slide 8/1 -Picture 2: Mothers talking to nurse*

It is now a half day after the birth of Miriam's baby. Miriam has rested and now she has some questions for the nurse. When Miriam's previous baby was born, the baby stayed in a nursery most of the time. Miriam asks why her new baby is expected to stay with her on the ward.

Ask: What can you say to explain the importance of rooming-in to Miriam?
Wait for a few responses

Importance of rooming-in

- Rooming-in has many benefits:
  - Babies sleep better and cry less.
  - Before birth the mothers and infant have developed a sleep/awake rhythm that would be disrupted if separated.
  - Breastfeeding is well established and continues longer and the baby gains weight quickly.
  - Feeding in response to a baby's cues is easier when the baby is near, thus helping to develop a good milk supply.
  - Mothers become confident in caring for their baby.
  - Mothers can see that their baby is well and they are not worried that a baby crying in a nursery is their baby.
  - Baby is exposed to fewer infections when next to his or her mother rather than in a nursery.
  - It promotes bonding between mother and baby even if mother is not breastfeeding.

Ask: What barriers are sometimes seen to rooming-in as the routine practice?
Wait for a few responses. Also ask what might be solutions to these barriers.

Barriers to rooming-in and possible solutions

- Barriers to rooming-in may be raised that include:
  - <u>Concerns that mothers are tired.</u>
    Ward routines need to facilitate the mother's rest with quiet times during which there is no cleaning, and there are no visitors or no medical rounds or procedures. In addition, review birth practices to determine if long labours, inappropriate use of anaesthesia and episiotomies, lack of nourishment and stressful conditions are resulting in mothers being extra tired and uncomfortable.
  - <u>Taking the baby to the nursery for procedures.</u>
    Baby care should generally take place at the mother's bedside or with the mother present. This can provide reassurance and teaching opportunities for the mother as well as providing comfort for the baby if distressed.

- Belief that newborn babies need to be observed.
  A baby can be observed next to the mother as easily as in a nursery. A mother is very good at observing her own baby and often notices change before a busy nurse notices them. Close observation is not possible in a nursery with many babies.
- There is no space on the ward for the baby cots.
  Babies can share their mothers' bed. Bed sharing or co-sleeping can help a mother and baby to get more rest and to breastfeed frequently. The bed may need a side rail, chair against the bed or the bed against the wall, to reduce the risk of the baby falling out of bed.
- Staff do not know how to assist mothers in learning to care for their babies.
  Soothing and caring for a baby is an important part of mothering. Helping a mother to learn to care for her baby at night is more useful to the mother than taking her baby away to a nursery. Taking the baby away may reduce the mother's confidence that she can cope with being a mother.
- Mothers ask for their babies to be taken to the nursery.
  Explain to the mother why the hospital encourages rooming-in as a time to get to know her baby and as beneficial to her baby and herself. Discuss the reason why the mother wants the baby taken to the nursery and see if the difficulty could be solved without taking the baby away. Address the benefits of rooming-in during antenatal contacts.

- If separation of a mother and her infant is required because of a medical situation, document the reason for this separation in the mother/baby record. The need for separation should be reviewed frequently so that it is for as short a time as possible.
- During separation, encourage the mother to see and hold her baby if possible, and to express her milk[32].

Ask: How is rooming-in presented to mothers? Is it routine to have all babies with their mothers unless there is a medical reason for separation, or does a mother have to ask for her baby to be beside her – implying that the normal place for the baby is in the nursery or in a cot?

Wait for a few replies and then continue.

2. Baby-led feeding 15 minutes

- Step 8 of the Ten Steps to Successful Breastfeeding states:
  Encourage breastfeeding on demand.
- Demand feeding is also called baby-led feeding. This means the frequency and length of feeds is determined by the baby's needs and signs.

Miriam thought babies needed to be fed to a set schedule, but in this hospital she is told to feed in response to her baby's own needs.

Ask: How can you explain why baby-led feeding is recommended?

Wait for a few responses.

32 Expression of milk is discussed later in Session 11.

Importance of baby-led feeding

- Baby-led feeding results in:
  - Baby gets more immune rich colostrum and therefore more protection from illness.
  - Faster development of milk supply.
  - Faster weight gain.
  - Less neonatal jaundice.
  - Less breast engorgement.
  - Mother learns to respond to her baby.
  - Easy establishment of breastfeeding.
  - Less crying so less temptation to supplement.
  - Longer breastfeeding duration.
- Infants who are allowed to control the frequency and duration of a feed learn to recognise their own signs of hunger and satiety. This ability to self-regulate may be related to the lower rates of obesity in children who were breastfed.

Miriam says she understands the idea of baby-led feeding, but how will she know when to feed her baby and how long to feed her baby for each time if she doesn't go by the clock?

Ask: What are the signs to watch for in a newborn baby to indicate when to feed the baby?
Wait for a few responses.

Signs of hunger

- The time to feed a baby is when the baby shows early hunger signs. The baby:
  - Increases eye movements under closed eye lids or opens eyes.
  - Opens his or her mouth, stretches out the tongue and turns the head to look for the breast.
  - Makes soft whimper sounds.
  - Sucks or chews on hands, fingers, blanket or sheet, or other object that comes in mouth contact.
- If the baby is crying loudly, arches his or her back, and has difficult attaching to the breast, these are late hunger signs. The baby then needs to be held and calmed before the baby is able to feed.
- Some babies are very calm and wait to be fed or go back to sleep if not noticed. This can result in underfeeding. Other babies wake quickly and become very annoyed if not fed immediately. Help the mother to recognise her baby's temperament and learn how to best meet her baby's needs.

Ask: What indicates that the baby has finished feeding?
Wait for a few responses.

Signs of satiety

- At the start of a feed, most babies have a tense body. As they get full, their body relaxes.
- Most babies let go of the breast when they have had enough, though some continue to take small gentle sucks until they are asleep.
- Explain to the mother that she should let her baby finish one breast before she offers the other breast in order to feed the rich hind milk and to increase milk supply.

Feeding patterns

- Some babies feed for a short time at frequent intervals. Other babies feed for a long time and then wait a few hours until the next feed. Babies may change their feeding pattern from day to day or during one day.
- Teach mothers the typical feeding pattern for a full term healthy newborn:
  - Newborns want to breastfeed about every one to three hours in the first two to seven days, but it may be more frequent.
  - Night feeds are important to ensure adequate stimulation for milk production and milk transfer, and for fertility suppression.
  - Once lactation is established (the milk supply ‘comes in’), eight to twelve breastfeeds in 24 hours is common. There are usually some longer intervals between some feeds.
  - During periods of rapid growth, a baby may be hungrier than usual and feed more often for a few days to increase milk production.
  - Let babies feed whenever they want. This satisfies the baby's needs if hungry or thirsty and the mother's needs if her breasts are full.
- Very long feeds (more than 40 minutes for most feeds), very short feeds (less than 10 minutes for most feeds) or very frequent feeds (more than 12 feeds in 24 hours on most days) may indicate that the baby is not well attached at the breast.
- Sore nipples are the result of poor attachment, not the result of feeding too often or too long. If a baby is well attached, it does not matter if she or he feeds often or for a long time at some feeds[33].

Special situations

- The mother may need to lead the feeding for a day or two and wake the baby for feeds if a baby is very sleepy due to prematurity, jaundice, or the effects of labour medication, or if the mother’s breasts are overfull and uncomfortable.
- Babies who are replacement fed also need to be fed in response to their needs. Sometimes there is a tendency to push the baby to finish a feed because the milk is prepared. This can lead to overfeeding. A mother can watch her baby for signs of fullness – turning away, reluctance to feed. A replacement feed should be used within one hour of the baby starting the feed and not kept for later as bacteria will grow in the milk. If baby does not finish the milk in one feed, this can be mixed into older sibling’s meal.

3. Ways to wake a sleepy baby and to settle a crying baby10 minutes

Wake a sleepy baby

- If the baby seems too sleepy to feed, suggest that the mother:
  - Remove blankets and heavy clothing and let her baby's arms and legs move.
  - Breastfeed with her baby in a more upright position.
  - Gently massage her baby's body and talk to her baby.
  - Wait half an hour and try again.
  - Avoid hurting the baby by flicking or tapping on the cheek or feet.

33 Sore nipples are discussed in Session 12.

Settle a crying baby

- A mother and her family may think that a crying baby means that the mother does not have enough milk or that her milk is not good milk. A crying baby can be difficult for a mother and reduce her confidence in herself, and her family's confidence in her.
- A baby who is 'crying too much' may really be crying more than other babies, or the family may be less tolerant of crying or less skilled at comforting the baby. It is not possible to say how much crying is 'normal'.
- If a baby is crying frequently, look for a cause. Listen to the mother and learn what her situation may be, observe a breastfeed, examine the baby and refer for further medical attention if needed. Babies may cry from hunger, pain, loneliness, tiredness or other reasons.
- Build the mother's confidence in her ability to care for her baby and give her support:
  - Listen and accept what the mother is feeling.
  - Reinforce what the mother and baby are doing right/what is normal.
  - Give relevant information.
  - Make one or two suggestions.
  - Give practical help.
- Suggestions and practical help can include:
  - Make the baby comfortable – dry, clean nappy, warm, dry bedding, not too warm.
  - Put the baby to the breast. The baby may be hungry or thirsty or sometimes just wants to suck because this makes the baby feel secure.
  - Put baby on the mother's chest, skin to skin. The warmth, smell, and heartbeat will help to soothe the baby.
  - Talk, sing and rock the baby while holding close.
  - Gently stroke or massage the baby's arms, legs and back.
  - Give one breast at each feed; give the other breast at the next feed. If the breast not used at that feed becomes overfull, express a small amount of milk.
  - Reduce the mother's coffee and other caffeine drinks.
  - Do not smoke around the baby and smoke after a feed, not before or during, if a smoker.
  - Have someone else carry and care for the baby for a while.
  - Involve other family members in the discussion so the mother does not feel pressure to give unnecessary supplemental feedings.
  - Hold the baby in a manner that wraps around and supports head, body, legs and arms so the baby feels secure.

4. Avoid unnecessary supplements 5 minutes

- Step 6 of the Ten Steps to Successful Breastfeeding states:
  Give newborn infants no food or drink other than breast milk unless medically indicated.
- Healthy full term babies rarely have a medical need for supplements or prelacteal feeds[34]. They do not require water to prevent dehydration. The needs of babies who are premature or ill and medical indications for supplements are discussed in a later session.

34 Prelacteal feeds are any fluid or feed given before starting to breastfeed.

Miriam gave her previous baby regular supplements from birth. Now she is hearing that supplements are not good for babies and wants to know why.

Ask: What can you say to Miriam as to why supplements are not recommended?
Wait for a few responses.

Dangers of supplements

- Exclusive breastfeeding is recommended for the first six months. Supplements can:
  - Overfill a baby's stomach so the baby does not suckle at the breast.
  - Reduce milk supply because the baby is not suckling, resulting in over fullness of the breasts.
  - Cause the baby to gain insufficient weight if feeds of water, teas, or glucose water, are given instead of milk feeds.
  - Reduce the protective effect of breastfeeding thus increasing the risk of diarrhoea, and other illnesses.
  - Expose the baby to possible allergens and intolerances that could lead to eczema and asthma.
  - Reduce the mother's confidence if a supplement is used as a means of settling a crying baby.
  - Be an unnecessary and potentially damaging expense.
- In addition to the points listed above that could be explained to a mother, there are more reasons why supplement use is not recommended:
  - A mother who is looking for a supplement may be indicating that she is having difficulties feeding and caring for her baby. It is better to help the mother to overcome the difficulties than to give a supplement and ignore the difficulties.
  - A health worker who offers a supplement as the solution to difficulties may be indicating a lack of knowledge and skill in supporting breastfeeding. Frequent use of supplements may indicate an overall stressful atmosphere where a quick temporary solution is chosen in preference to solving the problem.
  - *Prelacteal feeding* or offering formula to an infant of an HIV-positive woman who will breastfeed may alter the GI mucosa and allow the transmission of the virus. When we cannot test the HIV status of mother, it is important to emphasise that exclusive breastfeeding reduces the risk of HIV transmission during breastfeeding.
- If a mother has been counselled, tested and found to be HIV-positive and has decided not to breastfeed, this is an acceptable medical reason for giving her infant formula (replacement food).
- Even if many mothers are giving replacement feeds, this does not prevent a hospital from being designated as baby-friendly if those mothers have all been counselled, tested, and made genuine informed choices.

5. Avoid bottles and teats 5 minutes

- Step 9 of the Ten Steps to Successful Breastfeeding states:
  Give no artificial teats or pacifiers (also called dummies or soothers) to breastfeeding infants.

Ask: Why is it recommended to avoid using bottles and teats?
Wait for a few replies and then continue.

- Sometimes babies develop a preference for an artificial teat or pacifier and refuse to suckle on the mother's breast.
- If a hungry baby is given a pacifier instead of a feed, the baby takes less milk and grows less well.
- Teats, bottles, and pacifiers can carry infection and are not needed, even for the non-breastfeeding infant. Ear infections and dental problems are more common with artificial teat or pacifier use and may be related to abnormal oral muscle function.
- In the rare situation that a supplement is needed, feeding with an open cup is recommended, as a cup is easier to clean and also ensures that the baby is held and looked at while feeding. It takes no longer than bottle-feeding[35].

6. Discussion – removing barriers to early breastfeeding 15 minutes

- *Read the Case Study aloud in class. Ask participants to note practices that may help and those which may interfere with establishing breastfeeding. What might be the effect of this situation on breastfeeding?*

Case study

Carolina[36] has a long labour for her first baby and no-one from her family was allowed to be with her. When her baby is born, he is wrapped in a blanket and shown to her briefly. She sees that he has a birthmark between her baby's eyes. Then he is taken away to the nursery because it is night-time. The staff gives him a bottle of infant formula for the next two feeds.

Carolina's baby is brought to her early the next morning - 10 hours after birth. The nurse tells her to breastfeed. She is told to limit breastfeeding on each side to three minutes. The nurse says, "You don't want the pain of sore nipples, dear, do you?".

Carolina starts to take her baby while lying down, but the nurse tells her she must always sit up to feed. Carolina sits up with difficulty; the mattress sags and her back must be bent. She is sore from the birth and it hurts to sit. The nurse leaves Carolina to feed her baby.

She holds her baby to her breast, and pushes the breast towards her baby's mouth with her hand. But the baby is sleepy and suckles very weakly. Carolina thinks that she has no milk yet because her breasts are soft.

Carolina wonders if the birthmark on the baby's face was caused by something that she did wrong during the pregnancy. She is worried what her husband and his mother will say about it. The nurses look very busy and Carolina does not want to ask questions of them. Her family will not be allowed to visit until the afternoon.

35 How to cup feeding is discussed in Session 11.
36 Or other culturally appropriate name.

The nurse returns and takes the baby back to the nursery. She comes back in a few minutes and tells Carolina that she has weighed the baby and finds that he took only 25 g of milk, and that this was not an adequate feed. The nurse says, "How can you go home tomorrow if you can't feed your baby properly?".

Possible answers:

No support during labour may result in a longer labour and Carolina may be more tired and stressed.

No skin-to-skin contact means Carolina does not get time to be with her baby and all that she notices is his birthmark, which worries her.

Carolina and her baby are separated for many hours. The baby is given bottles of formula. The baby is not getting the valuable colostrum and Carolina's breasts are not receiving stimulation to make milk.

Carolina is not given any help to breastfeed. The baby is full from formula and sleepy, so does not want to suckle. The nurse worries her by talking about sore nipples.

It is sore for Carolina to sit to feed the baby. This would inhibit the oxytocin release. Carolina could be helped to feed lying down.

Carolina feels that she is alone in the hospital with no one to help her or talk to her, which caused her stress.

The nurse frightens Carolina by saying she is not able to feed her baby and will not be able to go home.

The result is that Carolina is worried, sore, frightened and lonely as well as not knowing how to feed her baby. She is likely to go home thinking that she is not able to make milk and to feed her baby a breast-milk substitute.

Ask if there are any questions. Then summarise the session.

Session 8 Summary

Rooming in and baby-led feeding help breastfeeding and bonding

- Mothers can notice and respond to their babies with ease when they understand their baby's feeding cues.
- Babies cry less so there is less temptation to give artificial feeds.
- Mothers are more confident about caring for their babies and breastfeeding.
- Breastfeeding is established early, a baby gains weight well, and breastfeeding is more likely to continue for longer.

Help mothers to learn skills of mothering

- Help to learn how to wake a sleepy baby.
- Help to learn how to settle a crying baby.
- Help to learn how to look for hunger cues.

Prelacteal and supplemental feeds are dangerous

- They increase the risk of infection, intolerance and allergy.
- They interfere with suckling and make breastfeeding more difficult to establish.

Artificial teats can cause problems

- Use of teats, pacifier, or nipple shield may effect milk production.

Session 8 Knowledge Check

Give three reasons why rooming-in is recommended as routine practice.

Explain as you would to a mother, what is meant by 'demand feeding' or baby-led feeding.

List three difficulties or risks that can result from supplement use.

Additional information for Session 8

Rooming-in

- Rooming-in has benefits for the baby, mother and hospital. In addition to those listed earlier:
  - Babies are responded to more quickly with less crying, thus using less of the baby's energy stores, and reducing temptation to give artificial feeds.
  - Frequent feeding means jaundice is less frequent and does not reach such high levels.
  - Higher maternal attachment, less parental abuse and less abandonment are linked with rooming-in.
  - Reduced infection rates as fewer staff are in contact with the baby. In addition the mother's bacteria colonise her infant with her own flora at the same time as giving immune protection through her milk.
  - Reduced infection rates, reduced use of artificial feeds, and reduced need for nursery space all save the hospital money.
  - Confident mothers and well established breastfeeding at hospital discharge results in less use of post-discharge health services.
- Mothers who are HIV-positive, and mothers who are not breastfeeding also benefit from rooming-in. Rooming-in assists them to get to know their baby and become confident in caring for their baby.

Co-sleeping/bed-sharing/bedding-in

- Bed sharing or co-sleeping can help a mother and baby to get more rest and to breastfeeding frequently.
- Co-sleeping is NOT recommended if either the mother or the father is
  - a smoker;
  - under the influence of alcohol or drugs that cause drowsiness;
  - unusually tired and might not respond to the baby;
  - ill or has a condition with could alter consciousness, e.g. epilepsy, unstable diabetes;
  - very obese;
  - very ill or if the baby or any other child in the bed is very ill.
- Guidelines for safe bed-sharing/co-sleeping:
  - Discuss benefits of, and contraindications to bed-sharing so that parents are informed.
  - Use a firm mattress, not one that is sagging. Sleeping on a sofa or cushions with a baby is not safe.
  - Keep pillows well clear of baby.
  - Cotton sheets and blankets are considered safer than a soft quilt.
  - Dress the baby appropriately – do not swaddle in wraps or blankets if bed-sharing, or over dress. The mother's body provides warmth for the baby.
  - The mother should lie close to her baby, facing baby with the baby lying on his or her back except when feeding.
  - Ensure that the baby cannot fall out of bed or slip between the side of the bed and the wall.
- In addition to the above guidelines on bed-sharing in hospital:
  - Ensure that the mother can easily call for assistance if she has difficulty moving in bed.
  - Check the wellbeing of the mother and baby frequently, ensuring that the baby's head is uncovered and that the baby is lying on his or her back if not feeding.
  - When handing over care to another staff member, make them aware of those mothers and babies who are bed-sharing.

Causes of crying

Babies cry for a variety of reasons.

- Causes of crying and suggestions what to do include:
  - Boredom or loneliness – carry or talk to the baby.
  - Hunger – mothers may be reluctant to feed their babies frequently if their expectations are of 3-4 hourly feeds. Many babies do not follow the same feeding pattern all of the time. Encourage mothers to offer a crying baby the breast.
  - Discomfort – respond to baby's needs, e.g. clean nappy/diaper, too hot/cold.
  - Illness or pain – treat or refer accordingly.
  - Tiredness – hold or rock baby in a quiet place to help baby go to sleep. Reduce visitors, handling and stimulation.
  - Something in the mother's diet – this is not very common and there are no foods that it is possible to recommend for mothers to avoid. Suggest that the mother stop eating the food to see if the crying improves. She can check further by eating the food again to see if it causes the problem again.
  - Effect of drugs – if the mother takes caffeine or cola drinks, the caffeine can get into the milk and make a baby restless. Cigarette smoke (even someone else smoking in the household) can also act as a stimulant to the baby. The mother can avoid caffeine and cola containing drinks; ask smokers not to do so in the house or near the baby.
- 'Colic' does not have a precise definition and the term may mean different things to different people. Exclude other causes of crying first. A baby with 'colic' grows well and tends to cry at certain times of day, often in the evening, but is content at other times. Check the baby's feeding. Poor attachment can result in air being swallowed causing 'wind'. A very fast milk flow or too much high lactose foremilk can cause discomfort. Attention to breastfeeding management may reduce these problems.

SESSION 9
MILK SUPPLY

Session Objectives:

On completion of this session, participants will be able to:

1.	Discuss concerns about "Not enough milk" with mothers.	10 minutes
2.	Describe normal growth patterns of infants.	5 minutes
3.	Describe how to improve milk intake/transfer and milk production.	10 minutes
4.	Discuss a case study of "not enough milk".	20 minutes
	Total session time	**45 minutes**

Materials:

Slide 9/1: Picture 2 Mothers in bed talking to nurse.
Slide 9/2: Case study.

For the case study, you will need:
To ask 3 participants to help with the role play and to prepare and practice.
Chairs that can be brought to the front of the room.
A doll or bundle of cloth to act as the 'baby'.

Further reading for facilitators:

Not enough milk Update No. 21, March 1996, WHO.

RELACTATION: A review of experience and recommendations for practice. WHO/CHS/CAH/98.14

1. Concerns about "Not enough milk" 10 minutes

- *Show slide 9/1: picture of 2 mothers in bed talking to nurse*

Miriam felt that she did not have enough milk for her previous baby and she gave regular supplements from the early weeks. During this pregnancy, she has heard that exclusive breastfeeding is important for her baby. Miriam believes that it is important, but she is not sure that she can give only breast milk with nothing else.

- The most common reason for mothers to stop breastfeeding, or to add other foods as well as breast milk, is they believe that they do not have enough milk.

Ask: What signs might make a mother think she does not have enough milk, even if the infant is growing well?

Wait for a few responses.

- A mother, her health worker or her family may think she does not have enough milk if there are signs such as:
  - baby cries often;
  - baby does not sleep for long periods;
  - baby is not settled at the breast and is hard to feed;
  - baby sucks his or her fingers or fists;
  - baby is particularly large or small;
  - baby wants to be at the breast frequently or for a long time;
  - mother (or other person) thinks her milk looks 'thin';
  - little or no milk comes out when the mother tries to express;
  - breasts do not become overfull or are softer than before;
  - mother does not notice milk leaking or other signs of oxytocin reflex;
  - baby takes a supplementary feed if given.
- These signs *may* mean a baby is not getting enough milk but they are not reliable indications.

Ask: What are reliable signs that the mother can see for herself that show that her young baby is receiving sufficient breast milk?

Wait for a few responses.

- Reliable signs of sufficient milk intake are:
  - *Output – milk must be going in, if urine and stools are coming out.*
  - *After day 2, six or more wet diapers in 24 hours with pale, diluted urine. If drinks of water are given in addition to breast milk, urine output may be good but weight gain low.*
  - *Three to eight bowel movements in 24 hours. As babies grow older than 1 month, stooling may be less frequent.*
  - *Alert, good muscle tone, healthy skin and is growing too big for his or her clothes.*
- A consistent weight gain is a sign of sufficient milk intake; however the mother may not be able to have her baby weighed often. If there is doubt about the infant's milk intake, weigh the baby each week, if possible
- Knowing these signs will build the mother's confidence – point out the things that she is doing well and suggest ways that she can get support in mothering.

Causes of low milk production

- The common reasons for low milk production are related to factors that limit the amount of milk the baby removes from the breast. If the milk is not removed, less milk is made. These factors include:
  - infrequent feeds;
  - scheduled feeds
  - short feeds;
  - poor suckling;
  - poor attachment.
- Low milk production may be also related to psychological factors:
  - The mother may lack confidence; feel tired, overwhelmed, worried, or find it difficult to respond to her baby.
  - Physiological factors may lead to too little or ineffective breastfeeding practices. A mother who is in a stressful situation may feed less frequently or for a short time, be more likely to give supplementary feeds or a pacifier, and may spend less time caring for the baby.

***C*auses of low milk transfer**

- The mother may have a good supply of milk but the baby may not be able to remove the milk from the breast. Low milk transfer may result if:
  - The baby is poorly attached to the breast and not suckling effectively. The baby may seem restless during a breastfeed and may pull away or tug at the breast.
  - Breastfeeds are short and hurried or infrequent.
  - The baby is removed from one breast too soon, and does not receive enough hindmilk.
  - The baby is ill or premature and not able to suck strongly and for long enough to obtain the milk the baby needs.
- Milk transfer and milk production are linked. If the milk is not being removed from the breast, the milk production will decrease. If you help the baby to remove milk more efficiently then sufficient milk production will usually follow.

2. Normal growth patterns of babies 5 minutes

Miriam has listened to what you said about signs of sufficient milk. However she is concerned about what the baby should weigh. With her previous baby even though she thought the baby looked well and seemed to be getting bigger, she was told that the baby was not gaining enough weight when the baby was weighed.

Ask: What is a normal growth pattern for a baby?
Wait for a few responses.

- Most babies start to gain weight soon if they are exclusively breastfed from soon after birth, are well attached and feed frequently.
- Some babies lose weight in the first few days after birth. This weight loss is extra fluid that the baby has stored during uterine life. A baby should regain birth weight by two weeks.
- Babies usually double their birth weight by five to six months; and triple it by one year. Babies also grow in length and head circumference.

- A properly and regularly completed growth chart can show the baby's pattern of growth. There is a range of normal growth. There is not one 'correct' line that all babies should follow.
- Do not wait until the weight gain is poor to do a careful breastfeeding assessment. Start and continue with good breastfeeding practices.
- Practising the Ten Steps to Successful Breastfeeding helps to assure an abundant milk supply:
  - Discuss the importance of breastfeeding and basics of breastfeeding management during pregnancy (Step 3).
  - Facilitate skin to skin contact after birth (Step 4).
  - Offer the breast to the baby soon after birth (Step 4).
  - Help the baby to attach to the breast so the baby can suckle well (Step 5).
  - Exclusively breastfeed: Avoid feeds of water, other fluids or foods; give only breast milk (Step 6).
  - Keep baby near so feeding signs are noticed (Step 7).
  - Feed frequently, as often and for as long as the baby wants (Step 8).
  - Avoid use of artificial teats and pacifiers. (Step 9).
  - Provide on-going support to the mother and ensure that mother knows how to find this support (Step 10)[37].

3. Improving milk intake and milk production 10 minutes

- Use your communication skills:
  - Listen to the mother and ask relevant questions.
  - Look at the baby - alertness, appearance, behaviour, and weight chart if available.
  - Observe a breastfeed, using the Breastfeed Observation Aid.
  - Respond to the mother and tell her what you are finding. Use positive words and avoid criticism or judgments.
  - Give relevant information using suitable language.
  - Offer suggestions that may improve the situation and discuss whether the suggestions seem possible to the mother.
  - Build the mother's confidence.
  - Help her to find support for breastfeeding and mothering.

Improving milk intake/transfer

- Address the cause of the low milk intake and try to remedy it. This may require you to:
  - Help the baby to attach well to the breast.
  - Discuss how the mother would be able to feed the baby more frequently.
  - Point out feeding cues so the mother learns when the baby has finished one breast before moving to the other breast rather than relying on a clock.
  - Encourage skin contact and holding the baby close.
  - Suggest that pacifiers and artificial teats (including nipple shields) be avoided.
  - Suggest offering the breast for comfort if her baby is unsettled.
  - Suggest avoiding or reducing supplement use.
- If the milk supply is very low, another source of milk is needed for a few days while the supply improves. How to give these supplements without using a bottle and teat will be discussed in a later session[38].

[37] On-going support is discussed in Session 14.
[38] See Session 11: If a baby cannot feed at the breast.

Increasing milk production

- To increase milk production, the breasts need stimulation and the milk needs to be removed frequently. The suggestions listed earlier for improving milk transfer will help to increase production because the milk is being removed from the breast. In addition suggest that the mother:
  - Gently massage her breast while feeding to help the milk to flow.
  - Express breast milk between breastfeeds and feed the expressed milk to her baby with a cup or a nursing supplementer[39]. This is particularly important if the baby has a weak suck or is reluctant to feed often.
  - Talk with her family to see how she can manage the needs of caring for her baby with other demands on her time.
  - Use foods, drinks, or local herbs believed to increase milk production, if these are safe to take while breastfeeding. These may help if they build the mother's confidence in her ability to breastfeeding or if they help the mother to be cared for by eating special foods. Using special foods or medications does not replace the need for frequent feeding with good attachment.

Monitoring and follow-up

- Follow-up the mother and baby to check that the milk production/milk transfer is improving. The frequency of follow-up depends on the severity of the situation.
- Monitoring means more than just weighing the baby. Look for signs of improvement that you can point out to the mother – increased alertness, less crying, stronger suck, more urine and stooling, and changes in her breasts such as fullness and leaking.
- Monitoring also gives you an opportunity to talk with the mother and see how the changes are working. Build her confidence and encourage things that she is doing well.
- If the baby's weight was very low and supplements were needed, reduce supplements as the situation improves. Continue to monitor the baby for a few weeks after supplements have stopped to ensure milk supply is sufficient.

4. Discuss a case study 20 minutes

Ask three participants to role-play the Case Study below in front of the class. This role-play should reflect what the midwife will do now and how she will follow up. Follow up the role-play with a discussion among all the participants.

Characters:

The patient, Anna.
Her mother-in-law (husband's mother).
The midwife at the outpatient department.

- *Show slide 9/2 with the key points of the Case Study*

[39] Cup feeding is described in Session 11.

Case study

Anna gave birth to a healthy boy in the hospital two weeks ago. Today she, the baby, and her mother-in-law are returning to the hospital because the baby is "sleeping all the time" and has passed only three stools this week. When the outpatient clinic midwife weighs the baby, she finds him 12% under birth weight.

The midwife asks about the events of the last week, using good communication skills and learns that:

- Anna and the baby were discharged on the second postpartum day.
- Anna received very little instruction on breastfeeding while she was in the postpartum ward.
- Anna feels that her baby is refusing her breasts.
- Yesterday, the mother-in-law began offering tea with honey in a bottle twice a day.

Questions that the midwife might ask include:
Can you tell me a little about the first day or two after the birth?
How did the baby feed in the first few days?
How do you feel the baby is feeding now?
Does the baby get anything other than breast milk?

The midwife also observes a breastfeed and sees that the baby is held loosely and that he must bend his neck to reach the breast. The baby has very little of the breast in his mouth and falls off the breast easily. When he falls off the breast, he gets upset, moves his head around, crying and has difficulty getting attached again.

Discussion questions: *(with possible answers)*
What are the good elements in this situation that you can build upon?

- They have looked for help, the mother-in-law is caring, and the bottle has been given only for one day.

What are three main things this family needs to know now?

- How to position and attach the baby for effective feeding.
- To feed frequently (2 hourly or more often), waking the baby if necessary.
- To avoid giving water (or honey and tea) using a bottle and teat. If needed, how to express breast milk and give to the baby by cup.

Also useful to know:

- To use plenty of skin to skin contact to help the baby learn that the breast is a comfortable place to be and to help stimulate prolactin release.
- To allow the baby to finish one breast before going to the other breast.
- The removal of milk makes more milk.
- The signs of having enough milk.

What follow-up will you offer?

- See the mother and baby in 1-2 days if possible to check if feeding and weight gain has improved.
- Continue assistance and follow-up until baby is feeding and gaining well.

- *Ask if there are any questions. Then summarise the session.*

Session 9 Summary

Concerns about "Not enough milk"

- A mother or her family may lack confidence in breastfeeding and think that she does not have enough milk. Explain to mothers the reliable signs of enough milk: passing urine and stools, and seeing the baby as alert and growing. Weight gain is a reliable sign if there is an accurate scale available and consecutive weight checks are on the same scales.
- Build the mother's confidence in her ability to breastfeed.
- Most common reason for low milk production is not enough milk is removed from the breast so less milk is made.
- Common causes of low milk transfer are:
  - Poor attachment, poor suckling; short or infrequent feeds; baby ill or weak.

Normal growth patterns of infants

- Infants may lose 7 - 10% of their birth weight in the first days after birth but should regain birth weight by 2 to 3 weeks.
- If they start breastfeeding exclusively soon after birth, they may lose very little weight or none at all.
- Babies generally double their birth weight by 6 months and treble it by 1 year old.
- The practices of the Ten Steps to Successful Breastfeeding help to ensure an abundant milk supply.

Improving milk intake and milk production

- Use your communication skills to listen, observe, respond, and build confidence.
- Address the cause of low milk transfer, offer possible solutions:
  - Improve attachment; increase frequency and duration of feed; avoid supplements and pacifiers.
- Increase milk production:
  - Breastfeed more often and for longer, express between feeds; talk with family about support.
- Monitor and follow-up until weight gain is adequate and mother is confident.

Session 9 Knowledge Check

Keiko tells you that she thinks she does not have enough milk. What is the first thing you will say to her? What will you ask her in order to learn if she truly does have a low milk supply?

You decide that Ratna's baby Meena is not taking sufficient breast milk for his needs. What things can you do to help Ratna increase the amount of breast milk that her baby receives?

Additional information for Session 9

Causes of low milk production

Common reasons

- The common reasons for low milk production are related to factors that limit the amount of milk the baby removes from the breast. If the milk is not removed, less milk is made. These factors commonly include:
  - Infrequent feeds, which may be due to:
  - Mothers not noticing signs of readiness to feed.
  - Baby being sleepy or 'quiet' and not looking to be fed.
  - Mother being busy and postponing feeds.
  - Baby sleeping away from the mother, so the mother does not see or hear feeding signs.
  - Other foods and drink being given to the baby, so the baby does not ask to be fed.
  - Baby being given a pacifier or distracted instead of being fed.
  - Belief that the baby does not need night feeds.
  - Mother has sore nipples or sore breast and does not want to feed.
  - Scheduled feeds – A schedule may not allow for frequent feeds. In addition, if the baby is left to cry until the scheduled time, he or she uses up energy and may be asleep at the scheduled feeding time.
  - Short feeds – Babies who are well attached usually end the feed when they are finished. If the mother ends the feed at a set time or because she thinks a pause in suckling indicates that the feed is finished, the baby may not get enough milk.
  - Not enough milk is removed. The inhibitor factor in milk collects and makes the breast stop producing milk.
  - Poor suckling – a baby who is weak or poorly attached to the breast is not able to remove the milk from the breast. The milk is not removed, so less milk is made.
  - A delayed start to breastfeeding – breastfeeding should start as soon as possible after birth.

Uncommon reasons for low milk production

- Medication of the mother – contraceptives that contain oestrogen can reduce milk supply. Diuretic therapy may also reduce milk supply.
- Alcohol and smoking may reduce milk supply.
- Breast surgery, which cuts milk ducts or nerves to the breast.
- If a mother becomes pregnant again, she may notice a reduction in milk supply.

Very rare reasons for low milk production

- Retained pieces of the placenta affect the hormones needed for milk production.
- Inadequate breast development during pregnancy, so that few or no milk producing cells develop.
- Severe malnutrition – milk is made from what the woman eats plus what is stored in her body. If a woman has used up her body stores, then it may affect her milk supply. However, she needs to be severely malnourished, and for a long time, to reach this state. A very restricted fluid intake may affect milk supply.

Weight gain

- Breastfeeding ensures healthy, normal weight gain for infants. Many breastfed babies are leaner (less fat) than artificially fed babies.
- Test weighing before and after one feed does not give a good indication of milk intake or production. The amount that a baby takes varies from feed to feed. Test weighing may worry the mother and can reduce her confidence in breastfeeding, tempting her to give supplements.
- A baby who is not gaining weight with good breastfeeding and good milk transfer may have an illness. If the baby is feeding poorly or showing signs of illness, refer for medical treatment. However, if the baby seems willing to feed and has no signs of illness, then poor weight gain can be the result of not getting enough milk, which is often due to poor feeding technique. This baby and mother need help with feeding.
- A baby with a condition such as congenital heart disease or a neurological difficulty may be slow to gain weight even if there is sufficient milk supply and transfer.
- There is a need for weight monitoring for all children including those who are not breastfeeding.

Relactation

Relactation definition: Re-establishing milk production in a mother who has a greatly reduced milk production or has stopped breastfeeding.

- If a mother has stopped producing breast milk and wishes to breastfeed, the health worker can help her to relactate. Relactation may be needed because:
    - The baby has been ill and not able to suck.
    - The mother did not express her milk when her baby was unable to suck.
    - The baby was not breastfed initially and now the mother wants to breastfeed.
    - The baby becomes ill on artificial feeds.
    - The mother was ill and stopped breastfeeding.
    - A woman has adopted a baby, having previously breastfed her own children.
- A woman who wishes to relactate should be encouraged to:
    - Let her baby suckle at the breast as often as possible, day and night for as long as the baby is willing.
    - Massage and express her breasts in-between feeds, especially if the baby is not willing to suckle frequently.
    - Continue to give adequate artificial feeds until the milk supply is sufficient to her infant's growth.
    - Seek support from her family, to ensure that she has enough time to spend relactating.
- Drug therapy is sometimes used to increase or develop a milk supply. It is only effective if there is also increased stimulation of the breasts.
- It is easier to relactate if:
    - The baby is very young (less than 2 months of age) and has not become accustomed to using an artificial tea.,
    - The mother gave birth recently or stopped breastfeeding recently.
- However relactation is possible at any age of baby or time since breastfeeding stopped. Grandmothers may even relactate to feed their grandchild.

SESSION 10
INFANTS WITH SPECIAL NEEDS

Session Objectives:

On completion of this session, participants will be able to:

1. Discuss breastfeeding of infants who are preterm, low birth weight or have special needs.;	20 minutes
2. Describe how to assist mothers to breastfeed more than one baby.	5 minutes
3. Outline prevention and management of common clinical concerns: neonatal hypoglycaemia, jaundice and dehydration, with regard to breastfeeding.	10 minutes
4. Outline medical indications for use of foods/fluids other than breast milk.	10 minutes
Total session time	**45 minutes**

Materials:

Slides 10/1 and 10/2: Pictures of kangaroo mother care.
Slide 10/3: Positioning a preterm baby.
Slide 10/4: Twins.
Slides 10/5 and 10/6: DANCER hand position. Baby in slide 10/6 has Down's Syndrome.

Two or three dolls (different size dolls to demonstrate feeding twins and feeding a preterm baby).

Does the baby need breast-milk substitutes? – One copy for each participant

Further reading for facilitators:

World Health Organization. *Breastfeeding and the use of water and teas.* Division of Child Health and Development Update No. 9 (reissued, Nov. 1997).

World Health Organization. *Persistent Diarrhoea and Breastfeeding.* Division of Child Health and Development Update; Geneva, 1997.

World Health Organization. *Hypoglycaemia of the Newborn – a review of the literature*. Division of Child Health and Development and Maternal and Newborn Health/Safe Motherhood, 1997.

World Health Organization. *Kangaroo Mother Care - a practical guide*. Department of Reproductive Health and Research, Geneva, 2003.

Integrated Management of Childhood Illness: A WHO/UNICEF Initiative, In Bulletin of the World Health Organization, supplement no 1, vol. 75, 1997.

WHO/UNICEF/USAID. *HIV and Infant Feeding Counselling Tools*. World Health Organization, Geneva: 2005; 2008.

WHO/UNICEF *Acceptable medical reasons for use of breast-milk substitutes* World Health Organization, Geneva 2009.

1. Breastfeeding infants who are preterm, low birth weight or ill 20 minutes

- *Continue with the 'story':*

We last saw Fatima and her son having skin-to-skin contact following an emergency caesarean section. Fatima's son was born four weeks early; however he was stable and started breastfeeding in the recovery room. Fatima was surprised that he was able to breastfeed and glad that he got some of her first milk that would help protect him. The nurse told her that breastfeeding is very important for a preterm baby.

Ask: Why is breastfeeding particularly important for a baby who is preterm, low birth weight, has special needs or any baby that is ill?

Wait for a few replies.

The importance of breast milk for preterm, low birth weight or special needs infants

- Breast milk contains:
  - Protective immune factors, which help to prevent infection.
  - Growth factors which help the baby's gut and other systems to develop as well as to heal after diarrhoea.
  - Enzymes which make it easier to digest and absorb the milk.
  - Special essential fatty acids that help brain development.
- In addition, breastfeeding:
  - Calms the baby and reduces pain from drawing blood or related to the baby's condition.
  - Gives the mother an important role in caring for her baby.
  - Comforts the baby and maintains the link with the family.
- Babies with special needs such as neurological conditions, cardiac problems or cleft lip/palate and babies who are ill, need breast milk as much if not more than babies who are well. Breastfeeding continues to benefit older babies and young children who are ill.
- The approach to feeding will depend on the individual baby and his or her condition. Overall, care can be divided into categories based on the baby's condition:
  - Baby not able to take oral feeds.
  - Baby able to take oral feeds but is not able to suckle.
  - Baby able to suckle but not for full feeds.
  - Baby can suckle well.
  - Baby is not able to receive any breast milk.

Fatima's baby is brought to the special care baby unit[40] because there is some concern about his breathing, and Fatima goes to the postnatal ward. She is worried about how she will breastfeed if she is separated from her baby.

Ask: What are some ways that a special care baby unit can support breastfeeding?

Wait for a few responses.

40 The term *special care baby unit* is used for any area that provides care for babies that are ill or have special needs. This unit may be part of the maternity unit or part of the paediatric unit or in a different hospital from the maternity unit.

Support for breastfeeding in the special care baby unit

- **Arrange contact** between mother and baby, day and night.
  - Encourage the mother to visit, touch, and care for her baby as much as possible.
  - A mother produces antibodies (one kind of protective factor) against bacteria and viruses (germs) that she is in contact with. When she spends time with her baby in a special care baby unit, her body is able to produce the protective factors against many of the germs that her baby is exposed to in the unit.

- *Show slides 10/1 and 10/2 - pictures of kangaroo mother care*

  - Skin to skin contact or 'kangaroo mother care' encourages the mother to hold her baby (dressed only in a diaper) beneath her clothing close to her breast. The baby can then go to breast whenever he or she wants. Skin-to-skin contact helps to regulate the baby's temperature and breathing, assists in development, and increases the production of milk.

- **Take care of the mother**. The mother is very important to the baby's well being and survival.
  - Help the mother to stay at the hospital while her baby is hospitalised
  - If the mother comes from a long distance to visit her baby, ensure she has a place to rest when she is at the hospital.
  - Make sure the mother has a suitable seat near the baby.
  - Encourage the health facility to provide food and fluids for the mother.
  - Answer the parents' questions and explain patiently. The parents may be upset, overwhelmed and frightened when their baby is ill.
  - Let the parents know that you believe breast milk and breastfeeding are important.
- **Help to establish breastfeeding:**
  - Assist the mother to express her milk, starting within 6 hours of birth, and expressing six or more times each 24 hours.
  - Encourage babies to spend time at the breast as early as possible even if they are not able to suckle well as yet. If the baby has the maturity to lick, root, suck and swallow at the breast, he or she will do so without harm.
  - Describe the early times at the breast as 'getting to know the breast' rather than expecting the baby to take full feeds at the breast immediately.
  - The baby can go to the breast while receiving a tube feed to associate the feeling of fullness with being at the breast.
  - Weight is not an accurate measure of ability to breastfeed. Maturity is a more important factor.
  - Until a baby is able to breastfeed, he or she may be fed expressed breast milk by tube or cup[41]. Avoid using artificial teats.

Putting a baby to breast

- Put a baby to the breast when the baby is just starting to wake up, as seen with rapid eye movements under the eyelids. When ready to feed, a baby may make sucking movements with his or her tongue and mouth. A baby may also bring her or his hand to her or his mouth. Help a mother learn how to anticipate feeding time to avoid her baby using up energy by crying.

41 Milk expression and cup feeding are discussed in Session 11.

- *Show picture 10/3: Positioning a preterm baby. Use a doll to demonstrate positions.*

- Show the mother how to hold and position her baby. One way to hold a small baby is with the baby's head supported – but not gripped - by the mother's hand. The mother's arm can support the baby's body. The baby can be to the mother's side (as in this picture), or the mother can use her hand from the opposite side to the breast that the baby is feeding at.
- The mother can support her breast with her other hand to help the baby keep the breast in his or her mouth. Show her how to put four fingers under the breast and her thumb on top.
- To increase milk flow, massage and compress the breast each time the baby pauses between suckling bursts (unless the flow is more than the baby can swallow already).

Explain to mothers what to expect at feeds

- Expect that the baby will probably feed for a long time, and that the baby will pause frequently to rest during a feed. Plan for quiet, unhurried, rather long breastfeeds (an hour or so for each feed).
- Expect some gulping and choking, because of the baby's low muscle tone and uncoordinated suckle.
- Stop trying to feed if the baby seems too sleepy or fussy. The mother can continue to hold her baby against her breast without trying to initiate suckling.
- Keep the feed as calm as possible. Avoid loud noises, bright lights, stroking, jiggling or talking to the baby during feeding attempts.

Prepare the mother and baby for discharge

- A baby may be ready to leave hospital if she or he is feeding effectively and gaining weight. Usually it is necessary for the baby to weigh at least 1800 – 2000 g before being discharged, but this varies with different hospitals.
- Encourage the health facility to provide a place for the mother to come and stay with the baby 24 hours a day for the day or two days before going home. This helps to build her confidence as well as helping her milk production to match her baby's needs.
- Ensure that the mother can recognise feeding signs, signs of adequate intake and that she is able to position and attach her baby well for breastfeeding.
- Make sure that the mother knows how she can get assistance with caring for her baby after she goes home. Arrange with the mother for follow-up care.

2. Breastfeeding more than one baby 5 minutes

- Mothers can make enough milk for two babies, and even three. The key factors are not milk production, but time, support and encouragement from health care providers, family, and friends.
- Encourage the mother to:
    - Get help with caring for other children and doing household duties.
    - Breastfeed lying down to conserve energy, when possible.
    - Eat a varied diet and take care of herself.
    - Try to spend time alone with each of the babies so that she can get to know them individually.

- *Show slide 10/4: Twins. Use a doll to demonstrate positions also*

- A mother of twins may prefer to feed each baby separately so that she can concentrate on the positioning and attachment. When the babies and mother are able to attach well, then the mother can feed them together if she wishes to reduce feeding time.
- If one baby is a good feeder and one baby less active, make sure to alternate breasts so that the milk production remains high in both breasts. The baby who feeds less effectively may benefit from breastfeeding at the same time as the baby who feeds more effectively, thereby stimulating the oxytocin reflex.

Breastfeeding a baby and older child

- There is generally no need to stop breastfeeding an older baby when a new baby arrives. The mother will produce enough milk for both is she is cared for herself, which includes eating well and resting.
- Whether there is a shortage of food in the family or not, breast milk may be a major part of the young child's diet. If breastfeeding stops, the young child will be at risk, especially if there are no animal foods in the diet. Feeding the mother is the most efficient way of nourishing the mother, the new baby, and the young breastfeeding toddler. Abrupt cessation of breastfeeding should always be avoided.

3. Prevention and management of common clinical concerns 10 minutes

- Many instances of hypoglycaemia, jaundice and dehydration can be avoided by implementing practices such as:
  - Early skin-to-skin contact to provide warmth for the baby.
  - Early and frequent breastfeeding.
  - Rooming-in so that frequent feeding is easy.
  - Encouraging milk expression and cup feeding if baby is unable to breastfeed effectively because he/she is too weak or sleepy.
  - Do not give water to the baby. Water is not effective at reducing jaundice and may actually increase it.
  - Observe all babies in the first few days to ensure that they are learning to suckle well.

Hypoglycaemia of the newborn

- Hypoglycaemia means a low blood glucose level. Babies who are born prematurely or small for gestational age, who are ill or whose mothers are ill may develop hypoglycaemia.
- There is no evidence to suggest that low blood glucose concentrations in the absence of any signs of illness are harmful to healthy, full term babies.
- Term, healthy babies do not develop hypoglycaemias simply through under-feeding. If a healthy full term baby develops signs of hypoglycaemia, the baby should be investigated for another underlying problem.

Jaundice

- It is common for babies to have a yellow colour (jaundice) to their skin in the first week of life due to high levels of bilirubin in the blood. The colour is most easily seen in the white part of the eyes. Colostrum helps infants to pass the meconium, and this removes excess bilirubin from the body.

Dehydration

- Healthy exclusively breastfed infants do not require additional fluids to prevent dehydration.
- Babies with diarrhoea should be breastfed more frequently. Frequent breastfeeding provides fluid, nutrients, and provides protective factors. In addition the growth factors in breast milk aid in the re-growth of the damaged intestine.

Babies who have breathing difficulties

- Babies with breathing difficulties should be fed small amounts frequently as they tire easily. Breastfeeding provides the infant with nutrients, immune bodies, calories, fluid and comforts the distressed baby and mother.

The baby with neurological difficulties

- Many babies with Down's syndrome or other neurological difficulties can breastfeed. If the baby is not able to breastfeed, breast milk is still very important. Some ways to assist include:
    - Encourage early contact and an early start to feeding.
    - The baby may need to be awakened for frequent breastfeeds and stimulated to remain alert during feeding.
    - Help the mother to position and attach the baby well.
    - It may help if the mother supports her breast and her baby's chin to stabilise the baby's jaw and maintain good attachment throughout the feed. She can gently cup the baby's chin between her thumb and first finger, and cup the remaining three fingers under her breast.

- *Show slide 10/5 and 10/6: Picture of DANCER hand position. Baby in slide 10/6 has Down's Syndrome*

- In addition,
    - Feedings may take a long time regardless of feeding method. Help the mother to understand that it is not breastfeeding of itself that is taking time.
    - The mother may need to express her milk and feed it to her baby in a cup.
    - Avoid artificial teats and pacifiers as these babies may find it very difficult to learn to suck from both a breast and an artificial teat.
    - Some babies with neurological difficulties gain weight slowly even if they receive enough breast milk.
    - Some babies with neurological difficulties may have other health challenges, e.g. cardiac problems.

4. Medical reasons for food other than breast milk 10 minutes

- Sometimes breastfeeding is not started or it is stopped without a clear medical indication. It is important to distinguish between:
  - Babies who cannot be fed at the breast but for whom breast milk remains the food of choice.
  - Babies who should not receive breast milk, or any other milk, including the usual breast-milk substitutes.
  - Babies for whom breast milk is not available, for whatever reason.
- Babies who cannot feed at the breast may be fed expressed milk by tube, cup, or spoon. Ensure the baby gets the hind milk that has a high fat content to help the baby grow.
- A very few babies may have inborn errors of metabolism such as galactosemia, PKU, or maple syrup urine disease. These infants may require partial or complete feeding with a special breast-milk substitute, which is appropriate to their specific metabolic condition.
- The mother may be away from the baby, severely ill, have died, or is HIV-positive and made an informed decision not to breastfeed. These babies will need replacement feeding. Situations related to maternal health that may require food other than breast milk will be discussed in a later session[42].
- Babies with medical conditions that do not permit exclusive breastfeeding need to be seen and followed-up by a suitably trained health worker. These infants need individualized feeding plans and the mother and family needs to be clear how to feed their baby.

- *Give handout:* Does the baby need breast-milk substitutes? *Discuss any points as needed.*

- *Ask if there are any questions. Then summarise the session.*

Session 10 Knowledge Check

Jacqueline has a 33-week preterm baby in the special care nursery. It is very important that her baby receive her breast milk. How will you help Jacqueline get her milk started? How will you help her with putting the baby to her breast after a few days?

Yoko gives birth to twin girls. She fears she cannot make enough milk to feed two babies and that she will need to give formula. What is the first thing you can say to Yoko to help give her confidence? What will you suggest for helping Yoko breastfeed her babies?

42 Further information on maternal health concerns and breastfeeding is in Session 13.

Session 10 Summary

Infants who are preterm, low birth weight, ill or have special needs

- Breast milk is important for babies who are preterm, low birth weight or have special needs. It protects, provides food, and aids in growth and development.
- The approach to feeding will depend on the individual baby and his or her condition. Overall, care can be divided into categories based on the baby's ability to suckle:
  - **Baby not able to take oral feeds.** Encourage the mother to express her milk to keep up her supply for when her baby can take oral feeds. If possible freeze her expressed breast milk and use it later.
  - Baby able to take oral feeds but is not able to suckle at the breast. Give expressed milk by tube and by cup if baby is able.
  - **Baby able to suckle but not for full feeds.** Let baby suckle whenever baby is willing. Frequent short feeds may tire the baby less than long feeds at long intervals. Give expressed milk by cup or tube in addition to what the baby can suckle.
  - **Baby can suckle well.** Encourage frequent feeds for milk, for protection from infection, and for comfort.
  - **Baby is not able to receive breast milk.** For example, if the baby has a metabolic disease such as galactosemia, and needs a specialized formula.
- Take care of the mother with fluid, food, rest, and help her to be in close contact with her baby.
- Expect that the baby will pause frequently to rest during the feed. Plan for quiet, unhurried, rather long breastfeeds. Avoid loud noises, bright lights, stroking, jiggling or talking to the baby during feeding attempts.
- Prepare the mother and baby for discharge by rooming-in, encouraging skin-to-skin contact, allowing time to learn to breastfeed and recognise feeding signs (cues), and to know how to get help when at home.
- Arrange early follow up for any baby that has special needs.

Breastfeeding more than one baby

- Mothers can make enough milk for two babies, and even three. The key factors are not milk production, but time, support and encouragement from health care providers, family, and friends.

Prevention and management of common clinical concerns

- Implementing practices such as early skin-to-skin contact, early and frequent breastfeeding, rooming-in, and milk expression and cup feeding if the baby is sleepy or weak and avoiding water supplements can avoid many instances of hypoglycaemia, jaundice and dehydration.

Medical indications for food other than breast milk

- Infants with medical conditions that do not permit exclusive breastfeeding need to be seen and followed-up by a suitably trained health worker.

Does the baby need breast-milk substitutes?

Exclusive breastfeeding in the first six months of life is the norm, and is particularly beneficial for mothers and infants. Nevertheless, a small number of health conditions of the infant or the mother may justify recommending that she does not breastfeed temporarily or permanently. These conditions concern very few mothers and their infants.

It is useful to distinguish between:

- Infants who should not receive breast milk or any other milk except specialized formula.
- Infants for whom breast milk remains the best feeding option but who may need other food in addition to breast milk for a limited period.

Infants who should not receive breast milk or any other milk except specialized formula may include infants with certain rare metabolic conditions such as galactosemia who may need feeding with a galactose free special formula, or Maple syrup urine disease: a special formula free of leucine, isoleucine and valine is needed, or phenylketonuria where a special phenylalanine-free formula is needed (some breastfeeding is possible, under careful monitoring).

Infants for whom breast milk remains the best feeding option but who may need other food in addition to breast milk for a limited period This group may include very low birth weight infants (those born weighing less than 1500 g) very preterm infants, i.e. those born less than 32 weeks gestational age, newborn infants who are at risk of hypoglycaemia by virtue of impaired metabolic adaptation or increased glucose demand (such as those who are preterm, small for gestational age or who have experienced significant intrapartum hypoxic/ischaemic stress), those who are ill and those whose mothers are diabetic if their blood sugar fails to respond to optimal breastfeeding or breast milk feeding.

Additional information for Session 10

Using expressed breast milk

- Milk from a mother giving birth preterm contains more protein, sodium and calcium than full term milk. Preterm infants often need extra protein, so this is helpful.
- Breast milk with an energy value of 65 kcal/100 ml at a volume of 200 ml/kg/day will result in an energy intake of 130 kcal/day. If the mother has more milk than her baby needs, the expressed breast milk can be left to stand for a short while and the fat rich hind milk will rise to the top. The 'cream' can be added to the regular milk feed, which will make it even higher in energy value.
- Some units add fortifiers and formula to the breast milk in order to make the baby grow more quickly. The long-term effect of early rapid growth is not known. These additions to her breast milk can make the mother worry that her milk is not good enough for her baby. Reassure her that her milk is good for her baby. If there is a medical need for additions to the breast milk, explain that for a short period her baby has extra needs.
- If both breast milk and formula are given, the formula will be better absorbed if it is mixed with the breast milk rather than giving alternate feeds of formula or breast milk. Additions to breast milk should be decided for each individual infant, not a standard policy for all infants in the unit[43].

Hypoglycaemia of the newborn

- Babies fed on breast milk may be better able to maintain their blood glucose levels than babies artificially fed on formulas. Babies compensate for low blood sugar by using their body fuels (e.g. glycogen stored in the liver).
- Term, healthy babies do not develop hypoglycaemia simply through under-feeding. If a healthy full term baby develops signs of hypoglycaemia, the baby should be investigated for an underlying problem. Signs of hypoglycaemia include reduced level of consciousness, convulsions, abnormal tone ('floppy'), and apnoea. A doctor should see any baby with these signs immediately.

Physiological jaundice

- This is the commonest kind of jaundice, and does not indicate an illness in the baby. It usually appears on the second or third day and clears by the tenth day. The fetal red blood cells, which are not needed by the baby after birth, break down faster than the baby's immature liver can handle. As the baby's liver matures, jaundice decreases. Bilirubin is mainly excreted in the stools, not in the urine; therefore water supplements do not help to reduce the level of bilirubin.

Prolonged jaundice

- Sometimes jaundice may persist for three weeks to three months. The baby should be checked to rule out abnormal jaundice. In an infant who is breastfeeding well with a good weight gain and only a mild level of jaundice, prolonged jaundice is rarely a problem.

Abnormal or pathological jaundice

- This type of jaundice is not usually related to feeding, and is evident at birth or within the first day or two. Usually the baby is ill. Breastfeeding should be encouraged, except in the very rare metabolic condition of galactosemia.

Treatment of severe jaundice

- Phototherapy is used in severe jaundice to breakdown the bilirubin. Very frequent breastfeeding is important to avoid dehydration. Give expressed milk if the baby is sleepy. Water or glucose water supplements do not help as they reduce the intake of breast milk and do little to reduce the jaundice.

43 Mothers who are HIV-positive should either exclusively breastfeed or exclusively formula-feed rather than do mixed feeding.

Cardiac problems

- Babies may tire easily. Short frequent feeds are helpful. The baby can breathe better when breastfeeding. Breastfeeding is less stressful and less energy is used so there is better weight gain. Breast milk provides protection from illness thus reducing hospitalization and helping growth and development.

Cleft lip and palate

- Breastfeeding is possible, even in extreme cases of cleft lip/palate. As babies with clefts are at risk for otitis media and upper respiratory infections, breast milk is especially important.
- Hold the baby so that his or her nose and throat are higher than the breast. This will prevent milk from leaking into the nasal cavity, which would make it difficult for the baby to breathe during the feed. Breast tissue or the mother's finger can fill a cleft in the lip to help the baby maintain suction.
- Feedings are likely to be long. Encourage the mother to be patient, as the baby tires easily and needs to rest. The mother probably will need to express her milk and supplement. She can feed expressed milk with a cup or breastfeeding supplementer[44]. Following surgery to repair the cleft, breastfeeding can resume as soon as the baby is alert.

Infants requiring surgery

- Breast milk is easily digested so requires a shorter fasting time than formula milk or other foods. In general, the baby should not need to fast for more than three hours. Discuss with the parents ways of comforting the baby during the fasting period. Breastfeeding can usually commence as soon as the baby is awake after the surgery.
- Breastfeeding soon after surgery helps with pain relief, comforts the baby and provides fluid and energy. If the baby is not able to take large amounts of breast milk immediately, the mother can express and let the baby suck on an 'empty breast' until the baby is more stable.

44 See Session 11.

SESSION 11
IF BABY CANNOT FEED AT THE BREAST – STEP 5

Session Objectives:

On completion of this session, participants will be able to:

1.	Describe why hand expression is useful and how to hand express.	15 minutes
2.	Practice assisting to learn how to hand express.	15 minutes
3.	Outline the safe use of milk from another mother.	5 minutes
4.	Explain how to cup feed an infant.	25 minutes
	Total session time	**60 minutes**

There is a demonstration of cup feeding during the Clinical Practice 3. If a mother and baby are available to come to the classroom, the demonstration can be done as a part of this session. Adjust the timetable accordingly.

Materials:

Slide 11/1: Hand Expression.
Slide 11/2: Cup feeding.
Slide 11/3: Breastfeeding supplementer (optional).

Breast model for demonstration plus some additional breast models for pair practice. If possible, have one breast model for each 2-3 participants.

Doll, small cup, cloth. The cup should be open, with no sharp edge – a medicine cup, egg cup or small tea cup or glass may be used. If a glass is used it may be easier to see the milk in the glass.

Handout – HOW TO CUP FEED A BABY, one copy for each participant (optional).

Handout – MILK EXPRESSION, one copy for each participant (optional).

Optional – breast pumps that are available locally. Make sure that you know how to use the pumps correctly before demonstrating them. Do NOT invite a representative from a pump company to give this demonstration as their job is to increase the use of their pump rather than give an unbiased review of pumping and expressing.

Breastfeeding supplementer for display, either home-made or a purchased device, if used locally.

Further reading for facilitators:

WHO/UNICEF/USAID. Chapter 3 Teach the mother how to practise the chosen feeding option. In: *HIV and Infant Feeding Counselling Tools: Reference Guide*. World Health Organization, Geneva: 2005.

RELACTATION: A review of experience and recommendations for practice. WHO/CHS/CAH/98.14

(Optional book) Lang, S. Breastfeeding Special Care Babies, Bailliere Tindall/Harcourt Publishers, 2002.

1. Learning to hand express 15 minutes

- Step 5 of the ten Steps to Successful Breastfeeding states:

  Show mothers how to breastfeed, and how to maintain lactation even if they should be separated from their infants.

Ask: Why might it be useful for a mother to know how to hand express?
Wait for a few responses.

Why learn to hand express?

- It may be useful to know how to hand express:
  - For breast comfort, such as to relieve engorgement or a blocked duct[45] or to rub a few drops of hind milk on the nipple area to soothe if the nipple is tender.
  - To encourage a baby to breastfeed. Express milk:
    - on to the nipple so that the baby can smell and taste it;
    - directly into the baby's mouth if the baby has a weak suck, or
    - to soften the areola of a full breast so that the baby can attach.
  - To keep up the milk production when the baby is not suckling or to increase milk production.
  - To obtain milk if the baby is unable to breastfeed, or if the baby is small and tires quickly, when mother and baby are separated, or to provide milk for a milk bank.
  - To pasteurise the milk for the baby, as an option if the mother is HIV-positive.
- Many mothers prefer hand expression to using a pump because:
  - Hands are always with you, and there are no parts to lose or break.
  - Hand expression can be very effective and quick when the mother is experienced.
  - Some mothers prefer the skin-to-skin stimulation from hand expression rather than the feel of plastic and sound of a pump.
  - Hand expression is usually gentler than a pump, particularly if the mother's nipple is sore.
  - There is less risk of cross-infection since the mother does not use equipment that may be also handled by others.

How to hand express

Fatima knows that breast milk is very important to her baby and wants to give her milk to him. However, he is not yet able to suckle well. The nurse helped her to begin expressing milk soon after her baby was born.

- It is easier to learn to hand express when the breast is soft rather than engorged and tender.
- The key steps in order to hand express are:
  - Encourage the milk to flow.
  - Find the milk ducts.
  - Compress the breast over the ducts.
  - Repeat in all parts of the breast.

- *Give out the Milk Expression handout (optional).*
- *Use the breast model as you explain the steps.*

45 See Session 12 for more information on blocked ducts and engorgement.

Encourage the milk to flow

- A mother can help her oxytocin reflex to work by:
  - Being comfortable and relaxed.
  - Thinking about her baby, looking at the baby (or even at a photograph).
  - Warming her breast and gently massaging or stroking it.
  - Gently rolling her nipple between her finger and thumb.
- Mothers can get their oxytocin reflex to work more easily with practice. When a mother is used to expressing her milk she may not need to encourage the milk to flow.

Find the milk ducts

- Ask the mother to gently feel the breast near the outer edge of the areola or about the length of her first thumb joint[46] back from the nipple until she finds a place where the breast feels different. She may describe it as feeling like a knotted string or a row of peas. These are the ducts of milk. Depending on what part of the breast it is, the mother should place her first finger over the duct, and her thumb on the opposite side of the breast, or her thumb on the duct and finger opposite. She can support her breast with the other fingers of that hand, or with her other hand.

Compress the breast over the ducts

- Ask the mother to gently press her thumb and fingers slightly back towards the chest wall. Then she presses the thumb and first finger together, compressing the milk duct between them. This helps the milk to flow towards the nipple. She releases the pressure and repeats the compress and release movement until milk starts to drip out (it may take a few minutes). Colostrum may come out in drops, as it is thick and a small amount. Later the milk may spray out in streams after the oxytocin reflex works.

Repeat in all parts of the breast

- When the milk flow slows, the mother moves her thumb and finger around the edge of her areola to another section and repeats the press and release movement. When flow ceases, she changes to the other breast and repeats, if both breasts are to be expressed. The mother can pause to massage her breast again if needed. She can go back and forth between her breasts a few times if needed.

When to express

- If the baby is not able to suckle, begin expressing as soon after birth as possible, by 6 hours preferably.

How long to express

- The length of time to express depends on why the mother is expressing.
  - If express to get colostrum for her baby who is not able to suck, she might express for 5-10 minutes to get a teaspoon of colostrum. Remember the newborn baby's stomach is very small and small amounts every 1-2 hours if what the baby needs.
  - If expression is used to increase milk production, aim to express for about 20 minutes at least six or more times in 24 hours including at least once at night, so that the total time expressing is at least 100 minutes per 24 hours.

46 About one and a half inches or 4 centimetres.

  - If the mother is just softening the areola to help the baby attach, she may only need to compress 3 or 4 times.
  - If the mother is clearing a blocked duct, she compresses and massages until the lump has cleared.
  - If it is past the newborn stage and the mother is expressing milk to be given to her baby when she is at work, determine the length of time to express by the flow of milk and the amount needed to meet the baby's needs. Some mothers can get the amount of milk needed in 15 minutes and for some women it may take 30 minutes.
  - A mother might express one breast and feed the baby from the other breast.
- Preterm babies and some sick babies may take only very small feeds at first. Encourage small frequent feeds of colostrum. Even very small feeds may be useful - do not dismiss small amounts that the mother expresses.
- Colostrum may only come in drops. These are precious to the baby. The mother may be able to express into a spoon, small cup or directly into the baby's mouth so that no drops of colostrum are lost. A useful way is for a helper to draw up the colostrum in a syringe directly from the nipple as the mother expresses it – 1 ml can look quite a lot in a small syringe.

Points to note:

- It is not necessary for the health worker to touch the mother's breasts when teaching hand expression.
- It may take a few tries before much milk is expressed. Encourage the mother not to give up if she gets little milk or no milk at the first try. The amount of milk obtained increases with practice.
- Explain to the mother that she should not squeeze the nipple itself. Pressing or pulling the nipple cannot express milk, but it is painful and it can damage the nipple.
- Explain to the mother that she should avoid sliding or rubbing her fingers along the breast when compressing. This can also damage the breast.
- With practice it is possible for a mother to express from both breasts at the same time.
- If a mother is both expressing and breastfeeding an older baby (for example, if she is working away from the baby), suggest that she express first and then breastfeed her baby. The baby is able to get the fat rich hind milk from deep in the breast more efficiently than expressing.
- Expressing should not hurt. If it does hurt, check the techniques listed above with the mother and observe her expressing.

2. Pair practice learning to hand express 15 minutes

Divide the group into pairs and give each pair a breast model. Participants take turns to help each other to learn how to hand express. Participants can be in a group of three with one person as the health worker, one person as the mother and one person observing.

REMEMBER YOUR COMMUNICATION SKILLS
Listen, praise, inform, suggest – Do not command or judge

3. Use of milk from another mother 5 minutes

- If a baby cannot feed at the breast, the next best choice is to receive his or her own mother's milk. If the baby's own mother's milk is not available, milk from another mother[47] is more suitable than milk from a cow, goat, camel or other animal, or milk from a plant (soy milk).
- When a woman breastfeeds a baby to whom she did not give birth, it is called *wet nursing.* Expressed milk from another mother is called *donor milk.*
- Some places may have breast milk banks to provide milk for babies who are preterm or ill. In a milk bank, the donor mothers are screened for HIV and other illnesses and the milk is also pasteurised (heat-treated). Using donor-banked milk is usually a short-term option, as the supply may be limited, and another way of feeding will need to be discussed.

- *If there is a milk bank in the area, tell participants that it is there.*

4. Feeding expressed breast milk to the baby 25 minutes

- Babies who are not fed at the breast can be fed by:
    - Naso-gastric or oro-gastric tube
    - Syringe or dropper
    - Spoon
    - Direct expression into the baby's mouth
    - Cup
- The need for alternative feeding methods and the most suitable method should be individually assessed for each mother and baby.
- **Tube feeding** is needed for babies who cannot suckle and swallow.
- **A syringe or dropper** can be used for very small amounts of milk, for example colostrum. Place a very small amount (not more than 0.5 ml at a time) in the baby's cheek[48] and let the baby swallow that before giving more.
- **Spoon-feeding** is similar to syringe feeding in that very small amounts are given. The baby cannot control the flow so there is a risk of aspiration if the milk is fed quickly. Spoon-feeding large amounts of milk takes a lot of time. This means the carer or baby may get tired before enough milk is taken. If a large spoon is used, then this is similar to cup feeding.
- **Direct expression into the baby's mouth** may encourage the baby to suck. Some mothers are able to use direct expression for a baby with a cleft palate.
- For all the above methods of supplementing, the caregiver decides how much and how fast the baby will drink.

Cup feeding

- Cup feeding can be used for babies who are able to swallow but cannot (yet) suckle well enough to feed themselves fully from the breast. They may have difficulty attaching well, or they may attach and suckle for a short time, but tire quickly before they have obtained enough milk. A baby of 30-32 weeks gestation can often begin to take feeds from a cup.

- *Show slide 11/1 – Cup Feeding*

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47 The other woman should be HIV-negative.

48 If the syringe is placed in the centre of the baby's mouth there is a risk that the milk could accidentally squirt down the throat when the baby was not ready to swallow. Some babies suck the syringe as if it were a bottle teat if it is in the centre of their mouth. This may give more milk than the baby can cope with and the baby may find it harder to learn to suckle the breast.

- Cup feeding has some advantages over other methods of feeding:
  - It is pleasant for the baby – there are no invasive tubes in his or her mouth.
  - It allows the baby to use his or her tongue and to learn tastes.
  - It stimulates the baby's digestion.
  - It encourages coordinated breathing/suck/swallow.
  - The baby needs to be held close and eye-contact is possible.
  - It can allow the baby to control the amount and rate of feeding.
  - A cup is easier to keep clean than a bottle and teat.
  - It may be seen as a transitional method on the way to breastfeeding rather than as a 'failure' of breastfeeding.
- Cup feeding may have disadvantages:
  - Milk can be wasted if the baby dribbles.
  - Term babies can come to prefer the cup if they do not go to the breast regularly.
  - Cup feeding may be used instead of direct breastfeeding because it is easy to do. For example, a special care baby nurse may prefer to give a cup feed rather than bring the mother from the post-natal ward and help her to breastfeed her small baby.
- The amount a baby takes varies from feed to feed – this is true for any method of feeding. If a baby takes a small feed, offer the next feed a little earlier, especially if the baby shows signs of hunger. Measure the baby's intake over 24 hours, not feed by feed. Extra milk can be given by tube if the baby is too weak to take full cup feeds.
- If mothers are not used to cup feeding, they need information about it, and they need to see their babies feeding by cup. The method needs to be taught in a way that gives them confidence to do it themselves[49].
- A cup does not need to be sterilised in the same way as a bottle and teat. It has an open, smooth surface that is easy to clean by washing it in hot soapy water. Avoid tight spouts, lids or rough surfaces where milk may stick and allow bacteria to grow.
- A baby can progress from tube feeding to cup feeding to fully feeding at the breast. The baby does not need to 'learn' to feed from a bottle and teat as part of his or her development.

- *Give participants' the handout* – HOW TO CUP FEED A BABY.
  Demonstrate how to cup feed using a doll using the points on the handout.
- *There is a demonstration of cup feeding during the Clinical Practice 3 or it can be demonstrated at this time if suitable.*

- *Ask if there are any questions. Then summarise the session.*

49 A demonstration of how to teach a mother to cup feeding using communication skills is included in Chapter 3 of *HIV and Infant Feeding Counselling Tools: Reference Guide.*

Session 11 Summary

Learning to hand express

- It may be useful to know how to hand express for:
  - Breast comfort.
  - Helping a baby to breastfeed.
  - Keeping up the milk supply.
  - Obtaining milk if the baby is unable to breastfeed, where mother and baby are separated, or if milk is needed for another baby.
  - Pasteurising the milk for the baby, as an option if the mother is HIV-positive.
- Key steps in order to hand express are:
  - Encourage the milk to flow.
  - Find the milk ducts.
  - Compress the breast over the ducts.
  - Repeat in all parts of the breast.
- The amount of milk obtained increases with practice.

Use of milk from another mother

- If a baby's own mother's milk is not available, milk from another mother (who is HIV-negative) is more suitable than milk from a cow, goat, camel or other animal, or milk from a plant source (soy milk).

Feeding expressed breast milk to the baby

- Babies who are not fed at the breast can be fed by:
  - Naso-gastric or oro-gastric tube
  - Syringe or dropper
  - Spoon
  - Direct expression into the baby's mouth
  - Cup
- The need for alternative feeding methods and the most suitable method should be individually assessed for each mother and baby.
- Cup feeding can be used for babies who are able to swallow but cannot (yet) suckle well enough to feed themselves fully from the breast. A baby of 30-32 weeks gestation can often begin to take feeds from a cup.
- If mothers are not used to cup feeding, they need information about it, and they need to see babies feeding by cup. The method needs to be taught in a way that gives them confidence to do it themselves.

Session 11 Knowledge check

List four reasons why it is recommended that mothers learn to hand express.

List four reasons why cup feeding is preferred to feeding by other means if the baby cannot breastfeed.

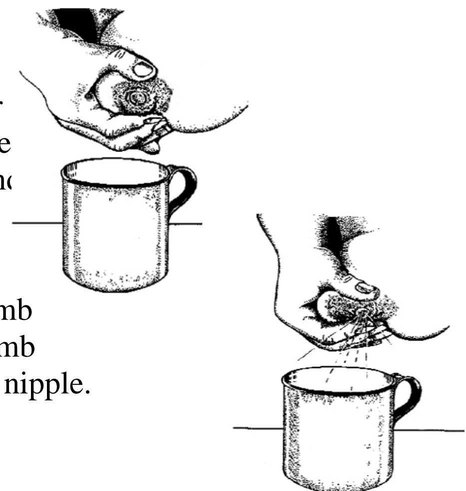
Milk Expression

Your milk is very important to your baby. It is useful to express your milk if:

- your baby cannot feed at the breast:
- you are away from your baby:
- you want drops of milk to encourage your baby to suck;
- your breasts are overfull or you have a blocked duct;
- you want some hind milk to rub on sore nipples, and other reasons.

You can help your milk to flow by:

- sitting comfortably, relaxed and thinking about your baby;
- warming your breast;
- massaging or stroking your breast, and rolling your nipple between your fingers;
- having your back massaged.



Feel back from your nipple to find a place where your breast feels different. This may feel like knots on a string or like peas in a pod. This is usually a good place to put pressure when expressing. Put your thumb on one side of the breast and 2-3 fingers opposite.

Compress the breast over the ducts. Try pressing your thumb and fingers back towards your chest, and then press your thumb and fingers towards each other, moving the milk towards the nipple. Release and repeat the pressure until the milk starts to come.

Repeat in all parts of the breast. Move your fingers around the breast to compress different ducts. Move to the other breast when the milk slows. Massage your breast occasionally as you move your hand around. If you are expressing to clear a blocked duct, you only need to express in the area that is blocked.

It takes practice to get large volumes of milk. First milk (colostrum) may only come in drops. These are precious to your baby.

How often to express depends on the reason for expressing. If your baby is very young and not feeding at the breast, you will need to express every 2-3 hours.

It is important to have clean hands and clean containers for the milk. Discuss milk storage if needed.

These points are suggestions not rules.

- Find what works best for you.
- Expressing should not hurt and to ask for help if it does.
- Ask if you have any questions. You can get information or help from:

Illustration from Breastfeeding Counselling: a training course,
WHO/CHD/93.4, UNICEF/NUT/93.2

Cup Feeding a Baby

Why cup feeding is recommended:

- It is pleasant for the baby – there are no invasive tubes in his or her mouth.
- It allows the baby to use his or her tongue and to learn tastes.
- It stimulates the baby’s digestion.
- It encourages coordinated breathing/suck/swallow.
- The baby needs to be held close and eye-contact is possible.
- It allows baby to control the amount and rate of feeding.
- A cup is easier to keep clean than a bottle and teat.
- It may be seen as a transitional method on the way to breastfeeding rather than as a ‘failure’ of breastfeeding.

HOW TO FEED A BABY BY CUP

Sit the baby upright or semi-upright on your lap; support the baby’s back, head and neck. It helps to wrap the baby firmly with a cloth, to help support his or her back, and to keep his or her hands out of the way.

Hold the small cup of milk to the baby's lips.

The cup rests lightly on the baby's lower lip, and the edges of the cup touch the outer part of the baby's upper lip.

Tip or tilt the cup so that the milk just reaches the baby's lips.

The baby becomes alert, and opens his or her mouth and eyes.
- A preterm baby starts to take the milk into his or her mouth with his or her tongue.
- A full term or older baby sucks the milk, spilling some of it.

DO NOT POUR the milk into the baby's mouth. Just hold the cup to the baby’s lips and let him or her take it himself or herself.

When the baby has had enough, the baby closes his or her mouth and will not take any more. If the baby has not taken the calculated amount, he or she may take more next time, or you may need to feed the baby more often.

Measure the baby’s intake over 24 hours - not just at each feed.

Additional information for Session 11

Use of milk from another mother

Wet nursing

- In some cultures, a family may look for a wet nurse if the mother dies or is very ill, if the mother will be away from the baby for a long period of time or if the mother is HIV-positive. If the reason for asking another woman to breastfeed a baby is to reduce the risk of the baby acquiring HIV, the wet nurse needs to be counselled, tested and shown to be HIV-negative.
- The wet nurse, if sexually active, also needs to be counselled about safer sex practices so that she does not acquire the virus during the breastfeeding period. The wet nurse needs access to breastfeeding support and assistance to establish good breastfeeding.
- It is important for the mother to stay close to the baby, and to care for him or her as much as possible herself, so that she bonds with her baby.

Donor milk and heat-treated milk

- Heat-treating destroys the HIV in the breast milk. A mother who is HIV-positive can also heat-treat her milk at home to reduce the risk of transmitting HIV to her baby. Breast milk should not be heat-treated unless necessary. Breast milk from an HIV-negative or untested mother does not need to be heat treated if the milk is for her own baby. Heating reduces some anti-infective components of breast milk and enzymes in the milk. However, heat-treated breast milk remains superior to breast-milk substitutes. Do not heat-treat the baby’s own mother’s milk just 'in case' the mother is HIV-positive.
- Information on using the milk from another mother and how to heat-treat breast milk to destroy HIV can be found in Chapter 3 of *HIV and Infant Feeding Counselling Tools: Reference Guide.*

Feeding expressed breast milk to the baby

- **Tube feeding -** Fat can stick to the side of the tube thus reducing the energy level of the feed received. If breast milk is fed continuously, angle the milk container and place the outlet tube at the highest point in the container so that the creamy part of the milk is fed first.
- **Bottle and artificial teats** come in a wide variety of sizes and shapes. There is not one teat that is ‘best’ or most like a mother’s breast. Babies who use the bottle and teat method may lose interest in breastfeeding. A baby can progress from tube feeding, to cup feeding to fully feeding at the breast. The baby does not need to ‘learn’ to feed from a bottle and teat as part of his or her development.
- Clean water and extra fuel are not always available to clean bottles and teats. This places the baby's health at risk. If a mother plan to use bottles and teats, then the mother must be instructed on the health and safety issues associated with their use.

A Breastfeeding Supplementer

- A **breastfeeding supplementer** can be useful to ensure that the baby receives enough milk while encouraging the baby to suckle for longer or if the baby has a weak suck. To use a nursing supplementer the baby must be able to attach to the breast and suckle.

- *Show slide 11/2: Breastfeeding supplementer*

- A breastfeeding supplementer is a device to allow extra milk to be given while the baby is at the breast, thus stimulating milk production, encouraging suckling, and enabling closeness of mother and baby. If the baby cannot attach to the breast and suckle, this method cannot be used.
- A breastfeeding supplementer device can be purchased or home-made. Read the instructions for using a purchased device.
- To use a home-made supplementer: The supplement is put into a cup, and a fine tube passes from the cup along the mother’s breast to the baby’s mouth. As the baby suckles on the breast, the baby draws up the supplement through the tube[50].

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50 See additional information in *RELACTATION: A review of experience and recommendations for practice.* WHO/CHS/CAH/98.14 http://www.who.int/child-adolescent-health/NUTRITION/infant.htm

- The tube of the supplementer needs to be thoroughly rinsed with water immediately after use, and then sterilised each time it is used, especially if the baby is ill or preterm; or rinsed and then washed well in very hot soapy water for an older, healthy baby. Cleaning the tube makes extra work for the mother or hospital staff. The mother may need help to use this method. Consider if a simpler method such as cup feeding would be suitable.

- *Discuss this method more and show a supplementer if they are used in your hospital.*

Breast pumps

- *Demonstrate the use of breast pumps that are available to mothers in your community. Explain both the positive and negative sides of their use.*

- Breast pumps are not always practical, affordable or available, so it is preferable for mothers to learn how to express milk by hand. If breast pumps are available to mothers in your area and if a particular mother needs to use one, help her choose an effective pump, show her how to use the pump and go through the manufacturer's instructions with her.
- It is usually helpful to stimulate the oxytocin reflex before pumping by sitting comfortably with support for the back and the arm holding the pump, relaxing, massage and other techniques as described for hand expressing.
- It is possible with some large electric pumps to pump both breasts at the same time. Double pumping increases the mother's prolactin level. It can help when large volumes of milk are needed or the mother has only a short time to pump.
- With all pumps use only a comfortable level of suction – more suction does not remove more milk and may damage the breasts. Mimic the baby's action – short quick initial sucks followed by longer, slower suction. With a cylinder hand pump, extend the cylinder to create a comfortable level of suction and hold that suction until the milk flow slows. The mother does not need to keep pumping if the milk is flowing.
- If the mother is getting little or no milk from pumping, check that the pump is working and check her pumping technique (including stimulating the oxytocin reflex). Do not conclude that she "has no milk".
- Ensure that the mother is able to sterilise the pump if she intends to feed the milk to her baby.
- Avoid the rubber bulb type hand pumps. These damage mother's nipples, are difficult to clean and the milk cannot be used for feeding a baby.

Check list for choosing a pump

- o Does the mother find it works well?
- o Is it easily available at an affordable price?
- o Is it comfortable to use – arm position, weight, adjustable suction?
- o Is the size of the breast cup/funnel and insert if available, suitable for the size of the nipple and breast?
- o Can milk be stored in a collection container, in standard thread containers, or is there a need to purchase special containers?
- o What is the noise level when in use?
- o Is it safe to use and easy to clean and sterilise?
- o Is it easy to assemble with few parts?
- o Are there clear instructions for use?

Storing expressed breast milk

- Choose a suitable container made of glass or plastic that can be kept covered. Clean it by washing in hot soapy water, and rinsing in hot clear water. If the mother is hand expressing, she can express directly into the container.
- If storing several containers, each container should be labelled with the date. Use the oldest milk first.
- The baby should consume expressed milk as soon as possible after expression. Feeding of fresh milk (rather than frozen) is encouraged.
- Frozen breast milk may be thawed slowly in a refrigerator and used within 24 hours. It can be defrosted by standing in a jug of warm water and used within one hour, as it is warm. Do not boil milk or heat it in a microwave as this destroys some of its properties and can burn the baby's mouth.

Breast milk Storage

Healthy baby at home
Fresh Milk

- At 25-37°C for 4 hours.
  At 15-25°C for 8 hours.
  Below 15°C for 24 hours.
  Milk should not be stored above 37° C.
- Refrigerated (2-4°C): up to 8 days.
  Place the container of milk in the coldest part of the refrigerator or freezer. Many refrigerators do not keep a constant temperature. Thus, a mother may prefer to use milk within 3-5 days or freeze milk that will not be used within 5 days, if she has a freezer.

Frozen Milk

- In a freezer compartment inside refrigerator: 2 weeks.
- In a freezer part of a refrigerator-freezer: 3 months.
- In a separate deep freeze: 6 months.
- Thawed in a refrigerator: 24 hours (do not re-freeze), or place the container in warm water to thaw quickly.

Ill baby in hospital
Fresh Milk

- At room temperature (up to 25°C): 4 hours.
- Refrigerated (2-4°C): 48 hours.

Frozen milk

- In a freezer compartment inside refrigerator: 2 weeks.
- In a freezer part of a refrigerator-freezer or a separate deep freeze (-20°C): 3 months.
- Thawed in a refrigerator: 12 hours (do not re-freeze).

SESSION 12
BREAST AND NIPPLE CONDITIONS

Session Objectives:

At the end of this session, participants will be able to:

1.	List the points to look for when examining a mother's breasts and nipples.	5 minutes
2.	Describe causes, prevention and management of engorgement and mastitis.	20 minutes
3.	Describe causes, prevention and management of sore nipples.	10 minutes
4.	Demonstrate through role-play assisting a mother with breast or nipple conditions.	25 minutes
	Total session time	**60 minutes**

Materials :

Cloth breast.
Slide 12/1: Breast and nipple size and shape
Slide 12/2: Full breast
Slide 12/3: Engorgement
Slide 12/4: Mastitis
Slides 12/5 and12/6: Sore nipples

Breastfeed Observation Aid - a copy for each person.
List of Communication Skills from Session 2 - a copy for each person.
Copy of the stories – one story for each group of 4-6 participants.

In Additional Information section
Slides 12/7: Syringe method for an inverted nipple
Slides 12/8 and12/9: Candida on nipples
Slide 12/10: Tongue-tie
Syringe and a sharp blade to cut it.

Further reading for facilitators:

Mastitis: causes and management WHO/FCH/CAH/00.13

1. Examination of the mother's breasts and nipples 5 minutes

- The earlier session on promoting breastfeeding during pregnancy mentioned that antenatal nipple preparation was generally not helpful. During antenatal checks, a woman can be reassured that most women's breasts produce milk well regardless of size or shape.
- After the baby is born, health workers do not need to physically examine every breastfeeding woman's breasts and nipples. They only need to do so if the mother has pain or a difficulty.
- Always observe the condition of the mother's breasts when you observe a breastfeed. In most cases this is all that you need to do, as you can see most important things when she is putting the baby onto the breast, or as the baby finished a feed.
- If you physically examine a women's breasts:
  - Explain what you want to do.
  - Ensure privacy to help the mother feel comfortable and consider customs of modesty.
  - Ask permission before breasts are exposed or touched.
  - Talk with the mother and look at the breasts without touching.
  - If you need to touch the breasts do so gently.
- Ask what has she noticed about her breasts – is there anything that worries her? If so ask her to show you.
- Talk to the mother about what you have found. Highlight the positive signs you see. Do not sound critical about her breasts. Build her confidence in her ability to breastfeed.

Nipple size and shape

- *Show slide 12/1: Breast and nipple size and shape*

- There are many different shapes and sizes of breast and nipple. Babies can breastfeed from almost all of them.
- Nipples can change shape during pregnancy and become more *protractile* or "*stretchy*". There is no need to 'diagnose' or treat a nipple that looks flat or inverted during pregnancy[51].
- Inverted nipples do not always present a problem. Babies attach to the breast, not to the nipple. If you think her nipples may be inverted, the best way to help is to build her confidence and provide good support from birth[52].
- Long or big nipples may also cause difficulties because the baby does not take the breast far enough back in his or her mouth. Help the mother to position and attach the baby so that there is a large amount of breast tissue in the mouth, not just the nipple.
- If the baby gags repeatedly because of a large nipple, ask the mother to express the milk and cup feed the baby for some days. Babies grow quickly and their mouths soon become bigger.

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51 Wearing of breast shells or special exercises during pregnancy to help the nipples protrude are no longer recommended as they may be painful and can give a woman the impression that her breasts are not right for breastfeeding. Build her confidence and provide good support from birth.

52 Supportive practices such as skin to skin contact, encouraging the baby to find his/her own way to the breast, help with positioning and attachment and avoiding artificial teats and pacifiers, assist breastfeeding to be established. These practices were discussed in earlier sessions.

2. Engorgement, blocked ducts and mastitis 20 minutes

One of the mothers in our story, Fatima, has heard that breastfeeding mothers can have sore breasts. She is worried this might happen to her, as her breasts seem to be getting swollen.

Ask: What can you explain to a mother about normal breast changes during breastfeeding and changes that may indicate a difficulty?

Wait for a few responses.

Engorgement

What is engorgement?

- *Slide 12/2:Picture of full breast*

- **Normal breast fullness**: When the milk is "coming in," there is more blood supply to the breast as well as more milk. The breasts may feel warm, full, and heavy. This is normal. To relieve fullness, feed the baby frequently and use cool compresses between feeds. In a few days, the breasts will adjust milk production to the baby's needs.

- *Slide 12/3:Picture of engorgement*

- **Engorgement:** If the milk is not removed, the milk, blood and lymph become congested and stop flowing well, which results in swelling and oedema. The breasts will become hot, hard and painful, and look tight and shiny. The nipple may be stretched tight and flat, which makes it difficult for the baby to attach and which can result in sore nipples.
- If engorgement continues, the feedback inhibitor of lactation reduces milk production.
- Causes of breast engorgement include:
  - Delay in starting to breastfeed soon after baby's birth.
  - Poor attachment, so that milk is not removed effectively.
  - Infrequent feeding, not feeding at night or short duration of feeds.

Do your practices help to avoid engorgement?

- If much engorgement is seen in a maternity facility, the pattern of care for mothers should be reassessed. Implementation of the Ten Steps to Successful Breastfeeding prevents most painful engorgement. If you can answer "yes" to all of the following questions, there should be very little engorgement in your facility.
- Ask yourself:
  - Is skin-to-skin care practiced at birth? (Step 4).
  - Is breastfeeding initiated within one hour after birth? (Step 4).
  - Do staff offer help early and make sure that every mother knows how to attach her baby at the breast? (Step 5).
  - If the baby is not breastfeeding, is the mother encouraged and shown how to express milk from her breasts frequently? (Step 5).
  - Are babies and mothers kept together 24 hours a day? (Step 7).
  - Is every mother encouraged to breastfeed whenever and for as long as her baby is interested, day and night (at least eight to twelve feeds in 24 hours)? (Step 8).
  - Are babies given no pacifiers, artificial teats, or bottles that would replace suckling at the breast? (Step 9).

Help mothers to relieve engorgement[53]

- To treat engorgement, it is necessary to remove the milk from the breast. This will:
  - Relieve the mother's discomfort.
  - Prevent further complications such as mastitis and abscess formation.
  - Help to ensure continued production of milk.
  - Enable the baby to receive breast milk.
- How to help a mother to relieve engorgement:
  - Check attachment: Is baby able to attach well at the breast? If not:
    - *Help the mother to attach her baby at the breast well enough to remove the milk.*
    - *Suggest that she gently express milk*[54] *from her breasts herself before a feed to soften the areola and make it easier for the baby to attach.*
  - If breastfeeding alone does not reduce the engorgement, advise the mother to express milk between feeds a few times until she is comfortable.
  - Encourage frequent feeds: if feeds have been limited, encourage the mother to breastfeed whenever and for as long as her baby is willing.
  - A warm shower or bath may help the milk to flow.
  - Massage of the back and neck or other forms of relaxation may also help the milk to flow.
  - Help the mother to be comfortable. She may need to support her breasts if they are large.
  - Provide a supportive atmosphere; build the mother's confidence by explaining that soon the engorgement will be resolved.
  - Cold compresses may lessen pain between feeds.

Blocked milk ducts and mastitis (breast inflammation)

- Milk sometimes seems to get stuck in one part of the breast. This is **a blocked duct.**
- If milk remains in a part of the breast, it can cause inflammation of the breast tissue or **non-infective mastitis.** Initially there is no infection, however the breast can become infected with bacteria and is then **infective mastitis**.
- Blocked ducts and mastitis can be caused by:
  - Infrequent breastfeeding – maybe because the baby wakes infrequently, hunger signs are missed, or the mother is very busy.
  - Inadequate removal of milk from one area of the breast.
  - Local pressure on one area of the breast, from tight clothing, lying on the breast, pressure of the mother's fingers on the breast, or trauma to the breast.
- A woman with a **blocked duct** may tell you that she can feel a lump, and the skin over it may be red. The lump may be tender. The mother usually has no fever and feels well.
- A woman with **mastitis** may report some or all of the following signs and symptoms:
  - pain and redness of the area;
  - fever, chills;
  - tiredness or nausea, headache and general aches and pains.
- The symptoms of mastitis are the same for non-infective and infective mastitis.

- *Show slide 12/4:Picture of mastitis. Note that an area is red and there is swelling. This is severe. Participants and mothers need to learn to recognise blocked ducts and mastitis in an earlier stage so that it does not progress to this severity.*

53 Relieving engorgement when a mother is not breastfeeding is discussed in the Additional Information section for this session.
54 See Session 11 for details of how to express milk.

Assessment of a mother with a blocked duct or mastitis

- The important part of treatment is to improve the drainage of milk from the affected part of the breast.
  - Observe a breastfeed. Notice where the mother puts her fingers and if she presses inwards, perhaps blocking the milk flow.
  - Notice if her breasts are very heavy. If the blocked duct or mastitis is in the lower area, lifting the breast while feeding the baby may help that part of the breast to drain better.
  - Ask about frequency of feeds and if the baby is allowed to feed for as long as the baby wants.
  - Ask about pressure from tight clothes, especially a bra worn at night, or trauma to the breast.

Treatment of mastitis

- Explain to the mother that she MUST:
  - Remove the milk frequently (if not removed, an abscess may form).
  - The best way to do this is to continue breastfeeding her baby frequently.
  - Check that her baby is well attached.
  - Offer her baby the affected breast first (if not too painful).
  - Help the milk to flow.
  - Gently massage the blocked duct or tender area down towards the nipple before and during the feed.
  - Check that her clothing, especially her bra, does not have a tight fit.
  - Rest with the baby so that the baby can feed often. The mother should drink plenty of fluids. The employed mother should take sick leave if possible.

Rest the mother, not the breast!

- If the mother or baby is unwilling to feed frequently, it is necessary to express the milk[55]. Give this milk to the baby. If the milk is not removed, milk production can cease and the breast becomes more painful, possibly resulting in an abscess.

Drug treatment for mastitis

- Anti-inflammatory treatment is helpful in reducing the symptoms of mastitis. Ibuprofen is appropriate if available. A mild analgesic can be used as an alternative.
- Antibiotic therapy is indicated if:
  - The mother has a fever for twenty four hours or more.
  - There is evidence of possible infection, for example an obviously infected cracked nipple.
  - The mother's symptoms do not begin to subside within 24 hours of frequent and effective feeding and/or milk expression.
  - The mother's condition worsens.
- The prescribed antibiotic[56] must be given for an adequate length of time. Ten to fourteen days is now recommended by most authorities to avoid relapse.

55 See Session 11 for details on expressing milk.
56 Generally oral antibiotics are used - erythromycin, flucloxacillin, dicloxacillin, amoxacillin, cephalexin. See *Mastitis: causes and management* WHO/FCH/CAH/00.13 for further information.

Mastitis in the woman who is HIV-positive

- In a woman who is HIV-positive, mastitis or nipple fissure (especially if bleeding or oozing) may increase the risk of HIV transmission.
- If an HIV-positive woman develops mastitis, an abscess or a nipple fissure, she should avoid breastfeeding from the affected breast while the condition persists. She must express milk from the affected breast, by hand or pump, to ensure adequate removal of milk. This is essential to prevent the condition becoming worse, to help the breast recover, and to maintain milk production. The health worker should help her to ensure that she is able to express milk effectively.
- Antibiotic treatment is usually indicated in a woman with HIV. The prescribed antibiotic must be given for an adequate length of time. Ten to fourteen days is now recommended by most authorities to avoid relapse.
- If only one breast is affected, the infant can feed from the unaffected side, feeding more often and for longer to increase milk production. Most infants get enough milk from one breast. The infant can feed from the affected breast again when the breast has recovered.
- If both breasts are affected, the mother will not be able to feed from either side. The mother will need to express her milk from both breasts. Breastfeeding can resume when the breasts have recovered.
- The health worker will need to discuss other interim feeding options (AFASS). The mother may decide to heat-treat her expressed milk[57], or to give home prepared or commercial formula. The infant should be fed by cup[58].
- Sometimes a woman may decide to stop breastfeeding at this time, if she is able to give another form of milk safely. She should continue to express enough milk to allow her breasts to recover and to keep them healthy, until milk production ceases.

3. Sore Nipples 10 minutes

- Breastfeeding should not hurt! Some mothers find their nipples are slightly tender at the beginning of a feed for a few days. This initial tenderness disappears in a few days as the mother and baby become better at breastfeeding. If this tenderness is so painful that the mother dreads putting the baby to the breast, or there is visible damage to the nipples, this soreness is not normal, and needs attention.
- The most common early causes of nipple soreness are simple and avoidable. If mothers in your facility are getting sore nipples, make sure that all maternity staff know how to help mothers get their babies attached to the breast. If babies are attached well at the breast and breastfeed frequently, most mothers do not get sore nipples.

57 This milk can be heat treated and used for the baby. Small lumps may form in the milk after heating, but these lumps can be removed and the milk used.
58 Session 11 describes milk expression and cup feeding.

Observation and history taking for sore nipples

- Ask the mother to describe what she feels.
  - Pain at the start of a feed that fades when the baby lets go, is most likely related to attachment.
  - Pain that gets worse during the feed and continues after the feed has finished, often described as burning or stabbing, is more likely to be caused by *Candida albicans*[59].
- Look at the nipples and breast.
  - Broken skin is usually caused by poor attachment.
  - Skin that is red, shiny, itchy, and flaky, at times with loss of pigmentation, is more often seen with Candida.
  - Remember Candida and trauma from poor attachment can exist together.
  - Similar to other parts of the body, the nipple and breast can have eczema, dermatitis and other skin conditions.

- *Show slides of sore nipples:*
- *12/5:This nipple has an open sore in a line across the tip of the nipple. This is likely to be the result of poor attachment*
- *12/6:This nipple is red and sore. Notice the red marks and bruising around the areola. This is likely to be the result of poor attachment*

- Observe a complete breastfeed. Use the *Breastfeed Observation Aid*.
  - Check how the baby goes on the breast, and his or her attachment and suckling.
  - Notice if the mother ends the feed or if the baby lets go himself or herself.
  - Observe what the nipple looks like at the end of the feed. Does it look misshapen (squashed), red or have a white line?
- Check the baby’s mouth for tongue-tie and Candida.
- Ask the mother about previous history of Candida or anything that might contribute to Candida such as recent use of antibiotics.
- If a mother is using a breast pump, check that it is appropriately positioned and the suction is not too high.
- Decide the cause of the sore nipple. The most common causes of sore nipples are:
  - Poor attachment.
  - Secondary to engorgement, or both caused by poor attachment.
  - Baby is ‘pulled’ off the breast to end a feed without the mother first breaking the seal between the baby's mouth and the breast.
  - A breast pump that may cause excess stretching of the nipple and breast or rub against the breast.
  - Candida that can be passed from the baby’s mouth to the nipples.
  - The infant’s tongue-tie (short frenulum), which prevents the tongue reaching over the lower gum thus causing friction on the nipple.
- There are many other less common causes of sore nipples. Arrange for a mother to be seen by someone who has training to investigate these less common causes, if needed[60].

59 Oral candida is also called thrush.
60 This course does not train participants to deal with complex or rare breastfeeding situations. Establish to whom participants could refer a mother if her breastfeeding difficulty is complex.

Management of sore nipples

- Reassure the mother that sore nipples can be healed and prevented in future.
- Treat the cause of the sore nipples:
    - Help the mother improve attachment and positioning. This may be all that is needed. If necessary, show the mother how to feed baby in different feeding positions. This helps to ease any pain mother is experiencing because baby will be putting pressure on a different area of the sore nipple and allows her to continue feeding while the nipple heals.
    - Treat skin conditions or remove source of irritation. Treat Candida both on the mother's nipples and in the baby's mouth.
    - If the baby's frenulum is so short that the tongue cannot extend over the lower gum, and the mother's nipples have been sore for two to three weeks, consider if the baby should be referred and the frenulum clipped.
- Suggest comfort measures while the nipples are healing:
    - Apply expressed breast milk to the nipples after a breastfeed to lubricate and soothe the nipple tissue.
    - Apply a warm, wet cloth to the breast before the feed to stimulate letdown.
    - Begin each breastfeed on the least sore breast.
    - If the baby has fallen asleep at the breast and is no longer actively feeding but remains attached, gently remove the baby from the breast.
    - Wash nipples only once a day, as for normal body hygiene, and not for every feed. Avoid using soap on nipples, as it removes the natural oils[61].

What <u>does not help</u> sore nipples

- DO NOT stop breastfeeding to rest the nipple. The mother may become engorged, which makes it harder for the baby to attach to the breast. The milk supply will decrease if milk is not removed from the breast.
- DO NOT limit the frequency or length of breastfeeds. Limiting feeds will not help if the basic problem is not addressed. One minute of suckling with poor attachment can cause damage to the breast. Twenty minutes of suckling with good attachment will not cause damage to the breast.
- DO NOT apply any substances to the nipples that would be harmful for the baby to take into his or her mouth, which requires removal before breastfeeding, or which can sensitise the mother’s skin and make the nipple more sore. An ointment is not a substitute for correct attachment.
- *(Include if nipple shields are available in the area)* DO NOT use a nipple shield as a routine measure. A nipple shield may cause more problems. Some shields result in less stimulation of the breast and reduce the amount of milk transferred, which may lead to reduced production. It can affect the way the baby sucks resulting in more soreness when it is stopped. It also presents a health risk to the baby from the possibility of contamination.

61 This is normal washing procedure, not just for when nipples are sore.

4. Small group work 25 minutes

Divide participants into groups of 4 people. Give each group one case study and ask them to discuss the questions. Encourage them to role-play so that they actually ask the questions and use communication skills. Remind them that practicing the actual phrases that they will use with the mother is useful even if they find it challenging at first.
Point to the list of Communication Skills and remind participants to use them. Facilitators can circulate to ensure that participants understand the exercise.
If there is time, you can ask each group to role-play their case study for the other groups.

- *Ask if there are any questions. Then summarise the session.*

Session 12 Summary

Examination of the mother's breasts and nipples

- Always observe the condition of the mother's breasts when you observe a breastfeed. In most cases, this is all that you need to do, as you can see most important things when she is putting the baby onto the breast, or as the baby finished a feed.
- Examine mothers' breasts only if a difficulty arises. Ensure privacy and ask permission before touching.
- Look at the shape of breasts and nipples. Look for swelling, skin damage or redness. Look for evidence of past surgery.
- Talk to the mother about what you have found. Highlight the positive signs you see. Build her confidence in her ability to breastfeed.

Preventing engorgement

- Fullness is normal in the early days. Over-fullness is not normal.
- Follow the practices of the Ten Steps:
  - Facilitate skin-to-skin contact immediately after birth and initiate exclusive, unlimited breastfeeding within one hour after birth (Step 4).
  - Show mothers who need help how to attach their baby at the breast (Step 5).
  - Show mothers how to express their milk (Step 5).
  - Breastfeeding exclusively with no water or supplements (Step 6).
  - Keep mothers and babies together in a caring atmosphere (Step 7).
  - Encourage babies to feed at least 8-12 times in 24 hours during the early days (Step 8).
  - Give no pacifiers, artificial teats, or bottles (Step 9).

Treating engorgement

- Remove the breast milk and promote continued lactation.
- Correct any problems with attachment.
- Gently express some milk to soften the areola and help the baby's attachment.
- Breastfeed more frequently.
- Apply cold compresses to the breasts after a breastfeed for comfort.
- Build the mother's confidence and help her to be comfortable.

Blocked milk ducts and mastitis (breast inflammation)

- May be caused by infrequent breastfeeding, inadequate removal of milk, or pressure on a part of the breast.

Treatment

- Improve milk flow:
  - Check the baby's attachment and correct/improve if needed.
  - Check for tight fitting clothing or pressure from fingers
  - Support a large breast to assist milk flow
- Suggest:
  - Breastfeed frequently. If necessary, express milk to avoid fullness.
  - Gently massage towards the nipple.
  - Apply a moist, warm cloth to the area before a breastfeed to help milk flow.
  - Rest the mother not the breast.
  - Anti-inflammatory treatment or analgesic if in pain.

- Antibiotic therapy is indicated if:
  - The mother has a fever for longer than 24 hours.
  - The mother's symptoms do not begin to subside after 24 hours of frequent and effective feeding and/or milk expression.
  - The mother's condition worsens.
- If a woman is HIV-positive and develops mastitis or an abscess she should:
  - Avoid breastfeeding from the affected breast while the condition persists.
  - Express the milk from that breast, which can be heat-treated and given to the baby.
  - Rest, keep warm, take fluids, pain relief and antibiotics.

Sore nipples

- Decide the cause, including observation of a feed. Examine the nipples and breasts.
- Reassure the mother.
- Treat the cause - poor attachment is the most common cause of sore nipples.
- Avoid limiting the frequency of feeds.
- Refer skin conditions, tongue-tie and other less common conditions to a suitably trained person.

Session 12 Knowledge Check

What breastfeeding difficulties would suggest to you that you need to examine a mother's breasts and nipples?

Rosalia tells you she became painfully engorged when she breastfed her last baby. She is afraid it will happen with the next baby too. What will you tell her about preventing engorgement?

Bola complains that her nipples are very sore. When you watch her breastfeed, what will you look for? What can you do to help her?

Describe the difference between a blocked duct, non-infective mastitis and infective mastitis. What is the most important treatment for all of these conditions?

Stories for small group practice

Mrs A. tells you her breast is sore. You look at her breast and see that a section of it is red, tender to touch and Mrs A. indicates a lump. She does NOT have a temperature. Her baby is 3 weeks old. Mrs. A probably has ......

What could you say to empathise with Mrs. A?

What are possible reasons this situation has occurred?

What questions might you want to ask?

What relevant information will you give Mrs. A?

What suggestions can you offer Mrs A so that this problem can be overcome and breastfeeding can continue?

What practices could be encouraged to avoid this problem re-occurring?

Mrs B. tells you that she feels as if she has had flu for the last two days. She aches all over and one breast is sore. When you look at the breast a part of it is hot, red, hard and very tender. Mrs B has a temperature and feels too ill to go to work.

Her baby is 5 months old and breastfeeding was going well. The baby feeds frequently at night. Mrs B expresses her milk before she goes to work to leave for the baby and feeds the baby as soon as she comes home from work. She is very busy at work and finds it hard to get time to express during the day.

Mrs B. probably has ......

What could you say to empathise with Mrs. B?

What are possible reasons this situation has occurred?

What questions might you want to ask?

What relevant information will you give Mrs. B?

What suggestions can you offer Mrs B so that this problem can be overcome and breastfeeding can continue?

What practices could be encouraged to avoid this problem re-occurring?

Mrs C's baby was born yesterday. She tried to feed him soon after birth, but he did not suckle well. Mrs C says her nipples are inverted and she cannot breastfeed. You examine her breasts and notice that her nipples look flat when not stimulated. You ask Mrs C to use her fingers to stretch her nipple and areola out a short way. You can see that her nipple stretches easily.

What could you say to accept Mrs C's idea about her nipples?

How could you build her confidence?

What practical suggestions could you give Mrs C to help her feed her baby?

Additional information Session 12

Breast examination

First *Ask*

- How did breasts change during pregnancy? If breasts become larger and the areola become darker during pregnancy this usually indicates that there is plenty of milk producing tissue.
- Has she had breast surgery at any time, which may have cut some milk ducts or nerves, or for a breast abscess?

Next *look*

- Are the breasts very large or very small? Reassure the woman that small and large breasts all produce plenty of milk, but sometimes a mother may need help with attachment.
- Are there any scars which may indicate past problems with breastfeeding such as an abscess or surgery?
- Is either breast swollen, with tight shiny skin? This suggests engorgement with oedema. Normal fullness, when the milk comes in, makes the breast larger, but not swollen with shiny oedematous skin.
- Is there redness of any part of the breast skin? If diffuse or generalised, this may be due to engorgement. If localised, this may be a blocked duct (small area) or mastitis (larger clearly defined area). Purple discoloration suggests a possible abscess.
- What is the size and shape of the nipples? (long or flat, inverted, very big). Could their shape make attachment difficult?
- Are there any sores or fissures (a linear sore)? This usually means that the baby has been suckling while poorly attached.
- Is there a rash or redness of the nipple?

Next *feel*

- Is the breast hard or soft? Generalised hardness, sometimes with several lumps, may be due to normal fullness or engorgement. The appearance of the skin (shiny with engorgement or normal with fullness) and flexibility of the skin (turgid) should tell you which it is.
- Talk to the mother about what you have found. Highlight the positive signs you see. Do not sound critical about her breasts. Build her confidence in her ability to breastfeed.

Assisting the mother with inverted nipples

- If the mother appears to have inverted nipples:
  - Ensure uninterrupted skin-to-skin contact immediately after birth and at other times, to encourage the baby to find his/her own way to the breast, in his/her own time.
  - Give extra help with positioning and attachment in the first day or two, before the breasts become full. Explain to the mother with an inverted nipple that the baby latches on to the areola not on to the nipple.
  - Help the mother to find a position that helps her baby to take the breast. For example, sometimes leaning over the baby on a table so that the breast falls towards his or her mouth can help.
  - Suggest that she gently change the shape of the areola into a cone shape or sandwich using C-shaped hold, so that baby can latch onto it.
  - Explain that babies may need time to learn and then will latch on spontaneously.
  - Suggest that the mother stroke her baby's mouth with the nipple and wait until the baby opens with a very wide mouth before bringing the baby on to the breast. Teach the mother how to recognise effective attachment.
  - Encourage the mother to help her nipples protrude before a feed. She can gently stimulate her nipple; use a breast pump, another mild suction device, or someone else sucking (if acceptable) to draw out the nipple.

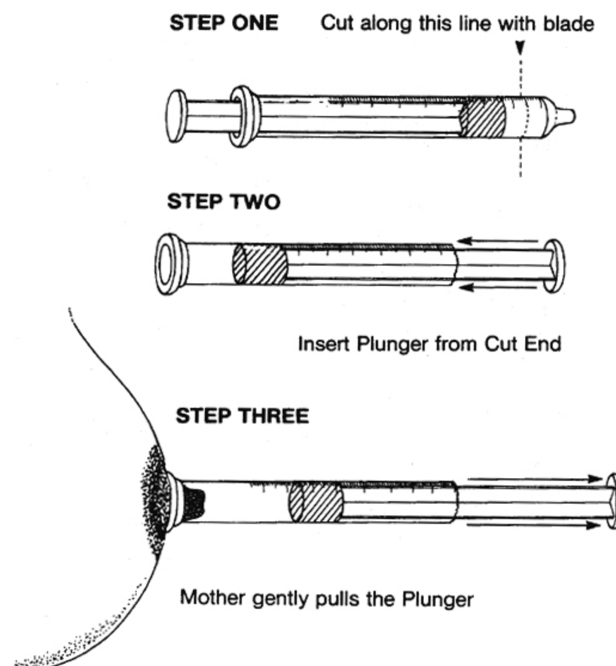
- Avoid artificial teats and pacifiers as these devices may make it more difficult for a baby to attach and take a large mouthful of breast.
- Prevent breast engorgement as this makes attachment difficult for the baby. If necessary, express and feed by cup while the baby learns to breastfeed.

Syringe method for treatment of inverted nipples

This method can help an inverted nipple to stand out and assist a baby to attach to the breast. The mother must use the syringe herself, so that she can control the amount of suction and avoid hurting her nipple.

- Take a syringe at least 10 ml in size and if possible 20 ml so that it is large enough to accommodate the mother's nipple.
- Cut off the adaptor end of the barrel (where the needle is usually fixed). You will need a sharp blade or scissors.
- Reverse the plunger so that it enters the cut (now rough) end of the barrel.
- Before she puts the baby to her breast, the mother:
  - Pulls the plunger about one-third of the way out of the barrel.
  - Puts the smooth end of the syringe over her nipple.
  - Gently pulls the plunger to maintain steady but gentle pressure for about 30 seconds.
  - Pushes the plunger back slightly to reduce suction as she removes the syringe from her breast.
- Tell the mother to push the plunger back to decrease the suction, if she feels pain. This prevents damaging the skin of the nipple and areola.

Slide 10/7: Syringe method for an inverted nipple



Adapted from: N. Kesaree, et al, (1993) Treatment of Inverted Nipples Using Disposable Syringe, *Journal of Human Lactation;* 9(1): 27-29

Class discussion: Engorgement (optional)

Maria gave birth three days ago to a healthy baby. Her baby is in the nursery and is only brought to her for feeding at scheduled times. As the midwife makes rounds in the postpartum ward, she finds that Maria's breasts are much engorged and Maria says they are painful.

What can the midwife do to help this mother?

How could her engorgement have been prevented?

How can Maria avoid becoming engorged again?

RELIEVING ENGORGEMENT WHEN A MOTHER IS NOT BREASTFEEDING

Support the breasts well to make her more comfortable (however, do not bind the breasts tightly, as this may increase her discomfort).

Apply compresses. Warmth is comfortable for some mothers, while others prefer cold compresses to reduce swelling and pain.

Express enough milk to relieve discomfort. Expression can be done a few times a day when the breasts are overfull. It does not need to be done if the mother is comfortable. Remove less milk than the baby would take, so as not to stimulate milk production.

Relieve pain. An analgesic, such as ibuprofen or paracetamol, may be used[62].
Some women use plant products such as teas made from herbs or plants, or raw cabbage leaves, placed directly on the breast to reduce pain and swelling.

The following are not recommended:
Pharmacological treatments to reduce milk supply[63]. The above methods are considered more effective in the long term.

62 Aspirin is not the first choice for breastfeeding women as it has been linked with Reye's condition in the infant.
63 Pharmacological treatments which have been tried include:
– Stilboestrol (diethylstilbestrol) - side effects include withdrawal bleeding, and thromboembolism.
– Oestrogen - breast engorgement and pain decreases but may recur when the drug is discontinued.
– Bromocriptine - inhibits prolactin secretion. Side effects including maternal deaths, seizures and strokes. Withdrawn from use for postpartum women in many countries.
– Cabergoline - inhibits prolactin secretion. Considered safer than bromocriptine. Possible side effects include headache, dizziness, hypotension, nose bleed.

Treatment of a breast abscess

- If mastitis is not treated early, it may develop into an abscess. An abscess is a collection of pus within the breast. It produces a painful swelling, sometimes with bruising discoloration.
- An abscess needs to be aspirated by syringe or surgical drainage by a health worker.
- The mother[64] may continue breastfeeding if the drainage tube or incision is far enough from the areola not to interfere with attachment.
- If the mother is unable or unwilling to breastfeed on that breast because of the location of the abscess, she needs to express her milk. Her baby can start to feed again from that breast as soon as it starts to heal (usually 2-3 days).
- The mother can continue to feed from the unaffected breast as normal.
- Good management of mastitis should prevent formation of an abscess.

Nipple shields

- Sometimes a nipple shield is offered as a solution for a baby who does not suck well or if the mother has sore nipples. Nipple shields may cause difficulties. They can:
    - Reduce stimulation of the breast and nipple and thus can reduce milk production and the oxytocin reflex.
    - Increase the risk of low weight gain and dehydration.
    - Interfere with the baby suckling at the breast without a shield.
    - Harbour bacteria or thrush and infect the baby.
    - Cause irritation and rub the mother's nipple.
- The mother, baby and health worker may become dependent on the shield and find it difficult to do without it.
- Stop and think before recommending a nipple shield. If used as a temporary measure for a clinical need, ensure that the mother has follow-up assistance to enable her to discontinue using the shield.

Candida (Thrush) infection

- Thrush is an infection caused by the yeast Candida albicans. Candida infections often follow the use of antibiotics to treat mastitis, or other infections, or if used following a caesarean section. It is important to treat both the mother and the baby so that they will not continue to pass the infection back and forth.
- Soreness from poor positioning can occur at the same time as Candida; before starting treatment for Candida, check for other causes of nipple pain such as poor attachment.

- *12/8: Candida on a dark-skinned nipple*
- *12/9: Candida on a light-skinned nipple*

- Signs of a thrush infection are:
    - The mother's nipples may look normal or red and irritated. There may be deep, penetrating pain and the mother may state that her nipples "burn and sting" after a feed.
    - The nipples remain sore between feeds for a prolonged time despite correct attachment. This may be the only sign of the infection.
    - The baby may have white patches on the skin in his or her mouth.
    - The baby may have a fungal diaper rash.
    - The mother may have a vaginal yeast infection.

64 If the mother is HIV-positive, it is not recommended that she continue to breastfed from a breast with an abscess.

Treatment for thrush

- Use a medication for the nipples and for the baby's mouth according to local protocols. Continue to use for 7 days after soreness has gone. Use medication that does not need to be washed off the nipples before a breastfeed.

- *Name some commonly used treatments for Candida.*

- Some women find it helpful to air dry and expose the nipples to sunlight after each breastfeed. Change bra daily and wash it in hot soapy water. If breasts pads are worn, replace them when they become moist.
- If a vaginal Candida infection is present, treat it. The woman's partner may need to be treated also.
- Wash hands well after changing the baby's diapers and after using the toilet.
- Stop the use of any dummies, pacifiers, teats, or nipple shields; if they are used, they must be boiled for 20 minutes daily and replaced weekly.

Tongue-Tie

- An infant may have "tongue-tie" because of a short frenulum, which restricts tongue movement to the extent that the tongue cannot extend over the lower gum. The tongue then rubs against the base of the nipple causing soreness *(slide 12/10).*

SESSION 13
MATERNAL HEALTH CONCERNS

Session Objectives:

On completion of this session, participants will be able to:

1.	Discuss nutritional needs of breastfeeding women.	10 minutes
2.	Outline how breastfeeding assists in child spacing.	10 minutes
3.	Discuss breastfeeding management when the mother is ill.	15 minutes
4.	Review basic information on medications and breastfeeding.	10 minutes
	Total session time	**45 minutes**

Materials:

Slide 13/1: Lactation Amenorrhea Method LAM
Slide 13/2: Recommendation for women who are HIV-positive

MATERNAL ILLNESS AND BREASTFEEDING – a copy for each participant (optional).

BREASTFEEDING AND MOTHER'S MEDICATION SUMMARY – a copy for each participant (optional).
Full copy for display of WHO/UNICEF *Breastfeeding and Maternal Medications* (2002).

Further Reading for facilitators:

Hepatitis B and breastfeeding, UPDATE No.22, November 1996 CHD, WHO Geneva.

Breastfeeding and maternal tuberculosis, UPDATE No. 23, Feb 1998 CHD, WHO Geneva.

WHO. *Nutrient requirements for people living with HIV/AIDS – report of a technical consultation.* (May 2003) Geneva.

WHO/UNICEF *Breastfeeding and maternal medication: Recommendations for drugs in the eleventh WHO model list of essential drugs* (2002) CHD, WHO, Geneva.

WHO/UNICEF *Acceptable medical reasons for use of breast-milk substitutes*. World Health Organization, Geneva 2009.

1. Nutritional needs of breastfeeding women 10 minutes

- *Show picture of two mothers in bed talking to nurse or at table talking to each other.*

Fatima's mother told her that she needs to eat special foods to make good milk and that some foods can affect her baby.

Ask: What can you say to a woman who asks about what she should eat or avoid eating when she is breastfeeding?
Wait for a few responses.

- All mothers need to eat enough foods and drink enough liquids to feel well and be able to care for their family. If a mother eats a variety of foods in sufficient amounts, she will get the proteins, vitamins and minerals that she needs. Mothers do not need to eat special foods or avoid certain foods when breastfeeding.
- A woman's body stores fat during pregnancy to help make milk during breastfeeding. She makes milk partly from these stores and partly from the food that she eats.
- A mother needs to be in a state of severe malnutrition for her breast milk production to decrease significantly. If there is a shortage of food, she first uses her own body stores to make milk. Her milk may be reduced in quantity and slightly lower in fat and some vitamins compared to that of a well-nourished mother, but it is still good quality.
- Poor food choices or missing a meal does not reduce milk production. However, a mother who is overworked, lacks time to eat, and does not have sufficient food or who lacks social support may complain of tiredness and a low milk supply. Care for the mother and time to feed the baby frequently, will help to ensure adequate milk production.
- Breastfeeding is important for food security for the whole family. If resources are limited, it is better to give the mother food so that she can care for her baby than to give artificial feeds to the baby. Discuss this with the family.
- Breastfeeding mothers are often encouraged to drink large quantities of fluid. Drinking more fluid than is needed for thirst will not increase milk supply, and may even reduce it. A mother should drink according to her thirst or if she notices that her urine output is low or concentrated.

- *Mention any food assistance programmes that are available in the area for pregnant or breastfeeding women.*

2. How breastfeeding helps to space pregnancies 10 minutes

Fatima has heard that breastfeeding helps to space her pregnancies, but she wants to know if this is true.

Ask: What can you tell a mother about how breastfeeding helps to space children?
Wait for a few responses.

- Breastfeeding can delay the return of ovulation and menstruation; and thus can help to space pregnancies. The Lactation Amenorrhea Method (LAM) helps women who wish to use breastfeeding for child spacing.

- *Show slide 13/1: LAM*

- The LAM method is 98% effective in preventing conception if three conditions are met:
  - the mother is not menstruating, and
  - the mother is exclusively breastfeeding, (day and night) with no very long intervals between feeds, and
  - baby is less than 6 months old.
- If any of these three conditions are not met, it is advisable for the mother to use another method of family planning to achieve pregnancy delay.
- Most family planning methods are compatible with breastfeeding with exception of oestrogen containing contraceptive pills.

3. Breastfeeding management when the mother is ill 15 minutes

Fatima has heard from a neighbour that if a breastfeeding mother gets a fever or needs to take any medications that she must stop breastfeeding.

Ask: What can you tell a mother about breastfeeding if the mother is ill?
Wait for a few responses.

- Women can continue to breastfeed in nearly all cases when they are ill. There are many benefits to continuing breastfeeding during illness:
  - A woman's body makes antibodies against her infections, which go into the breast milk and which can help to protect the baby from the infection.
  - Suddenly stopping breastfeeding can lead to sore breasts[65] and the mother may develop a fever.
  - A baby may show signs of distress, such as crying a lot, if breastfeeding suddenly stops.
  - It may be difficult to return to breastfeeding after the mother has recovered as her milk production may have decreased.
  - Stopping breastfeeding leaves the baby exposed to all the hazards of artificial feeding.
  - Breastfeeding is less work than preparing formula, sitting up to feed and sterilising bottles. The baby can lie beside the mother and feed as needed without her moving.
  - Mother and baby can stay together, so she knows her baby is safe and happy.
  - The baby continues to receive the benefits of breastfeeding: protects health, best nutrition, optimal growth, and development, less risk of obesity and later health problems.
- Mothers with chronic illness may need extra help to establish breastfeeding. For example, a mother with diabetes may experience complications during birth, which can interfere with establishing breastfeeding, but with appropriate help she can breastfeed normally.

Ask: What kind of help with breastfeeding may be needed if a mother is ill?
Wait for a few responses.

65 Mastitis was covered in Session 12.

To assist breastfeeding when a mother is ill:

- Explain the value of continuing to breastfeed during her illness.
- Minimise separation, keeping mother and baby together.
- Give plenty of fluids, especially if she has a fever.
- Assist the mother to find a comfortable position for feeding or show someone else how to help her to hold the baby comfortably.
- If breastfeeding is difficult or the mother is too unwell, she may be able to (or helped to) express her milk and the baby can be feed breast milk by cup until she is better.
- Choose treatments and medications that are safe for breastfeeding.
- Assist the mother to re-establish breastfeeding after she recovers, if there has been an interruption during the illness.

Ask: Are there any situations related to the mother's health that may require the use of foods other than breast milk?

Wait for a few responses.

- There are very few situations related to maternal health that require the use of artificial feeds. It is important to distinguish if it is the illness that is a contraindication to breastfeeding or the situation surrounding the illness that makes breastfeeding difficult.
- **Hospitalisation** of itself is not a contraindication to breastfeeding. If a mother is hospitalised, the baby should be kept with the mother. If the mother is not able to care for her infant, a family member can be asked to stay and help her with the infant. **Maternal use of substances**: Maternal use of nicotine, alcohol, ecstasy, amphetamines, cocaine and related stimulants has been demonstrated to have harmful effects on breastfed babies; alcohol, opioids, benzodiazepines and cannabis can cause sedation in both the mother and the baby. Mothers should be encouraged not to use these substances and given opportunities and support to abstain.
- If a mother has a **common contagious illness** such as a chest infection, sore throat, or gastrointestinal infection, there is a risk to the baby from being near the mother and exposed to the infection though contact, coughing and such. When the mother continues to breastfeed, the baby receives some protection from the infection. If breastfeeding stops at this time, the baby is at higher risk of contracting the mother's infection. For most maternal infections, including tuberculosis, hepatitis B, and mastitis, breastfeeding is not contraindicated.
- If a mother is not able to breastfeed, efforts should be made to find a wet-nurse (of known HIV-negative status) or to obtain heat-treated breast milk from a breast-milk bank.

- *Give participants a copy of* MATERNAL ILLNESS AND BREASTFEEDING *and let them read through the list in their own time. Clarify any points as needed.*

If the mother has HIV/AIDS

- *Show slide 13/2*

- As we said Session 1, in the situation where the woman is tested and found to be HIV-positive, the recommendation is:

> **UNICEF/WHO Infant Feeding Recommendation for HIV-positive Women**
>
> Exclusive breastfeeding is recommended for HIV-infected mothers for the first six months of life unless replacement feeding is acceptable, feasible, affordable, sustainable and safe for them and their infants before that time. When replacement feeding is acceptable, feasible, affordable, sustainable and safe avoidance of all breastfeeding by HIV-infected mothers is recommended

- Each woman who is HIV-positive needs a one-to-one discussion with a trained person to help her to decide the best way to feed her child in her individual situation.

4. Medications and breastfeeding[66] 10 minutes

- If a mother requires medication, it is often possible for the doctor to prescribe a drug that may be safely taken during breastfeeding. Most drugs pass into breast milk only in small amounts and few affect the baby. In most cases, stopping breastfeeding may be more dangerous to the baby than the drug.
- A medication the mother takes is more likely to affect a premature baby or a baby less than two months old than an older baby. If there is a concern, it is usually possible to find a drug or treatment that is more compatible with breastfeeding.
- If a breastfeeding mother is taking a drug that you are not sure about:
  - Encourage the mother to continue breastfeeding while you find out more.
  - Watch the baby for side effects such as abnormal sleepiness, unwillingness to feed, and jaundice, especially if the mother needs to take the drug for a long time.
  - Check the WHO list, (explain where to get this list or other locally available list that is breastfeeding supportive).
  - Ask a more specialized health worker, for example a doctor or pharmacist for more information, and to find an alternative drug that is safer if needed.
  - If the baby has side effects and the mother's medication cannot be changed, consider a replacement feeding method, temporarily if possible.
- Traditional treatments, herbal medicines and other treatments may have effects on the baby. Try to find out more about them if they are commonly used in your area. Meantime encourage the mother to continue breastfeeding and to observe the baby for side effects.

- *Give participants the summary of "BREASTFEEDING AND MOTHER'S MEDICATION" or tell them where they can obtain the full text of the booklet. Point out the categories of drugs in the summary – contraindicated, and continue breastfeeding with monitoring.*
- *Ask if there are any questions. Then summarise the session.*

66 The target audience for this course are not expected to recommend medications.

Session 13 Summary

Nutritional needs of breastfeeding women

- All mothers need to eat enough foods so that they will feel well and be able to care for their families.
- Mothers do not need to eat special foods or avoid certain foods when breastfeeding.
- If the food supply is limited, it is better for the health and nutrition of both mother and baby and less expensive to give the mother food so that she can care for her baby than to give artificial feeds to the baby.

How breastfeeding helps to space births

- The LAM method is 98% effective if three conditions are met:
  - the mother is not menstruating;
  - the mother is exclusively breastfeeding, with no very long intervals between feeds;
  - baby is less than 6 months old.
- If any of these three conditions are not met it is advisable for the mother to use another method of family planning.

Breastfeeding management when the mother is ill

- You can assist breastfeeding during maternal illness by:
  - Explaining the value of continuing to breastfeed during illness.
  - Minimising separation, keeping mother and baby together.
  - Giving plenty of fluids, especially if there is a fever.
  - Assisting the mother to find a comfortable position for feeding.
  - Assisting mother to express, and feeding the baby breast milk by cup if the mother is too unwell to breastfeed.
  - Choosing treatments and medications that are safe for breastfeeding.
  - Assisting mother and baby to re-establish breastfeeding when the mother recovers, if she has not breastfed during her illness.

Medications and breastfeeding

- Often, if a medication is needed, one can be used that is safe for her baby. Most drugs pass into breast milk only in small amounts and few affect the baby. In most cases, stopping breastfeeding may be more dangerous to the baby than the drug.
- Watch the baby for side effects and find out more about the drug if you are worried. Babies under 2 months of age are more likely to show side effects.
- Know where to get more information or advice on medications.

Session 13 Knowledge Check

A pregnant woman says to you that she cannot breastfeed because she would need to buy special foods for herself that she could not afford. What can you say to her to help her see that breastfeeding is possible for her?

A co-worker says to you that a mother will need to stop breastfeeding because she needs to take a medication. What can you reply to this co-worker?

Maternal Illness and Breastfeeding

Exclusive breastfeeding in the first six months of life is particularly beneficial for mothers and infants and is the norm. Nevertheless, a small number of health conditions of the infant or the mother may justify recommending that she does not breastfeed temporarily or permanently. These conditions, which concern very few mothers and their infants, are listed below together with some health conditions of the mother that, although serious, are not medical reasons for using breast-milk substitutes.

Mothers who are affected by any of the conditions mentioned below should receive treatment according to standard guidelines.

Mothers who may need to avoid breastfeeding

This category includes women with HIV infection: if replacement feeding is acceptable, feasible, affordable, sustainable and safe (AFASS).

Mothers who may need to avoid breastfeeding temporarily

Includes mothers with severe illness that prevents a mother from caring for her infant, for example sepsis; Herpes simplex virus type 1 (HSV-1): direct contact between lesions on the mother's breasts and the infant's mouth should be avoided until all active lesions have resolved;

In this group are also included those with ***maternal medication***:

- Sedating psychotherapeutic drugs, anti-epileptic drugs and opioids and their combinations may cause side effects such as drowsiness and respiratory depression and are better avoided if a safer alternative is available.
- Radioactive iodine-131 is better avoided given that safer alternatives are available - a mother can resume breastfeeding about two months after receiving this substance.
- Excessive use of topical iodine or iodophors (e.g. povidone-iodine), especially on open wounds or mucous membranes, can result in thyroid suppression or electrolyte abnormalities in the breastfed infant and should be avoided.
- Cytotoxic chemotherapy requires that a mother stops breastfeeding during therapy.

Mothers who can continue breastfeeding, although health problems may be of concern *This group includes:*

- Breast abscess: breastfeeding should continue on the unaffected breast; feeding from the affected breast can resume once treatment has started.
- Hepatitis B: infants should be given hepatitis B vaccine, within the first 48 hours or as soon as possible thereafter.
- Hepatitis C;
- Mastitis: if breastfeeding is very painful, milk must be removed by expression to prevent progression of the condition.
- Tuberculosis: mother and baby should be managed according to national tuberculosis guidelines.

Substance use:

- Maternal use of nicotine, alcohol, ecstasy, amphetamines, cocaine and related stimulants has been demonstrated to have harmful effects on breastfed babies.
- Alcohol, opioids, benzodiazepines and cannabis can cause sedation in both the mother and the baby.

Mothers should be encouraged not to use these substances and given opportunities and support to abstain.

References

HIV and infant feeding: update based on the technical consultation held on behalf of the Inter-agency Task Team (IATT) on Prevention of HIV Infection in Pregnant Women, Mothers and their Infants, Geneva, 25–27 October 2006. Geneva, World Health Organization, 2007 (http://whqlibdoc.who.int/publications/2007/9789241595964_eng.pdf, accessed 23 June 2008).

Breastfeeding and maternal medication: recommendations for drugs in the Eleventh WHO Model List of Essential Drugs. Geneva, World Health Organization, 2003.

Mastitis: causes and management. Geneva, World Health Organization, 2000 (WHO/FCH/CAH/00.13; http://whqlibdoc.who.int/hq/2000/WHO_FCH_CAH_00.13.pdf, accessed 24 June 2008).

Hepatitis B and breastfeeding. Geneva, World Health Organization, 1996 (Update No. 22).

Breastfeeding and Maternal tuberculosis. Geneva, World Health Organization, 1998 (Update No. 23).

Background papers to the national clinical guidelines for the management of drug use during pregnancy, birth and the early development years of the newborn. Commissioned by the Ministerial Council on Drug Strategy under the Cost Shared Funding Model. NSW Department of Health, North Sydney, Australia, 2006.

Further information on maternal medication and breastfeeding is available at the following United States National Library of Medicine (NLM) website:
http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?LACT

Breastfeeding and Mother's Medication - Summary

Breastfeeding contraindicated:

- Anticancer drugs (antimetabolites).
- Radioactive substances (stop breastfeeding temporarily).

Continue breastfeeding:

Side-effects possible; monitor baby for drowsiness:

- Selected psychiatric drugs and anticonvulsants (see individual drug).

Use alternative drug if possible:

- Chloramphenicol, tetracyclines, metronidazole, quinolone antibiotics (e.g. ciprofloxacin).

Monitor baby for jaundice:

- Sulfonamides, dapsone, sulfamethoxazole+trimethoprim (cotrimoxazole), sulfadoxine+pyrimethamine (fansidar).

Use alternative drug (may decrease milk supply):

- Estrogens, including estrogen-containing contraceptives, thiazide diuretics, ergometrine.

Safe in usual dosage:

Most commonly used drugs:

- Analgesics and antipyretics: short courses of paracetamol, acetylsalicylic acid, ibuprofen; occasional doses of morphine and pethidine.
- Antibiotics: ampicillin, amoxicillin, cloxacillin and other penicillins, erythromycin.
- Antituberculosis drugs, anti-leprosy drugs (see dapsone above).
- Antimalarials (except mefloquine, fansidar), anthelminthics, antifungals.
- Bronchodilators (e.g. salbutamol), corticosteroids, antihistamines.
- Antacids, drugs for diabetes, most antihypertensives, digoxin.
- Nutritional supplements of iodine, iron, vitamins.

(Adapted from "Breastfeeding counselling: A training course", WHO/CDR/93.3-6)

More information on specific medications can be found in the publication:
WHO/UNICEF Breastfeeding and Maternal Medications (2003)
www.who.int/child-adolscent-health/

SESSION 14
ON-GOING SUPPORT FOR MOTHERS – STEP 10

Session Objectives:

On completion of this session, participants will be able to:

1.	Describe how to prepare a mother for discharge.	15 minutes
2.	Discuss availability of follow-up and support after discharge.	10 minutes
3.	Outline ways of protecting breastfeeding for employed women.	10 minutes
4.	Discuss sustaining breastfeeding for the second year or longer.	10 minutes
5.	Discuss group support for breastfeeding.	30 minutes
	Total session time	**75 minutes**

Materials and Preparation:

Slide 14/1: Mother-to-mother support

Contact details for support in the area, such as mother's groups, community support or feeding clinics in the health centre.

Information on any national legislation or directives on workplace support for breastfeeding.

Information on any national complementary feeding guidelines and policies – check that these materials support exclusive breastfeeding for six months.

Flip chart of Communication Skills from Session 2.

Ask two participants to play the part of 'mothers' in the group support activity and give them the questions to ask.

Further reading for facilitators:

Community based strategies for breastfeeding promotion and support in developing countries. WHO, Department of Child and Adolescent Health and Development (CAH), 2003.

Green, C P. *Mother Support Groups: A Review of Experience in Developing Countries*. BASICS II. 1998 http://www.basics.org/publications/pub/msg/contents.htm

Guiding principles for complementary feeding of the breastfed child . PAHO/WHO, 2003.

1. Preparing a mother for discharge 15 minutes

- Step 10 of the Ten Steps to Successful Breastfeeding states:
  "Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or clinic".
- The health facility where the baby is born can do much to initiate and establish breastfeeding or safer replacement feeding if necessary. However, the need for support continues after she is discharged.
- In some communities, mothers are well supported by friends and family. Where this is not available, for example if the mother is living away from her own family, the health facility needs to arrange some alternative follow up. This must be discussed with mothers before discharge.

- *Tell the next point in the "story":*

Fatima and Miriam are preparing to go home from the hospital with their babies.

Ask: What does a mother need before she leaves the hospital to go home with her baby?
Wait for a few responses.

- Before a mother leaves a maternity facility, she needs to:
  - Be able to feed her baby.
  - Understand the importance of exclusive breastfeeding for 6 months and continued breastfeeding after the introduction of complementary foods to two years and beyond.
  - Be able to recognize that feeding is going well.
  - Find out how to get the on-going support that she needs.

Be able to feed her baby

- A health worker trained in breastfeeding support should observe every mother and baby at a breastfeed and make sure that the mother and baby know how to breastfeed.
- A mother should:
  - Know about baby-led, or demand feeding, and how babies behave.
  - Be able to recognise her baby's feeding signs.
  - Be able to position her baby for good attachment at the breast.
  - Know the signs of effective breastfeeding and a healthy baby.
  - Know what to do if she thinks that she does not have enough milk.
  - Be able to express her milk.
- If a mother is not breastfeeding, a health worker trained to assist with replacement feeding needs to check the mother knows:
  - What type of replacement feeding to use that is acceptable, feasible, affordable, sustainable and safe for her situation.
  - How to obtain the replacement milk in sufficient quantities.
  - How to reduce the risks associated with replacement feeding.
- A health worker should observe that the mother (or other caregiver) is able to prepare a replacement feed and feed the baby in a safe manner before the mother and baby are discharged from the maternity unit.

Understand the importance of exclusive breastfeeding and continued breastfeeding

- When a mother returns home there may be pressures on her to supplement her baby with foods or fluids other than breast milk. Before she leaves the maternity facility, remind her of the importance of exclusive breastfeeding for the first six months.
- After six months, a baby needs foods in addition to breast milk. Breast milk continues to provide good nutrition and protection from illness as well as closeness to the mother. Breast milk is valuable for health and nutrition for two years and longer.
- If the mother is HIV-positive and is breastfeeding, it is best if the baby is exclusively breastfeeding. Mixed feeding, giving both breastfeeding/breast milk and other foods and fluids has been shown to increase the risk of transmission of HIV.

Be able to recognize that feeding is going well

- Sometimes we might say to a mother to contact us if there is a problem. A new mother may not know what is normal and what is a problem. Signs that a mother with a young baby can look for that indicate breastfeeding is going well include:
  - Baby is alert and active, feeding at least 8 times in 24 hours.
  - Baby settles and sleeps for some periods in 24 hours.
  - Baby has six or more wet diapers/nappies in 24 hours with pale, diluted urine and is passing stools three or more times a day[67].
  - Breasts are fuller before feeds than after feeds. Breasts and nipples are comfortable and not sore.
  - Mother feels confident caring for her baby in general.

Discuss how to get the support that she needs

- Mothers need support. When a mother goes home she needs a family member, friend, health worker or other person who will help her to become confident as she learns about caring for her baby. A mother needs help particularly if she:
  - Has many demands on her time such as caring for other children and household tasks.
  - Is a first time mother.
  - Has difficulty feeding her baby.
  - Needs to work outside the home and leave her baby.
  - Is isolated with little contact with supportive people.
  - Receives confusing and conflicting advice from many people.
  - If she or the baby has a health problem.
- Sometimes a mother thinks that she should be able to do everything without needing any help. She may think that if she looks for help it will be thought that she is a bad mother or cannot cope.
- When any of us learn a new job or skill we need to take time to learn it and we may need to ask for help from other people. It is similar with learning to be a mother; there are new skills to learn. It may not be enough that support services exist in the area. A new mother may need encouragement to look for help and to use support that is available.
- Follow-up of the mother who is replacement feeding is very important to ensure that she is using the option properly and if she should want to change feeding option at any time she is assisted.

67 In an older baby, stooling may be less frequent. Stools should be soft.

- When talking to a woman during her pregnancy it can be helpful to mention that there are support services available in case she has any difficulty. This may help her to feel confident from the beginning.

2. Follow-up and support after discharge 10 minutes

Resources available in the local community

- *Show slide 14/1: Mother-to-mother support*

Fatima and Miriam meet sometimes, sit, and talk about their babies. Fatima likes to hear what Miriam has to say because this is Miriam's second child and Fatima values Miriam's experience and knowledge.

Ask: Who in the community could provide ongoing support for a mother in feeding and caring for her baby?

Wait for a few replies.

Family and friends

- Families and friends can be an important source of support for breastfeeding in general. However, support for exclusive breastfeeding through six months is often lacking in families where other women have always given early supplements and foods.
- Mothers who are replacement feeding need support from family and friends also. The mother who is HIV-positive may need support to replacement feed exclusively, and avoid mixing breastfeeding and replacement feeding.

Primary Care and community health workers

- Any time a health worker is in contact with a mother and young child, the health worker can help and support the mother in feeding and caring for her baby. If the health worker cannot do so themselves, they may be able to refer the mother to someone else who can provide support.
- Community health workers are often nearer to families than are hospital-based health workers and may be able to spend more time with them. To be effective, community health workers need to be trained to support mothers to feed and care for their babies.
- Community health centres can have "lactation clinics" which means that there are trained staff who will help a breastfeeding mother at the time that she contacts the clinic rather than waiting for an appointment. It may be effective to see more than one mother together so they can exchange experiences. A mother support group can come out of these clinics.
- Health workers can set an example in their own communities by exclusive breastfeeding their own babies with the addition of appropriate complementary foods after six months of age.

Mother to mother support

- This support is usually community-based and may be provided one-to-one or group-based. An experienced mother can provide individual support to a new mother. Ask the experienced mother for permission to give her name to new mothers in her area.
- A group may be started by a few mothers themselves or by a health or community worker. There may be special support groups for women who are HIV-positive.

- The help is easily accessible and free or very inexpensive. Ideally mothers who have been trained to give support are available at any time to help a mother with difficulties[68].
- In a mother-to-mother support group:
  - Help can be available in the mother's own community.
  - Women's traditional patterns of getting information and support from relatives and friends are reinforced.
  - Feeding and caring for a baby are seen as normal activities rather than problems that need to be solved by a health worker.
  - Discussion groups are led and help is given by experienced mothers.
  - Mothers feel reassured and become more self-confident.
  - Pregnant women as well as more experienced mothers are welcome.
  - Mothers can help each other outside of group meetings and build friendships.
- Some mother-to-mother support groups are part of larger networks that provide training, written materials and other services. The experienced mothers leading or facilitating the groups can be invited to contribute to health worker training, and to visit wards and clinics to introduce themselves to pregnant women and new mothers.

When formal support is not available

- If there are no existing support groups available in your area, before the mother leaves the maternity facility:
  - Discuss what family support she has at home.
  - If possible, talk with family members about how they can help.
  - Give the mother the name of a person to contact at the hospital, or at a clinic. She should go for a follow-up check for her and her baby in the first week after birth, which should include observation of a breastfeed. She should also go at any other time if she has any difficulties or questions.
  - She should also go for her routine postpartum 6-week check-up, and take her baby with her, so that she or he can be followed-up too.
  - Remind mothers of the key points about optimal feeding.
  - It is often helpful to give written materials as a reminder. These must be accurate, and not from companies that produce or distribute breast-milk substitutes, bottles or teats.
  - If possible, contact mothers after they are home to learn how feeding is going.
- Some hospitals establish mother support groups that are lead by a health worker and meet in the hospital. There may also be a feeding clinic where the mother can attend if she has a feeding difficulty.

- *Give any specific information such as contact details for any sources of support in the area.*

Baby-friendly communities

- Some communities have established the concept of "baby-friendly communities." Your facility may wish to foster this concept in the surrounding area. While there is no internationally recognized approach, the basic elements include community discussion of needs as reflects all applicable Ten Steps to Successful Breastfeeding.

68 Support may also be provided by telephone, letter and in some areas by e-mail.

- Baby-friendly communities may include:
  - Health system, or local health care provision, is designated “baby-friendly” and actively supports both early and exclusive breastfeeding.
  - Access to a referral site with skilled support for early, exclusive and continued breastfeeding is available and community approved.
  - Support is provided for age-appropriate, frequent, and responsive complementary feeding with continued breastfeeding.
  - Mother-to-mother support system, or similar, is in place.
  - No practices, distributors, shops or services that violate the International Code are present in the community.
  - Local government or civil society creates and supports the implementation of change that actively supports mothers and families to succeed with optimal infant feeding practices. Examples of this change could be time-sharing of tasks, granting authority to transport a breastfeeding mother for referral if needed, identification of “breastfeeding advocates or protectors” among community leaders, and breastfeeding supportive workplaces.

3. Protecting breastfeeding for employed women 10 minutes

- Many mothers introduce early supplements or stop breastfeeding because they have to return to work. Health workers can help mothers to continue to give their babies as much breast milk as possible when they return to work.

Ask: Why is continuing to breastfeed after return to employment recommended?
Wait for a few replies.

- As well as the general importance of breastfeeding discussed earlier in the course, a woman who works outside the home may value breastfeeding because of:
  - Less illness in the baby, so she misses less time from work to care for a sick child.
  - Ease of night feeds, thus mothers gets more sleep.
  - Opportunity to spend time with the baby and continue the closeness to the baby.
  - A chance to a rest while she feeds the baby.
  - A special, personal relationship with her baby.

Ask: If an employer asked you why she or he should support a woman to breastfeed after she returns to employment, what could you say?
Wait for a few replies.

- Employers who support women to continue breastfeeding benefit also:
  - Mothers are away from work less because their children are healthy.
  - Mothers can concentrate on their work because they have less concern about their babies’ health.
  - Employers retain skilled workers.
  - Women are more interested in working for employers who are supportive.
  - Families and the community think well of the employers that are supportive.
  - Breastfed babies grow up to be a healthy future workforce.

Ask: What are the key points to discuss with a mother preparing to return to employment?
Wait for a few replies.

- Some weeks before the mother is due to go back to work, discuss:
    - Could the baby go to work with her?
    - Could the baby be cared for near her workplace so that she could go to feed the baby at break times or could the baby be brought to her?
    - Could the mother work shorter hours or fewer days until the baby is older?
- If it is not possible to breastfeed the baby during the working day, suggest:
    - Breastfeed exclusively and frequently during maternity leave.
    - Continue to breastfeed whenever mother and baby are together – nights, early morning, and days off.
    - Do not start other feeds before needed – a few days before going back to work is enough.
    - Learn to express milk and leave it for the carer to give to the baby.
    - Express milk about every 3 hours at work, if possible. This keeps up the milk supply and keeps the breasts more comfortable. The breasts will make more milk when the milk is removed[69].
    - Teach the carer to give feeds in a safe and loving way, by cup rather than by bottle, so that the baby wants to suckle from the breast when mother is home.
    - Have contact and support from other mothers who are working and breastfeeding.
- Much of the information about breastfeeding and working also applies to mothers who are students.

- *(Optional) Most health workers are women and many are likely to be mothers of young children. How could your health facility be a breastfeeding supportive workplace?*
- *Mention any national laws or policies that protect working mothers.*

4. Sustaining continued breastfeeding for 2 years or longer 10 minutes

- There is no specific age at which breastfeeding is no longer important. Breastfeeding continues to provide closeness to the mother, protection from illness and good nutrition.
- Breastfeeding an older baby/young child can be valuable if the child becomes ill. Often the child will be able to breastfeed when they are not interested in eating other foods. This helps the child to get fluids as well as helping to avoid weight loss during the illness.
- Breastfeeding can be soothing to a child who is in pain or upset.
- Breastfeeding an older baby is different from breastfeeding a newborn. As a baby becomes more alert, she or he may be distracted easily during breastfeeds by noises and activity. A mother may find that feeding in a quiet place limits distractions.
- Young children may breastfeed once or twice a day or more frequently. Some may breastfeed only if they are hurt or upset.
- Mothers may need special support to overcome competing pressures on her, whether from the workplace or family, as the child gets older. A discussion can help her identify what might work in her situation.

69 See Session 11 for how to express and store milk.

Complementary feeding[70]

- After six months of age, the baby needs other foods while continuing to receive sufficient breast milk. This is called *complementary feeding* because it complements the breastfeeding; it does not replace it.
- Until a baby is year old, breast milk (or breast-milk substitutes if not breastfed) should provide the main part of the baby's diet. Continue to offer the breast frequently as well as offering suitable foods from the family meals. The period from 6-12 months of age is a time for learning how to eat a wider range of foods and textures.
- To maintain the milk supply, encourage the mother to continue to offer the breast before the complementary food.
- A child stops breastfeeding when they are ready as a natural part of their development. A child should not be stopped suddenly from breastfeeding, as this can cause distress to the child and the mother, sore breasts for the mother, as well removing a source of food from the child. Allow the child to decrease the number of feeds gradually, and be sure he or she gets plenty of other foods each day as well as continued attention from the mother.

Other national health programs for mother and child (include those that are locally in place)

- Continued support for breastfeeding can occur through other national health and nutrition programs including:
    - Safe Motherhood Programmes: mothers are seen through pregnancy to ensure safe birth.
    - The Integrated Management of Childhood Illness (IMCI): child seen for recurrent illness.
    - The Expanded Programme of Immunization (EPI): child is seen at frequent intervals
    - Micronutrient supplementation programs for iron and vitamin A supplementation.
    - Neonatal screening programmes: usually done at 6-10 days after birth, which is an important time to ensure that breastfeeding is going well.
    - Early child development programmes: child is monitored for growth and development during the routine checks ups in child welfare.
    - Family planning programmes: mother seen for family planning at any point of time, usually through health visitors.

5. Group support - class activity 30 minutes

Introduce the activity:

- The facilitators in a mother to mother support group need to use good communication skills and have adequate infant feeding knowledge. These experienced mothers may attend a training course to gain these skills.
- In this activity we can see how the communication skills can be used to help new mothers in a group.

Ask 6-8 participants to sit in a circle. Give two of these participants questions to ask as 'new mothers'. The other participants in the 'mother-to-mother group' are the experienced mothers providing support to the new mothers. Chose one of the participants to be the trained peer 'facilitator' i.e. an experienced breastfeeding mother who will help guide the discussion and ensure all 'mothers' have a chance to contribute.

70 Detailed information on complementary feeding is in *Infant and Young Child Feeding Counselling: An integrated course.*

Ask the remaining participants to form an outer circle and to be observers.

Ask the participants to talk with the mother who is asking the question and to help her, playing the part of other mothers in the group. No one should lecture. Try to keep it like a friendly conversation. Remember the communication skills practiced in this course.

Sample discussion questions for the group discussion are given or other questions can be suggested by the group. Discussion points are included if the facilitator needs to provide information that is not coming from the group. However, if the group is responding well, do not turn it into a lecture. This is mother-to-mother group support, not a clinical case study.

Encourage the 'experienced mothers' in the group to briefly share how they overcame similar concerns when their babies were the same age. This sharing helps takes some of the 'focus' off the 'new mother'. It also helps bring out the essence of peer support where mothers learn from each other and common breastfeeding concerns are shown to have many solutions.

Sample "problem" 1:

James is eight months old and healthy. He eats two meals of porridge every day and he breastfeeds whenever I am at home from my job. Yesterday he refused to breastfeed during the evening and the night. This morning when he woke up he also did not want the breast at all. He gets four bottle feeds a day of formula, so maybe I should stop breastfeeding.

Possible discussion points

Remember to listen to the mother and to respond in a way that encourages her to talk and to explore her own situation.

What would the mother like the situation to be?

What has the mother tried already? Has the mother any thoughts on what she could try?

- *Sometimes babies of this age refuse the breast due to teething or a sore mouth, do you think this might be happening?*
- *What is the feed like? Some babies can be distracted when breastfeeding. A busy mother may rush breastfeeding.*
- *How often is 'whenever I am home'? Could more time be spent with the baby, e.g. is the baby with her and breastfeeding on her day off if she is shopping or visiting?*
- *Where do the mother and baby sleep? (together?) How does the baby feed during the night?*
- *How much does the baby take in the feeds when she is away, could this be reduced, especially in the afternoon so the baby is ready for a breastfeed when the mother comes home?*
- *Giving some vegetable, fruit, or meat would give a wider range of foods and the baby may not be as full as when he has just porridge. What does she think about offering more variety of foods rather than only porridge?*
- *Breast milk continues to be an important source of food into the second year.*

Sample "problem" 2:
Clara is three months old and she is breastfeeding quite frequently. But she doesn't get satisfied. Sometimes after I finish feeding her, she cries again very soon. I think my milk is going away. Will I need to start giving her foods from a spoon or other milk?

Possible discussion points
Remember to listen to the mother and to respond in a way that encourages her to talk and to explore her own situation.
What would the mother like the situation to be?
What has the mother tried already? Has the mother any thoughts on what she could try?

> *Sometimes a baby needs some help to feed well. Has the mother asked a knowledgeable person to look at the way that the baby is feeding?*
>
> *Sometimes a baby wants to be fed, to have contact or wants to be more comfortable before the clock says that it is time to feed. What does the mother think about carrying the baby more and giving the breast when the baby is unsettled to sooth the baby?*
>
> *If the baby is growing well, what are some suggestions for soothing a crying baby?*

Conclude the activity:
Ask the 'mothers' in the group how they felt their concerns were discussed. Ask the 'experienced mothers' how they felt they used their communication skills. Then ask the 'observers' what they noticed. Remember to also reinforce skills that were well used.

- *Ask if there are any questions. Then summarise the session.*

Session 14 Summary

Preparing mothers for discharge

- Before the mother leaves the maternity facility, she needs to:
  - Be able to feed her baby.
  - Know the importance of exclusive breastfeeding for 6 months and continued breastfeeding after the introduction of complementary foods.
  - If replacement feeding, know how to get suitable milk and prepare the feed in a safe manner.
  - Be able to recognize that feeding is going well.
  - Find out how to get the on-going support that she needs.

Follow-up and support after discharge

- Before the mother leaves the maternity facility:
  - Discuss what family support she has at home.
  - If possible, talk with family members about how they can provide help and support.
  - Give the mother the name of a person to contact at the hospital/clinic or in the community to arrange a follow-up check in the first week at home, to include observation of a breastfeed. Arrange for the routine 6-week check-up as well.
  - Tell mother about any mother support groups in her area or the names of experienced mothers willing to support a new mother
  - Remind the mother of the key points about how to breastfeed and practices that help.
  - Be sure that the mother receives no written materials that market breast-milk substitutes or bottles.
  - Contact the mother after she is home to learn how feeding is going,

Protecting breastfeeding for employed women

- Breastfeeding continues to be important when the mother returns to employment.
- Supporting breastfeeding has benefits to the employer.
- Some weeks before the mother is due to go back to work, discuss:
  - Could the baby go to work with her?
  - Could the baby be cared for near her workplace?
  - Could the mother work shorter hours or fewer days until the baby is older?
- If it is not possible to breastfeed the baby during the working day, suggest:
  - Breastfeed exclusively and frequently during maternity leave.
  - Learn to express the milk and leave it for the carer to give to the baby.
  - Have contact and support from other mothers who are working and breastfeeding.

Sustaining continued breastfeeding for 2 years or longer

- Breastfeeding continues to provide closeness to the mother, protection from illness and good nutrition to the older baby and young child.
- Until a baby is a year old, breast milk (or breast-milk substitutes if not breastfed) should provide the main part of the baby's diet. After six months of age, the baby needs continued frequent breastfeeding and other foods in addition to breast milk or replacement milk. Giving these foods is called *complementary feeding* because it complements the breastfeeding; it does not replace it.
- Recommend that the mother continue to offer the breast frequently, preferably before complementary foods, to maintain her milk supply. If she wishes to wean, suggest that she allow the baby to reduce the number of feeds gradually and be sure he or she gets plenty of food each day.

Session 14 Knowledge Check

List three sources of support for mothers in your community.

Give two reasons why mother-to-mother support may be useful to mothers.

Give two reasons why breastfeeding is important to the older baby and the mother.

Additional information for Session 14

Developing a mother-to-mother support group

- Mothers in many communities are best helped where there are mother-to-mother support groups. These groups do not need to be big or have highly trained facilitators. They do need warm-hearted and kind facilitators, who know how to breastfeed and who can help other women. If there is not such a support group in your community, perhaps you can help to establish one, and foster its growth.
  - Identify experienced breastfeeding mothers and learn if they would be acceptable to other mothers as "facilitators". Young mothers can help each other well.
  - Provide accurate information and help to the facilitators, but let them lead the group.
  - Encourage the group to meet rather frequently, in a mother's home or other community location. At meetings, mothers can share how they feel, difficulties they have had, and how they solved them. You can suggest special topics that could be discussed.
  - Tell every mother about the nearest support group and introduce her to a facilitator if possible.
  - Be available to the facilitators to give accurate information and support when asked.
  - Include facilitators in some training activities at the hospital or lactation clinic.
  - Provide training in communication and listening skills to facilitators.

SESSION 15
MAKING YOUR HOSPITAL BABY-FRIENDLY

Session Objectives:

On completion of this session, participants will be able to:

1.	Explain what Baby-friend practices mean	20 minutes
2.	Describe the process of BFHI assessment	10 minutes
3.	Discuss how BFHI can be included in existing programmes.	5 minutes
	Total session time	**35 minutes**

Activities are included in this session that require additional time. The needs of the group of participants will help you decide which activities to include.

The Self-Appraisal Tool can be completed for the health facility. This will take 1-2 hours or more depending on how many people (mothers and staff) are asked for their views.

A plan can be made using the planning questions listed. A plan will take an hour or more to write in addition to the session time, and more time will be needed for discussion with those involved with and affected by the plan.

Materials:

Slide 15/1: Course Aims

List of the *Ten Steps to Successful Breastfeeding* from Session 1.

Hospital Self-Appraisal Tool for the WHO/UNICEF Baby-friendly Hospital Initiative and The Global Criteria – one copy for each group of 4-6 participants. If the optional activity to complete the tool is done, more copies will be needed.

For optional policy activity:

Copies of the hospital policy or example policy and *The Hospital Infant Feeding Policy Aid* – one for each group of 4-6 participants.

For optional planning activity:
Planning slides (5)
Example of a plan – one copy for each small group.

Further reading for facilitators:

Other sections in this set:
BFHI materials: Revised, Updated and Expanded for Integrated Care

Section 1: Background and Implementation

Section 4: Hospital Self-Appraisal and Monitoring

1. What Baby-friendly practices mean 20 minutes

- In the first session, we saw that the aim of this course was:

- *Show slide 15/1 and read it out*

> The aim of this course is that
> every staff member will confidently support mothers
> with early and exclusive breastfeeding, and that this facility moves towards achieving Baby-friendly designation

- A Baby-friendly Hospital:
  - Implements the Ten Steps to Successful Breastfeeding.
  - Accepts no free supplies or samples and no promotional material from companies that manufacture or distribute breast-milk substitutes.
  - Fosters optimal feeding and care for those infants that are not breastfed.

- *Point to Ten Steps list on display or remind participants that they received a handout, if they received it in Session 1.*
- *Ask a participant to read out **Step 1**.*

Ask: Why is it important for a hospital to have a written policy that is visible?
Wait for a few replies.

- A policy defines what the staff and service are required to do as their routine practice, and should be mandatory. It helps parents to know what care they can expect to receive.
- To satisfy the requirements of the BFHI, a policy has to cover all the Ten Steps, as well as prohibiting free supplies of breast-milk substitutes, bottles and teats and promotional materials.
- In high HIV prevalence areas, the policy must clearly define what the staff and services are required to do as their routine practice as related to mothers who are not breastfeeding.

- *Ask if there are any questions on this Step.*
- *Ask a participant to read out **Step 2**.*

Ask: Why is it important for a hospital to train their staff?
Wait for a few replies.

- If staff are used to working in a facility that does not use baby-friendly practices, they will need training to learn about these practices.
- Knowledgeable staff together can make the necessary changes, eliminate unsupportive practices, and develop baby-friendly practices that assist mothers and babies to breastfeed.

- *Ask if there are any questions on this Step.*

- *Ask a participant to read out **Step 3**.*

Ask: Why is it important for a hospital to talk with pregnant women?
Wait for a few replies.

- Pregnant women need accurate information that does not promote a commercial product such as infant formula. This information should be relevant to the specific woman. If pregnant women do not discuss the information with a knowledgeable health worker, they may make decisions based on incorrect information.

- *Ask if there are any questions on this Step.*

- *Ask a participant to read out **Step 4**.*

- This Step is now interpreted as:
  Place babies in skin-to-skin contact with their mothers immediately following birth for at least an hour and encourage mothers to recognise when their babies are ready to breastfeed, offering help if needed.

Ask: Why is it important to help mothers and babies to have immediate contact?
Wait for a few replies.

- Skin to skin contact helps:
  - To keep the baby warm, and to stabilize breathing and heat rate.
  - Breastfeeding to get started
  - The mother and baby to get to know each other.
- If the baby or mother need immediate medical care at birth, this skin to skin contact can start as soon as they are stable.

- *Ask if there are any questions on this Step.*

- *Ask a participant to read out **Step 5**.*

Ask: Why is it important to show mothers and babies how to feed?
Wait for a few replies.

- Some mothers have seen little breastfeeding among their family and friends. Showing them some main points can help breastfeeding to go well.

Ask: What are the main points to look for regarding the position of a baby?
Wait for a few replies.

- The baby's body needs to be:
  - **In line** with ear, shoulder and hip in a straight line**,** so that the neck is neither twisted nor bent forward or far back;
  - **Close** to the mother's body so the baby is brought to the breast rather than the breast taken to the baby;
  - **Supported** at the head, shoulders and if newborn, the whole body supported.
  - **Facing** the breast with the baby's nose to the nipple as she or he comes to the breast.

Ask: What are the main points to look regarding the attachment of the baby to the breast?
Wait for a few replies.

- Signs of good attachment are:
  - Chin touching breast (or nearly so)
  - Mouth wide open
  - Lower lip turned outwards
  - Areola: more visible above than below the mouth

Ask: What are the main signs of effective suckling?
Wait for a few replies.

- Signs of effective suckling are:
  - Slow, deep sucks and swallowing sounds
  - Cheeks full and not drawn in
  - Baby feeds calmly
  - Baby finishes feed by him/herself and seems satisfied
  - Mother feels no pain

Ask: If the mother is expressing milk for her baby, what points can help her to express?
Wait for a few replies.

- It can help hand expression if the mother can:
  - Encourage the milk to flow
  - Find the milk ducts
  - Compress the breast over the ducts
  - Repeat in all parts of the breast.

Ask: If a baby is not breastfeeding, what does the mother need to learn about feeding?
Wait for a few replies.

- The mother needs to know:
  - What kind of replacement feeding is acceptable, feasible, affordable, sustainable and safe (AFASS) in her situation.
  - How to obtain, prepare and feed the replacement feeds safely.

- *Ask if there are any questions on this Step.*

- *Ask a participant to read out* ***Step 6****.*

Ask: Why is it important to give newborn infants only breast milk?
Wait for a few replies.

- Breast milk coats the baby's system like a paint to protect it. Other fluids or foods can wash away this protection. Other fluids and foods can introduce infections to the baby.
- There is information available to discuss if it is thought there is a medical reason to not encourage exclusive breastfeeding.

- *Ask if there are any questions on this Step.*

- *Ask a participant to read out **Step 7** and **Step 8**.*

Ask: Why is it important for mothers and babies to be together 24 hours a day?
Wait for a few replies.

- Rooming-in helps a mother to learn the feeding cues of her baby and how to care for her baby. It helps to feed in response to those cues (demand feeding) rather than to feed by a clock. Babies who have to cry to be fed use up energy crying and may fall asleep without feeding well.

- *Ask if there are any questions on this Step.*

- *Ask a participant to read out **Step 9**.*

Ask: Why is it important to avoid giving artificial teats and pacifiers?
Wait for a few replies.

- The use of artificial teats or pacifiers may:
  - Interfere with the baby learning to breastfeed.
  - Affect milk production.
  - Indicate the mother (or health worker) finds it hard to care for the baby and needs assistance.

- *Ask if there are any questions on this Step.*

- *Ask a participant to read out **Step 10**.*

Ask: Where in this community could a mother get support for breastfeeding after she leaves the birth facility?
Wait for a few replies.

- Support for breastfeeding and other aspects of caring for a baby, may be available from:
  - Family and friends
  - Health workers
  - Organised support groups and counsellors
  - Informal or volunteer support groups and counsellors
  - Other community services
- The need for support and where to find support should be discussed with each mother before she is discharged after birth.

- *Ask if there are any questions on this Step.*

- Hospitals must abide by the International Code and the subsequent resolutions in order to be recognised as baby-friendly.
- The overall aim of the **International Code** of Marketing of Breast-milk Substitutes is the safe and adequate nutrition of all infants.

Ask: How can you help to achieve this aim?
Wait for a few replies.

- To achieve this aim we must:
  - Protect, promote and support breastfeeding.
  - Ensure that breast-milk substitutes (BMS) are used properly when they are necessary.
  - Provide adequate information about infant feeding.
  - Prohibit the advertising or any other form of promotion of BMS.
  - Report breaches of the Code (and/or local laws) to the appropriate authorities.

- *Ask if there are any questions on the Code.*

- **Mother friendly birth practices** assist a woman to feel competent, in control, supported and ready to interact with her alert and responsive baby who.

Ask: What labour and birth practices can help to achieve this aim?
Wait for a few replies.

Supportive practices include:
- support during labour,
- limiting invasive interventions,
- paying attention to the effects of pain relief,
- offering light food and fluids,
- avoiding unnecessary caesarean sections, and
- facilitating early mother and baby contact.

- When health facilities work to implement the practices of the Baby-friendly Initiative, the aim is to not only gain a plaque or award. More importantly, it is to increase the well being of mothers and babies and thus benefit the wider community.
- The Initiative is a *Baby* friendly rather than *Breastfeeding* friendly initiative. Most of the practices in a baby-friendly hospital also benefit babies and mothers who are not breastfeeding.

2. The process of Baby-friendly Assessment 10 minutes

Self-Appraisal

- The BFHI process begins when the hospital decides to make the changes, and forms a group or committee with a co-coordinator to take responsibility. Usually this consists of senior people in the hospital who can make decisions, and staff who are interested in breastfeeding and who know something about it.
- The committee arranges for 2-3 people to use the Self-Appraisal Tool to review their policies and practices that may help or hinder breastfeeding. The experiences of the mothers and staff are a key source of information to assess if practices are in place.

- *Show participants the Self-Appraisal Form and give them a few minutes to look the layout – there are questions and to answer yes or no about each practice. They do not need to look at it in detail.*

- The yes/no boxes on the form should be filled in honestly with regard to a normal day. Items for which it is hoped that they will be in place soon, or practices that happen on a perfect day, do not reflect the current situation. Imagine an external assessor came today, what would they find?
- Once the hospital can see which of its practices are supportive and which are not, it can make a plan of action that will lead to a service that is more supportive. A plan with a timetable is necessary to keep the project moving forward. It can also assist in setting a budget and to obtain funding[71].
- Training, such as this course, is usually needed early in the process. When all staff have received the required training, and the new practices are in place, the hospital can conduct a repeat self-appraisal.
- When a hospital can answer “yes” to all the questions in the Self-Appraisal Tool, they can request an external assessment.

Optional activity (additional time needed)

The Self-Appraisal Tool can be completed for the health facility before the course or as a separate activity and discussed here. This will take 1-2 hours or more depending on how many people (mothers and staff) are asked for their views.

External assessment

- After the Self-Appraisal is completed, the committee and the co-coordinator have to work to help other staff to make the necessary changes. When changes are thought to be satisfactory, the national baby-friendly authority can carry out an external assessment using The Global Criteria. The Global Criteria are the same all over the world. The criteria cannot be made easier to meet an individual country’s or hospital’s standards, although some countries have made the criteria stricter.
- Often, one or more external assessors come for a preliminary visit, to explain the assessment process, to check about the policy and training process that the hospital has been through, to make sure that they really are ready for assessment, and to help them to plan what else they may need to do. This helps to ensure that the process is educational, and not disciplinary, in case they are not yet ready. It is very discouraging when a hospital that has worked hard to improve practices does not succeed in an assessment.
- For the external assessment, a multi-disciplinary assessment team visits the maternity services and interviews staff and mothers, observes practices and reviews documentation. The external assessment can take two or more days (and nights) depending on the size of the hospital.
- When possible, documents such as the staff training curriculum, the hospital policy, breastfeeding statistics, and antenatal information, are reviewed before the assessment team arrives at the hospital.
- Interviews with pregnant women and new mothers are key to the assessment. It is also important to interview staff members who have direct contact with mothers in the maternity services, to assess their knowledge and practices. It is not sufficient that senior management report on activities.
- The external assessment team does not designate a hospital as baby-friendly. The team completes a report that goes to the national authority responsible for BFHI, a national breastfeeding committee, or other designated body.

71 The optional activity on Planning for Change addresses this point.

- The national authorities, consulting with WHO and UNICEF as necessary, determine if the hospital will be awarded baby-friendly designation. If the hospital does not meet the criteria, it may receive a Certificate of Commitment to becoming baby-friendly and guidance on how to make the improvements needed.

On-going monitoring

- When a hospital is awarded baby-friendly status, it is required to maintain the standards of The Global Criteria and to abide by the International Code to remain designated as a baby-friendly hospital. To help maintain standards between assessments, practices need to be monitored.
- To monitor, you need to collect information about practices. It is better to collect information about an *outcome or result* rather than about *activities.* For example, it is better to measure the number of babies and mothers who have skin-to-skin contact soon after birth, rather than to measure if an information sheet listing the benefits of skin-to-skin contact is available.

Ask: What practices do you think would be useful to monitor so a hospital could see how it was doing?

Wait for a few responses.

- Monitoring is easier to do when a hospital policy is written in a way that is measurable. For example, the following statement is very difficult to monitor - "Offer mother skin to skin contact with her baby as soon as it is feasible following delivery, preferably within half an hour." How could "as soon as it is feasible," and "preferably" be measured?
- The following policy statement is easier to monitor: "Within 5 minutes of birth, all mothers regardless of feeding intention will be given their babies to hold with skin-to-skin contact for at least 60 minutes".

External re-assessment

- It is also important that hospitals that have been designated "baby-friendly" be reassessed on a regular basis. This reassessment helps to ensure that they maintain their adherence to the "Ten Steps" and the Code over time and thus continue to give mothers and babies the support they need.
- UNICEF recommends that hospitals be reassessed approximately every 3 years, but suggests that the national authority responsible for BFHI in each country make the final decisions concerning the timing and process to be followed.
- Reassessment should be conducted, as with the assessment, by an external team. Although the country can use the full assessment tool for this process, it is often more cost-effective to use a simpler, less time-consuming tool, and a small assessment team. UNICEF provides guidelines for planning for reassessment, as well as several tools that the national authority can consider using.
- Once a hospital has been reassessed, its status as baby-friendly can be renewed or, if it has slipped, it may be asked to work on any of the Steps that need improvement, before official re-designation as a baby-friendly hospital.

3. Including BFHI in existing programmes 5 minutes

- Some hospitals participate in a national or international accreditation process, quality assurance or improvement programme that identifies equity of access, quality of service and accountability as the approach to quality of care.

- The BFHI can fit into these quality assurance programmes. BFHI has measurable criteria and international standards. There are tools to assess how a hospital meets those standards and criteria. If a hospital already has a quality or accreditation system in place, the planning and monitoring tools of that system can be used.
- In a hospital, BFHI may be the responsibility of the mother and child services, a breastfeeding or infant feeding committee, or it may be part of a quality committee. Including BFHI in the responsibility of a hospital-wide quality committee can assist in raising awareness of the importance of supportive practices for breastfeeding, as well as assisting in obtaining resources to implement BFHI.
- The expertise of staff in the maternity services is usually in the care of the mother and baby. The expertise of staff in a quality office is measuring and improving the quality of the care. For example, the quality office may not know that BFHI exists and that standards and tools are available. The maternity staff may not know what the quality office can do to assist with using the Self-Appraisal Tool, with developing or fitting into an existing regular audit process, and with planning for improvement. Both these areas of expertise can be used to provide a better service, however each group will need to be aware of the other group's expertise and work together.
- BFHI can also be integrated with Safe Motherhood and/or IMCI[72] programmes. However for a hospital to be designated as a *baby-friendly hospital* it must be assessed using the specific Global Criteria of the Initiative.

- *Ask if there are any questions. Then summarise the session.*
- *There is a Closing Session Outline after the optional activity pages.*

72 Integrated Management of Childhood Illness.

Session 15 Summary

- The BFHI Self-Appraisal helps a health facility to see what practices are in place and what areas need attention. A structured plan for improvement can assist change.
- External assessment is requested when supportive practices are fully in place.
- On-going monitoring and re-assessment are needed to keep standards high.
- BFHI can be integrated into other programmes such as a hospital quality improvement programme, if one exists.

Session 15 Knowledge Check

List two reasons why a hospital might seek BFHI external assessment.

Explain, as if to a co-worker, why achieving baby-friendly designation is not the end of the process and the importance of on-going monitoring.

<u>Optional Activity:</u> Assess a Policy at least 30 minutes

- There may be an existing breastfeeding policy that needs to be reviewed. Often there is no policy and one has to be developed.
- A policy consists of a set of rules that people who are in a position to make decisions have agreed to follow. This is usually senior people from all relevant departments including midwifery, nursing, obstetrics, paediatrics, and hospital management. All need to agree to the policy before it can be implemented. This requires that they meet and discuss it. This may take a number of months.
- The policy does not need to be very long and detailed. There may be additional protocols, guidelines or information sheets to assist staff to implement the required practices.
- The policy needs to use words that are understood easily. The statements should be measurable. For example, if a policy said that "staff will do everything possible to assist breastfeeding", how would you monitor if this was happening? We say more about this below when we discuss monitoring.

Small group activity

If the course is in a hospital, review the policy of that hospital. If the course is elsewhere, review one of the sample breastfeeding policies in the Appendix to this session. Evaluate whether the policy addresses all of the *Ten Steps to Successful Breastfeeding*, includes non-acceptance of free supplies and promotional materials, and supports mothers who are not breastfeeding.

Use the *Hospital Infant Feeding Policy Checklist*. Mark any changes that could be suggested to make the policy more supportive.

To use the time well, divide the group so that small groups each look at 2-3 of the headings in the Policy Checklist, and then tell the other groups what they found. Remember to check if the policy statements are clearly written and the activities are measurable so that they are easy to monitor.

Allow 2 minutes to explain the activity, 10 minutes for the small groups to look at how the Steps are or are not included in the policy and 15 minutes for feedback to the group and discussion.

- *The policy checklist is on the next page.*

You can use the policy of the hospital where the course is taking place or there are policies to use in the following pages.
In the sample Happy Hospital Policy, items to discuss include:

- *Phrasing such as "do everything possible", "as soon as is feasible" that are difficult to monitor;*
- *There is no need for every antenatal women to have a through breast examination.*
- *Women should not be asked to choose how they would feed their baby before the importance of breastfeeding is discussed.*
- *The baby does not need to be 'put to the breast'. The baby can self-attach to his/her mother's breast. The emphasis at this time needs to be skin-to-skin contact and time, rather than taking a feed.*

Hospital breastfeeding/infant feeding policy checklist

(Note: A hospital policy does not have to have the exact wording or points as in this checklist, but should cover most or all of these key issues. Care should be taken that the policy is not too long. Shorter policies (3 to 5 pages) have been shown to be more effective as longer ones often go unread).

The policy should clearly cover the following points:		**YES**	**NO**
Step 1:	The policy is routinely communicated to all (new) staff.		
	A summary of the policy that addresses the Ten Steps and support for non-breastfeeding mothers is displayed in all appropriate areas in languages and with wording that staff and mothers can easily understand.		
Step 2:	Training for all clinical staff (according to position) includes: Breastfeeding and lactation management (20 hours minimum or covering all essential topics, including at least 3 hours of clinical practice).		
	Feeding the infant who is not breastfed.		
	The role of the facility and its staff in upholding the International Code of Marketing and subsequent WHA resolutions.		
	New staff members are trained within 6 months of appointment.		
Step 3:	All pregnant women are informed of: Basic breastfeeding management and care practices.		
	The risks of giving supplements to their babies during the first six months.		
Step 4:	All mothers and babies receive: Skin-to-skin contact immediately after birth for at least 60 minutes.		
	Encouragement to look for signs that their babies are ready to breastfeed and offer of help if needed.		
Step 5:	All breastfeeding mothers are offered further help with breastfeeding within 6 hours of birth.		
	All breastfeeding mothers are taught positioning and attachment.		
	All mothers are taught hand expression (or given leaflet and referral for help).		
	All mothers who have decided <u>not</u> to breastfeeding are: Informed about risks and management of various feeding options and helped to decide what is suitable in their circumstances.		
	Taught to prepare their feedings of choice and asked to demonstrate what they have learned.		
	Mothers of babies in special care units are: Offered help to initiate lactation offered help to start their breast milk coming and to keep up the supply within 6 hours of their babies' births.		
	Shown how to express their breast milk by hand and told they need to breastfeed or express at least 6-8 times in 24 hours to keep up their supply.		
	Given information on risks and benefits of various feeding options and how to care for their breasts if they are not planning to breastfeed.		
Step 6:	Supplements/replacement feeds are given to babies only: If medically indicated.		
	If mothers have made a "fully informed choices" after counselling on various options and the risks and benefits of each.		

	Reasons for supplements are documented.		
Step 7:	All mothers and babies room-in together, including at night.		
	Separations are only for justifiable reasons with written documentation.		
Step 8:	Mothers are taught how to recognize the signs that their babies are hungry and that they are satisfied.		
	No restrictions are placed on the frequency or duration of breastfeeding.		
Step 9:	Breastfeeding babies are not fed using bottles and teats.		
	Mothers are taught about the risks of using feeding bottles.		
	Breastfeeding babies are not given pacifiers or dummies.		
Step 10:	Information is provided on where to access help and support with breastfeeding/ infant feeding after return home, including at least one source (such as from the hospital, community health services, support groups or peer counsellors).		
	The hospital works to foster or coordinate with mother support groups and/or other community services that provide infant feeding support.		
	Mothers are provided with information about how to get help with feeding their infants soon after discharge (preferably 2-4 days after discharge and again the following week).		
The Code:	The policy prohibits promotion of breast-milk substitutes.		
	The policy prohibits promotion of bottles, teats, and pacifiers or dummies.		
	The policy prohibits the distribution of samples or gift packs with breast milk substitutes, bottles or teats or of marketing materials for these products to pregnant women or mothers or members of their families.		
Mother-friendly care:	Policies require mother-friendly practices including: Encouraging women to have constant labour and birthing companions of their choice.		
	Encouraging women to walk and move about during labour, if desired, and to assume the positions of their choice while giving birth, unless a restriction is specifically required for a complication and the reason is explained to the mother.		
	Not using invasive procedures such as rupture of membranes, episiotomies, acceleration or induction of labour, caesarean sections or instrumental deliveries, unless specifically required for a complication and the reason is explained to the mother.		
	Encouraging women to consider the use of non-drug methods of pain relief unless analgesic or anaesthetic drugs are necessary because of complications, respecting the personal preferences of the women.		
HIV*:	All HIV-positive mothers receive counselling, including information about the risks and benefits of various infant feeding options and specific guidance in selecting what is best in their circumstances.		
	Staff providing support to HIV-positive women receive training on HIV and infant feeding.		

* The **HIV-related content** in the policy should be assessed only if national authorities have made the decision that the BFHI assessment should include HIV criteria.

Policies for activity

Note that these policies may have areas that can be improved. They are not examples of policies acceptable to BFHI.

EXAMPLE A for Analysis
HAPPY HOSPITAL BREASTFEEDING POLICY

Aims

1. To increase the incidence and duration of breastfeeding.
2. To assist mothers and infants in achieving successful breastfeeding by standardising teaching, eliminating contradictory advice, and implementing practices conductive to breastfeeding success.

POLICY

ANTENATAL PERIOD
Staff should be committed to the promotion of breastfeeding and should do everything possible to enhance the woman's confidence in her ability to breastfeed.
At first antenatal visit:
(a) Perform thorough breast examination.
(b) Ascertain choice of feeding method; if undecided encourage breastfeeding.
(c) Give information leaflet that describes the benefits and management of breastfeeding.

DELIVERY ROOM
Put baby to breast as soon as it is feasible following delivery, preferably within half an hour as the infant suck is strongest at or during the first hour after birth. A nurse should be present at the first feed to offer instruction in correct technique and positioning.

POSTNATAL WARD
Demand Feeding - There should be no limit to the maximum number of feeds, but a full-term neonate is expected to need at least 5/6 feeds in a 24-hour period - with intervals of not longer than five hours.

Practice rooming in.

Avoid rigid ward routine - do not waken baby for bath/weight/temperature between feeds. Advise mother to call staff member when baby wakens, for these tasks.

Efficient communication between mother and midwives and between staff at changeover is essential if consistency of approach and advice is to be achieved.

Document feeds as follows - long good feed, short good feed, poor feed.

Give no artificial teats or pacifier (also called "dummies" or "soothers") to breastfeeding infants while breastfeeding is being established.

All mothers need to be taught while in hospital how to express and store breast milk

DISCHARGE
Give information on community based support groups, community clinic, and the availability of follow-up clinic at the hospital.

EXAMPLE B for Analysis

Note that these policies may have areas that can be improved. They are not examples of policies acceptable to BFHI.

QUALITY CARE HOSPITAL BREASTFEEDING POLICY

Staff of the Quality Care Hospital are committed to Protecting, Promoting and Supporting Breastfeeding because breastfeeding is important for both the mother and her baby. This policy helps us to provide effective and consistent information and support to pregnant women, mothers and their families.

Adherence to the Ten Steps to Successful Breastfeeding (WHO/UNICEF) and the adherence to the International Code of Marketing of Breast-milk Substitutes (1981) and its subsequent resolutions are the foundation for our practices.

1. All staff will receive orientation on our breastfeeding policy relevant to their role when joining the hospital.
2. A minimum of 18 hours training in breastfeeding management is mandatory for all staff and students caring for pregnant women, infants and young children. New staff are facilitated to avail of training, within 6 months of commencing work if not already trained. Refresher courses are offered on a regular basis.
3. Midwives must discuss the importance and basic management of breastfeeding in the antenatal period and record this discussion in the pregnant women's chart.
4. Within 30 minutes of birth, all mothers regardless of feeding intention will be given their babies to hold with skin-to-skin contact for at least 30 minutes. A family member may provide skin-to-skin when the mother is unable to do so and skin-to-skin contact later encouraged in the postnatal ward or special care when baby and/or mother are stable.
5. All mothers will be offered help to initiate breastfeeding within 30 minutes of birth. Further assistance will be offered within 6 hours by a midwife to position and attach baby on breast.
6. Rooming-in is hospital policy and unless medically/clinically indicated a mother and her baby will not be separated. Where separation of baby from mother is necessary, lactation will be encouraged and maintained.
7. Baby-led feeding will be practiced for all babies although in the early days the baby may need to be woken if sleepy or if the mother's breasts become overfull. When baby has finished feeding on one side the second breast will be offered.
8. Breastfeeding mothers will be shown by the midwife how to express their breast milk by hand, and by pump if necessary.
9. Supplements will only be given for clinical/medical need. All supplementary feeds/fluids will be recorded in the baby's hospital notes with the indication for giving the feed. Prescribed supplementary fluids will be given by cup or NG tube.
10. No teats/dummies/soothers will be given to babies while breastfeeding is being established.
11. No advertising of breast-milk substitutes, feeding bottles, teats or dummies is permissible. Mothers choosing to formula feed their infants will be individually instructed on safe formula use during the postnatal period by the midwife before discharge.
12. Before discharge, support services available in the community will be discussed with each mother.

Any deviations to this policy as regards patient care will be recorded in the mother's/baby's chart with the reason for the deviation. The staff member will sign this with the date and time.

The Quality Office will audit compliance with the hospital breastfeeding policy at least once a year.
Policy effect date:
Policy review date:

Optional activity – Planning for Change

How planning can assist change[73] at least 30 minutes

- If change is planned in a systematic way, it is more likely to result in progress. A plan helps to focus the project activities towards reaching the goal. It can form a timetable to keep the project moving forward. It can also assist in setting a budget and to obtain funding.
- There are many different systems used for planning, though most are similar and just have different names.

\- *Show slides 15/1 to15/5 for each stage of planning and read it out*

Where are we now? Slide 15/1

- The Self-Appraisal Tool will help to answer this question. List any barriers or difficulties to health workers or families in carrying out appropriate practices. Remember to make a note of activities that are going well and that can be reinforced in your plan.

Where do we want to be? Slide 15/2

- This step involves setting your goals or targets. Set a target that is specific, measurable, achievable, relevant and with a time limit. (SMART goals).
- If the target is too easy, some people may sit back and do nothing because they feel it will happen anyway. If it is too difficult or the target seems not relevant to them, people may decide they can never achieve it and so they will not try. Aim for something that is realistic to achieve within the period.

How will we get to where we want to be? Slide 15/3

- When you have decided on your goals or targets, you then need to decide the best actions to reach those goals. Many different activities can be undertaken. What you choose depends on the needs of the service, the resources available and the ability to implement and sustain the changes. There is no one best activity for every setting.
- It is important to assign to each goal or action a person who is responsible to check on progress towards reaching that goal. Large goals can be broken down into smaller goals and divided among a number of people. One person does not need to do it all.
- Set a time period for the tasks needed to achieve your targets. It can help to divide the tasks into activities that can be achieved in a few weeks. A target that is due in a year tends not to be worked on until late in the year.
- Plan ways to involve your co-workers, the families you serve and community leaders in setting and achieving the goals.

73 Originally developed by Genevieve Becker and used with permission in Session15, Sustaining Practices, in the *Complementary Feeding Counselling Course.* WHO/UNICEF 2004.

- When you are working on this step, also consider what resources are needed to carry out the actions.

How will we know we are going in the right direction? Slide 15/4

- Are you going in the right direction? Have you achieved your target or goal? If your targets and activities are specific and measurable, it is easier to know you have reached them.
- This step is also called monitoring and evaluation. Monitoring can be carried out during a project or activity to check that the activity is going in the right direction. Evaluation can be carried out during or after the project or activity is completed to measure the effectiveness of the activity. However, your evaluation measures need to be decided as part of setting your goals, not after the project is finished.

How will we sustain the practice? Slide 15/5

- The word "sustain" means to keep something going into the future. Sustained practices are achieved by making the new practices part of the regular service rather than special activities that are only in place for a short time.
- In your planning, try to find a way to connect each new activity to an existing activity or process. It is often easier to expand an existing activity than to start a completely new activity.

- *Discuss the Sample Plan. Highlight each of the planning steps.*

An additional activity is to make a plan specific to an action chosen by the participants. Developing a detailed plan may take an hour or more depending on the practice to be implemented.

Developing an Action Plan for a BFHI project[74]

Rooming-in **Example**[75]

Aim is to improve the number of mothers and babies with 24-hour rooming-in

Where are we now? What is the current situation?

Audit of rooming-in carried out on (date) ___________ showed:

___ % of mothers and babies remained together 24 hours a day.

___ % of mothers and babies remained together during the day but not rooming-in at night.

___ % of mothers and babies did not remain together 24 hours a day for medical indications.

___ % started rooming-in immediately after a normal birth.

___ % of c-section mothers started rooming-in within a half-hour of when they were able to respond to their baby.

What would we like the situation to be? What is our goal or target?

On (date) ____________, an audit of rooming-in will show:

___ % of mothers and babies remained together 24 hours a day.

___ % of mothers and babies remained together during the day but not rooming-in at night.

___ % started rooming-in immediately after a normal birth.

___ % of c-section mothers started rooming-in within a half-hour of when they were able to respond to their baby.

Any mothers and babies who did not remain together 24 hours a day will be recorded in the _____________________ with the reason for rooming-*out*.

This record will be examined every 3 months to see if there are any contributing factors to rooming-*out* that could be addressed.

How will we get to our goal? (Method)

Action	Person (s) Responsible	Start and Completion Date
All staff, professional and ancillary, **will be informed** that rooming-in is the standard policy for all mothers by means of a posted notice.		
All staff will be educated as to the reasons behind this policy appropriate to their areas of responsibility, by means of attendance at a 20-minute session on the ward.		
All relevant staff will be **taught means of assisting mothers** to settle their babies themselves, and how to explain the importance of rooming-in to mothers/parents. Staff will be educated by means of a 20-minute session on the ward and this topic addressed during the 20-hour course.		
Antenatal classes and other information sources will explain to parents the importance of rooming-in and that it is the hospital policy.		

74 Used with permission from the Baby-friendly Hospital Initiative in Ireland.
75 This Action Plan focuses on rooming-in. Other Action Plans would need to be made for other practices/Steps that needed attention.

Any mother and baby **not rooming-in** for a medical indication or by mother request will be **recorded** in the __________________ including the reason. Completion of this **record** will be **checked** weekly for the first month of the project and any non-completion addressed.		
This **record will be analysed** at the end of (one month from start) and each 3 months afterwards to see if there are any contributing factors to rooming-*out* that could be addressed. (addressing them would be a separate plan)		
The (designated person) will carry out an audit of rooming-in one night per month, randomly chosen, during the next 4 months. The results of this audit will be recorded in _________________________ and **posted** at the nurses' desk on the ward.		

How will we know we are going in the right direction? (Evaluation)
At (date, perhaps 4 months from start), the monthly random audits show an increase in rooming-in to the levels of the targets above.

For one week (date about 4 months from start), further data collected to ascertain the statistics regarding degree of rooming-in and how soon it starts as outlined above. This data collection is the responsibility of _______________

The record of rooming-*out* will be filled in with the occurrence, length of time and reason for the rooming-*out*.

A list of reasons for rooming-*out* and the number of occurrences of each reason will be complied by ____________________________

A sample of mothers (all the mothers in one week - date) asked on discharge to complete a short form regarding their experiences of rooming-in. Person responsible for designing this form __________________, checking completion of forms ________________ and analysing and reporting on findings ________________.

How will you sustain the practice? (Sustainability)
Compliance with the rooming-in policy audited one night per month by random check by (person) ________ and results recorded in _____________________ and posted on the ward.
Reasons for rooming-*out* recorded in ____________________ and examined on a three monthly basis for contributing factors that need to be addressed. Responsibility ____
Importance of rooming-in explained to women during their antenatal contacts (not just at classes) Responsibility ___________________________
New staff orientated to the rooming-in policy. Responsibility ________________

Budget (What resources are required to implement the action?)
Equipment: bed sides may be needed if bedding-in is used and beds are narrow, or bigger beds

Staff: initial -replacement staff for staff attending training; staff member at ½ day per week for x weeks for project co-ordinator or other person to educate staff (depends on number of staff to educate), develop recording system, and evaluate project.
On-going - 15 minutes per month for person to count numbers rooming-out; 1 hour per month to monitor whether the improvements are being sustained and to orient new staff.
May need additional antenatal staff to ensure there is time to discuss rooming-in with women.

Photocopying/printing of information leaflet for staff.

Overall project responsibility: _________________________________

Start date: **Target completion date:**

CLOSING SESSION

Session Time:

The length of the closing will depend if an outside person is coming to make a speech and present certificates of attendance.
If there is no outside person, the closing will take about 15 minutes.

Preparation for session:

- If certificates of attendance are to be given, ensure that they are prepared.
- Make a list of people who need to be thanked.
- Remind participants before this session to complete course evaluation forms.
- Find out if there are plans to follow up after this course, to arrange further training, hospital assessments of other activities.

Session Outline:

- Thank you for participating and sharing your experiences, your thoughts, and your ideas during this course.

The Key Points from this course are:

- *Breastfeeding is important for mother and baby.*
- *Most mothers and babies can breastfeed.*
- *Mothers and babies who are not breastfeeding need extra care to be healthy.*
- *Hospital practices can help (or hinder) baby and mother friendly practices.*
- *Implementing the Baby-friendly Hospital Initiative helps good practices to happen.*

- *Ask if there are any questions on the course information.*

- I hope that participation in this course has increased your knowledge, skill, and confidence in supporting mothers. When you return to work, you can help to provide consistency of information and practice throughout your health facility.

- *Discuss here plans to follow-up on the course and continuing activities.*

- *Thank other people such as organisers.*

- *Present certificates if needed.*

CLINICAL PRACTICE 1–
OBSERVING AND ASSISTING BREASTFEEDING

Session Objectives:

On completion of this session, participants will be able to:

1. Observe a breastfeed using the Breastfeed Observation Checklist.
2. Assist a mother to learn to position and attach her baby for breastfeeding.
3. Use communication skills when assisting a mother.

Total time 120 minutes

Travel time to and from the clinical practice area is NOT included in this time.

Materials:

Breastfeed Observation Aid from Session 7 – two copies for each participant.
List of Communication Skills from Session 2 – a copy for each participant.

Preparation for Clinical Practice:

Make sure that you know where the clinical practice will be held, and where each facilitator should take her group. If you did not do so in a preparatory week, visit the wards or clinics where you will go, introduce yourself to the staff members in charge, and make sure that they are prepared for the session.

The session time does not include time for travel to a clinical practice site. Add extra time to the timetable if participants must leave the building to go to another site.

1. Explain the clinical practice 20 minutes

- This clinical practice will give you an opportunity to:
  - Practice assessing a breastfeed using the Breastfeed Observation Aid.
  - Practice using your communication skills.
  - Help a mother to position and attach her baby for breastfeeding.
- You work in groups of four plus a facilitator with each group. To start with, the whole group of four people works together. One person talks to a mother, while the other members of the group observe. When everyone knows what to do, you can work in pairs, while the facilitator circulates.
- The midwife will tell us which women are suitable to talk with and who have their breastfeeding babies with them on the ward.
- <u>One participant will talk to a mother:</u>
  - Introduce yourself to the mother, and ask permission to talk to her. If she does not want to be observed, thank her and find another mother. Introduce your partner/small group, and explain that you are interested in infant feeding.
  - Ask permission to watch her baby feed. Avoid saying that you want to watch how she is ‘breastfeeding’ as this may make her feel nervous. If the baby is heavily wrapped in blankets ask the mother to unwrap the blankets so that you can see.
  - Try to find a chair or stool to sit on. If necessary, and if permissible, sit on the bed so that you are at the mother’s level.
  - If the baby is feeding, ask the mother to continue as she is doing. If the baby is not feeding, ask the mother to offer a feed in the normal way at any time that her baby seems ready. If the baby is willing to feed at this time, ask the mother's permission to watch the feed. If the baby is not interested in feeding, thank the mother and go to another mother.
  - Before or after the breastfeed, ask the mother some open questions about how she is, how her baby is, and how feeding is going, to start the conversation. Encourage the mother to talk about herself and her baby. Practise as many of the listening and learning skills as possible.
  - Remember to praise what mothers are doing right and offer a small amount of relevant information if appropriate.
- <u>The partner or rest of the small group (of four people) will observe:</u>
  - Stand quietly in the background. Try to be as still and quiet as possible. Do not comment, or talk among yourselves.
  - Make *general* observations of the mother and baby. Notice for example: does she look happy? Does she have formula or a feeding bottle with her?
  - Make *general* observations of the conversation between the mother and the participant. Notice for example: Who does most of the talking? Does the participant ask open questions? Does the mother talk freely, and seem to enjoy it?
  - Make *specific* observations of the participant's communication skills. Notice if she or he uses helpful non-verbal communication, if she or he uses judging words, or if she or he asks many closed questions to which the mother says ‘yes’ and ‘no’.

- When you observe a breastfeed:
  - Stay quietly watching the mother and baby as the feed continues.
  - While you observe, fill in a Breastfeed Observation Aid. Explain to the mother that you are using an Aid to help you remember the new skills that you are learning.
  - Mark a tick beside each sign that you observe.
  - Under 'Notes:' at the bottom of the form, write anything else that you observe which seems important for breastfeeding.
- When you have finished observing a mother:
  - Thank the mother for her time and cooperation, and say something to encourage and support her.
  - Go with the group into another room or private area to discuss your observations.
  - Discuss what you noticed about the breastfeed and what you noticed about the communication skills that the participant used.

If the mother needs help

- When a pair finds a mother who needs help positioning her baby at the breast, tell the facilitator of your small group. Then practice helping the mother, while your facilitator observes you, and helps if necessary.
- When a pair has finished helping a mother, if needed, move away from the mother for a discussion. The participant should comment on her or his own performance first. Then the facilitator can praise what they did well, give them relevant information and suggest changes that could be made the next time they help a mother.
- Before you leave the ward or clinic, tell the staff member which mothers you have suggested to change their positioning and attachment so that the staff member can follow-up with these mothers.
- Each participant should talk to at least one mother and observe a breastfeed. Not all mothers will need help to position and attach their babies.
- While you are in a ward or clinic, notice:
  - if babies room-in with their mothers;
  - -whether or not babies are given formula, or glucose water;
  - -whether or not feeding bottles are used;
  - -the presence or absence of advertisements for baby milk;
  - -whether sick mothers and babies are admitted to hospital together;
  - -how low-birth-weight babies are fed.
- Do not comment on your observations, or show any disapproval, while in the health facility. Wait until the facilitator invites participants to comment privately, or in the classroom.

- *Ask if the participants understand what they are to do during the clinical practice and answer any questions. Give directions how to reach the clinical practice area.*

2. Conduct the clinical practice 80 minutes

- *For the facilitator of each small group:*

- When you arrive at the clinical practice area:
  - Introduce yourself and your group to the staff member in charge.
  - Ask which mothers and babies it would be appropriate to talk to, and where they are.
  - Try to find a mother and baby who are breastfeeding, or a mother who thinks that her baby may want to feed soon. If this is not possible, talk to any mother and baby.
  - Remember to praise what mothers are doing right and offer a small amount of relevant information if appropriate.
- When a participant finds a mother who needs help with positioning and attaching her baby, observe the participant assisting that mother, giving any necessary help as needed.
- When the participant has finished talking with the mother, take the group away from the mother, and discuss what the participants observed. Ask them:
  - What did they observe generally about the mother and baby?
  - What signs from the Breastfeed Observation Aid did they observe?
  - Which communication skills did they observe?
- If the mother and baby showed any signs of good or poor positioning and attachment that participants did not see, point them out.
- Before your group leaves the ward or clinic, tell the staff member which mothers you have suggested to change their positioning and attachment so that the staff member can follow-up with these mothers.

3. Discuss the clinical practice 20 minutes

- *The whole class comes back together to discuss the clinical practice.*

Ask one participant from each group to report briefly on what they learnt.

- Ask them to comment:
  - On their experiences using the Breastfeed Observation Aid and the list of Communication Skills.
  - On any special situations of mothers and babies and what they learnt from these situations.

  Encourage participants report only on points of special interest; they do not need to report on details of every individual mother.
- Participants may continue to practice their skills of observing and assisting mothers at other times if this is acceptable to the mothers and to the hospital ward or clinic. Encourage participants to practice in pairs so that one can observe the skills used and discuss them afterwards with the other participant.
- Review any points about the clinical practice that will help the next clinical practice to go better.

- *Ask if there are any questions.*

CLINICAL PRACTICE 2-
TALKING WITH A PREGNANT WOMAN

Session Objectives:

On completion of this session, participants will be able to:
1. Talk with a pregnant woman about her feeding her baby;
2. Discuss with a pregnant woman practices that assist in establishing breastfeeding;
3. Use communication skills of listening and learning, and building confidence.

Total session time: 60 minutes

Travel time to and from the clinical practice area is NOT included in this time.

Materials:

ANTENATAL CHECKLIST – a copy for each participant (optional).
List of Communication Skills from Session 2 – a copy for each participant.
Flip chart page with Communication Skills from Session 2.

Preparation for Clinical Practice:

Make sure that you know where the clinical practice will be held, and where each facilitator should take her group. If you did not do so in a preparatory stage, visit the antenatal ward or clinic where you will go, introduce yourself to the staff members in charge, and make sure that they are prepared for the session.

The session time does not include time for travel to a clinical practice site. Add extra time to the timetable if participants must leave the building to go to another site.

1. Explain the clinical practice 10 minutes

- This clinical practice gives you an opportunity to:
  - Talk with a pregnant woman about her feeding intentions.
  - Discuss with a pregnant woman practices that assist in establishing breastfeeding, such as early skin to skin contact, rooming-in, baby led feeding, and exclusive breastfeeding without supplements and artificial teats.
  - Use your communication skills of listening and learning, and building confidence.
- You work in groups of 4 with a facilitator with each group. To start with, the whole group works together. You take turns to talk to a pregnant woman, while the other members of the group observe. When everyone knows what to do, you can work in pairs, while the facilitator circulates.
- One participant in each small group will talk to a mother:
  - Introduce yourself to the pregnant woman and ask permission to talk to her about feeding her baby.
  - Introduce the group or your partner, and explain that you are interested in infant feeding.
  - Try to find a chair or stool to sit on.
  - Ask the pregnant woman some open questions, such as "What are your thoughts on feeding your baby?" or "What do you know about breastfeeding?" to start the conversation.
  - Encourage the mother to talk by using your communication skills. *Refer to list of Communication Skills.* Practise using as many of the listening and learning skills as possible.
  - If the woman's comments tell you that she already knows much about breastfeeding, you can reflect her knowledge and praise her. You do not need to give her information that she already knows.
  - Provide information in a way that is easy to understand. Include the importance of breastfeeding for the woman as well as her baby and some information on why practices are recommended.
  - Offer opportunities for the woman to ask questions or discuss the information more. You can ask about previous breastfeeding experiences if the woman already has children.
  - Remember to praise what the woman is doing right and offer a small amount of relevant information if appropriate.
- If the pregnant woman tells you that she is not going to breastfeed because she has a medical condition – do NOT ask about her condition. You do not need to know her personal details. You can ask her if anyone has talked to her about feeding her baby if she is not breastfeeding.

- *Check that participants know where they can refer a mother for infant feeding counselling if needed.*

- The rest of the small group observe:
  - Stand quietly in the background. Try to be as still and quiet as possible. Do not comment, or talk among yourselves.
  - Make *general* observations concerning the conversation between the pregnant woman and the participant. Notice for example: who does most of the talking? Does the participant ask open questions? Does the pregnant woman talk freely, and seem to enjoy it?
  - Make *specific* observations concerning the participant's communication skills. Notice if she or he uses helpful non-verbal communication, uses judging words, or asks a lot of questions to which the mother says `yes' and `no'.
- When you have finished talking with the pregnant woman:
  - Thank the pregnant woman for her time and cooperation and say something to encourage and support her.
  - Go with the group into another room or private area to discuss your observations.
  - Discuss what you noticed about the discussion and what you noticed about the communication skills that the participant used.
- Each participant should talk with at least one pregnant woman.
- While you are in the ward or clinic notice:
  - The presence or absence of advertisements for baby formula, free samples, or pens or other equipment advertising baby formula
  - Any posters of leaflets for mothers on the importance of breastfeeding or how to breastfeed.
- Do not comment on your observations or show any disapproval while in the health facility. Wait until the facilitator invites you to comment privately, or in the classroom.

- *Ask if the participants understand what they are to do during the clinical practice and answer any questions. Give directions how to reach the clinical practice area.*

2. Conduct the clinical practice 40 minutes

- *For the facilitator of each small group:*

- Ensure that your group has the Antenatal Checklist (if using this) and a list of Communication Skills to practice using and to watch for when observing colleagues.
- When you arrive at the clinical practice area:
  - Introduce yourself and your group to the staff member in charge.
  - Ask which pregnant women it would be appropriate to talk with and where they are.
- When the participant is finished talking with a pregnant woman, take the group away from the pregnant woman, and discuss what they observed. Ask them:
  - Which communication skills did they observe?
  - Was the information provided accurate and in a suitable amount?

3. Discuss the clinical practice 10 minutes

- *The whole class comes back together to discuss the clinical practice.*

Ask one participant from each group to report briefly on what they learnt.

- Ask them to comment on:
  - What the main issues were that women wanted to discuss when they offered information.
  - Their experiences using the list of Communication Skills to talk with the pregnant women.

  Encourage participants to report only on points of special interest. They do not need to report on details of every individual pregnant woman.
- Review any points about the clinical practice that will help the next clinical practice to go better.

- *Ask if there are any questions.*

CLINICAL PRACTICE 3 –
OBSERVING HAND EXPRESSION AND CUP FEEDING

Session Objectives:

On completion of this session, participants will be able to:

1. Assist a mother to learn the skills of hand expression.
2. Observe a cup feeding demonstration.

Session time:

- **60 minutes** for hand expression practice.
- **30 minutes** for cup feeding demonstration.

The session time does not include time for travel to a clinical practice site(s).
Add extra time to the timetable if participants must leave the building to go to another site.

Materials:

List of Communication Skills from Session 2 – a copy for each participant.
MILK EXPRESSION handout from Session 11– a copy for each participant.
HOW TO CUP FEED A BABY handout from Session 11.

Cup feeding demonstration:
Small sterile cup and a small cloth to catch any dribbles while cup feeding
Remind participants to bring their handout on Cup Feeding a Baby from the earlier session.

Preparation for the clinical practice:

The hand expression clinical practice and the cup feeding demonstration may be done at separate times.

A mother may be willing to bring her baby to the classroom for the cup feeding demonstration. In some places, mothers may be willing to come to the classroom to learn about hand expression.

This demonstration might be done in an outpatients' clinic for well-baby visits or immunisations. If the baby is preterm or ill, the group is a possible infection risk to the baby. Try to find a young healthy baby to demonstrate cup feeding.

If the clinical practice is to be held in a clinic or ward, make sure that you know where this is and where each facilitator should take her group. If you did not do so in a preparatory week, visit the wards or clinic where you will go, introduce yourself to the staff members in charge, and make sure that they are prepared for the session.

If needed, ensure there is somewhere private to teach/observe hand expression.

Discuss with the staff on the ward or clinic what containers they use for expressed milk that will be fed to a baby. Ensure there are some clean containers available if the mother wishes to keep the milk that she expresses.

Conduct the cup feeding demonstration in small groups so everyone can see and the mother and the baby are not overwhelmed.

1. Explain the clinical practice – hand expression 5 minutes

Explain the instructions to the participants

- This clinical practice gives you an opportunity to:
  - Assist a mother to learn the skills of hand expression.
  - Practice using your communication skills.

- *Briefly review the four key points of expressing. Remind participants that it does not matter what quantity of milk is expressed in this practice.*

- Each group of four divides into two pairs of participants. Each pair works separately. One person of the pair talks to a mother, while the other observes. The facilitator circulates between the pairs observing and assisting as needed. Mothers may be unwilling to hand express with a group observing.
- To begin:
  - Introduce yourself to the mother and ask permission to talk to her.
  - Introduce your partner and explain that you are interested in learning about hand expression of breast milk.
- Ask the mother some open questions about how she is, how her baby is, and how feeding is going, to start the conversation. Encourage the mother to talk about herself and her baby. Be aware that the mother may be hand expressing for reasons that she does not want to discuss – do not push her to explain. If her baby is ill, show empathy, however you do not need to discuss her baby's condition in detail. Practice as many of the listening and learning skills as possible.
- Ask the mother if she expresses her milk by hand.
  - If she does hand express, ask her if she can show you how she hand expresses. Let her show you without interruption while you observe the way that she does it – do not stop her and tell her that she is doing something wrong, even if you think that she is.
  - If she is comfortable hand expressing, there is milk flowing and she is happy with her technique, praise her for what she is doing, reinforce that breast milk is best for babies and thank her for helping you to learn.
  - If the mother has difficulty with hand expressing, make some positive comments and then ask her if you can suggest some ways that might be easier for her. Explain in simple words the reason for any suggestions you make, for example, if you suggest that she move her fingers around the breast, explain that there is milk in all areas of the breast and moving her fingers helps the milk to flow from these areas.
  - If the mother does not know about hand expression, ask her if you can tell her why it might be useful to learn hand expression. If she agrees, explain some of the reasons why hand expression might be useful to her. Then ask if you can help her to learn how to hand express.
- Try to find a chair or stool to sit on, so that you are at the mother's level. Ensure the mother is comfortable and has some privacy if needed.
- The mother can either just express a small amount to show you how she does it or she can express a full feed for her baby if her baby receives expressed breast milk regularly. If the mother is feeding the milk to the baby, she needs to wash her hands and prepare a suitable container for the milk.
- The first time that a pair finds a mother, who needs help with hand expression, ask the mother for her permission for the facilitator to join you. The participant helps the mother to learn how to hand express, while the facilitator observes and assists if needed.

- <u>The partner will observe:</u>
  - Stand quietly in the background. Try to be as still and quiet as possible. Do not comment.
  - Make *general* observations of the hand expression – does the mother seem comfortable or does it seem to hurt; does the milk flow? You can use the Hand Expression Aid to help you remember the key points to look for.
  - Make *general* observations of the conversation between the mother and the participant. Notice for example: Who does most of the talking? Does the participant ask open or closed questions? Does the mother talk freely, and seem to enjoy the discussion or does she find it hard to talk?
  - Make *specific* observations of the participant's communication skills. Notice if she or he uses helpful non-verbal communication, uses judging words, or asks a lot of questions to which the mother says `yes' and `no'.
- <u>When you have finished observing each mother:</u>
  - Thank the mother for her time and cooperation and say something to praise and support her.
  - Go with your partner into another room or private area away from the mothers to discuss your observations.
  - Discuss with your facilitator what you noticed about the hand expression and what you noticed about the communication skills that the participant used.
- Each participant will observe at least one mother hand expressing. Not all mothers will need help to learn how to hand express.
- <u>While you are in a ward or clinic, notice:</u>
  - if babies room-in with their mothers;
  - the presence or absence of breast pumps[76];
  - how breast milk is handled/stored for later feeding to a baby in special care;
  - how low-birth-weight or ill babies are fed if they are unable to breastfeed.
- Do not comment on your observations, or show any disapproval, while in the health facility. Wait until the facilitator invites you to comment privately, or in the classroom.

- *Ask if the participants understand what they are to do during the clinical practice and answer any questions. Give directions how to reach the clinical practice area.*

76 Breast pumps are not required to express milk. If you see no pumps on the ward, this may indicate that the staff are very skilled at helping the mothers to learn to hand express, which is a positive practice.

2. Conduct the clinical practice – hand expression 45 minutes

Instructions for the facilitator of each small group:

- When you arrive at the clinical practice area:
  - Introduce yourself and your group to the staff member in charge.
  - Ask which mothers it would be appropriate to talk to and where they are.
  - Ask that if you find a mother who needs help with hand expression, is it all right to help the mother or do they need to check individually for each mother before they assist her.
  - Remember to praise what mothers are doing right and offer a small amount of relevant information if appropriate.
- Mothers may need something to catch the expressed milk in – a cloth, cotton wool, or if keeping the milk a clean container. If the milk is to be given to the baby, the mother will need to wash her hands first.
- Go between the two pairs in your group. Observe their communication skills and how they assist a mother to learn. If needed, you can demonstrate to the pair, if the mother is willing.
- When the pair of participants is finished talking with the mother, take the group away from the mother, and discuss what they observed. Ask them:
  - What did they observe generally about the mother and baby?
  - What signs from the Hand Expression Aid did they observe?
  - Which communication skills did they observe?
- Let participants comment on their own performances first. Then you can reinforce what they did well, give them relevant information and suggest changes that could be made for the next time they help a mother.
- If the mother has any good techniques of hand expressing that participants did not see, point them out.

3. Discuss the clinical practice – hand expression 10 minutes

- *The whole class comes back together to discuss the clinical practice.*

Ask participants to report briefly on what they learnt.

- Ask them to comment on:
  - Any special situations of mothers and babies and what they learnt from these situations with regard to expressing milk or feeding expressed milk to the baby.
  - Their experiences using the Communication Skills.

  Because of time limits, participants should report only on points of special interest, rather than on details of every individual mother and baby.
- Participants may continue to practice their skills of observing and assisting mothers at other times if this is acceptable to the mothers and to the hospital ward or clinic. Encourage participants to practice in pairs so that one can observe the skills used and discuss them afterwards with her partner.
- Review any points about the clinical practice that will help the next clinical practice to go better.

- *Ask if there are any questions.*

4. Clinical practice – cup feeding demonstration[77] 30 minutes

- Most babies will be able to feed at the breast and not need to cup feed. Health workers need to know the basic technique of how cup feeding is done so that they are aware that it works.
- Not every mother needs to know how to cup feed her baby, and you are not practicing teaching this skill to all the mothers. You will see a demonstration of cup feeding so that you understand how it works[78].

- *Review the main points of cup feeding from Session 11.*

Instructions for facilitator

- Conduct the cup feeding demonstration in small groups so everyone can see and to avoid overwhelming the baby and the mother.
- Ask a mother if you may demonstrate cup feeding with her baby. This may be a baby who is already receiving expressed breast milk or replacement milk already by cup or a mother who would like to learn how this is done.
- Use open questions to ask about her baby and how the baby is feeding. Explain to the mother why cup feeding is used sometimes.
- Demonstrate to the group how to cup feed. When you are finished, ask the mother what she thought about cup feeding. Answer questions that the mother may have about cup feeding.
- Then move away from the mother and baby before you discuss what the participants observed and learnt about cup feeding.

- Review any points about the clinical practice that will help the next clinical practice to go better.

- *Ask if there are any questions.*

---

77 If the baby is preterm or ill, the group is a possible infection risk. Try to find a healthy baby to demonstrate cup feeding.
78 Additional clinical practice time can be arranged to provide an opportunity for participants to practice teaching mothers the skill of cup feeding. This skill is explained in more detail in *HIV and Infant Feeding Counselling Tools*, as cup feeding is a skill many mothers who are replacement feeding need to know.

Appendix 1 :

WHO/NMH/NHD/09.01
WHO/FCH/CAH/09.01

Acceptable medical reasons for use of breast-milk substitutes

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Preface

A list of acceptable medical reasons for supplementation was originally developed by WHO and UNICEF as an annex to the Baby-friendly Hospital Initiative (BFHI) package of tools in 1992.

WHO and UNICEF agreed to update the list of medical reasons given that new scientific evidence had emerged since 1992, and that the BFHI package of tools was also being updated. The process was led by the departments of Child and Adolescent Health and Development (CAH) and Nutrition for Health and Development (NHD). In 2005, an updated draft list was shared with reviewers of the BFHI materials, and in September 2007 WHO invited a group of experts from a variety of fields and all WHO Regions to participate in a virtual network to review the draft list. The draft list was shared with all the experts who agreed to participate. Subsequent drafts were prepared based on three inter-related processes: a) several rounds of comments made by experts; b) a compilation of current and relevant WHO technical reviews and guidelines (see list of references); and c) comments from other WHO departments (Making Pregnancy Safer, Mental Health and Substance Abuse, and Essential Medicines) in general and for specific issues or queries raised by experts.

Technical reviews or guidelines were not available from WHO for a limited number of topics. In those cases, evidence was identified in consultation with the corresponding WHO department or the external experts in the specific area. In particular, the following additional evidence sources were used:
-*The Drugs and Lactation Database* (LactMed) hosted by the United States National Library of Medicine, which is a peer-reviewed and fully referenced database of drugs to which breastfeeding mothers may be exposed.
-*The National Clinical Guidelines for the management of drug use during pregnancy, birth and the early development years of the newborn*, review done by the New South Wales Department of Health, Australia, 2006.

The resulting final list was shared with external and internal reviewers for their agreement and is presented in this document.

The list of acceptable medical reasons for temporary or long-term use of breast-milk substitutes is made available both as an independent tool for health professionals working with mothers and newborn infants, and as part of the BFHI package. It is expected to be updated by 2012.

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This list was developed by the WHO Departments of Child and Adolescent Health and Development and Nutrition for Health and Development, in close collaboration with UNICEF and the WHO Departments of Making Pregnancy Safer, Essential Medicines and Mental Health and Substance Abuse. The following experts provided key contributions for the updated list: Philip Anderson, Colin Binns, Riccardo Davanzo, Ros Escott, Carol Kolar, Ruth Lawrence, Lida Lhotska, Audrey Naylor, Jairo Osorno, Marina Rea, Felicity Savage, María Asunción Silvestre, Tereza Toma, Fernando Vallone, Nancy Wight, Anthony Williams and Elizabeta Zisovska. They completed a declaration of interest and none identified a conflicting interest.

Introduction

Almost all mothers can breastfeed successfully, which includes initiating breastfeeding within the first hour of life, breastfeeding exclusively for the first 6 months and continuing breastfeeding (along with giving appropriate complementary foods) up to 2 years of age or beyond.

Exclusive breastfeeding in the first six months of life is particularly beneficial for mothers and infants.

Positive effects of breastfeeding on the health of infants and mothers are observed in all settings. Breastfeeding reduces the risk of acute infections such as diarrhoea, pneumonia, ear infection, *Haemophilus influenza*, meningitis and urinary tract infection (1). It also protects against chronic conditions in the future such as type I diabetes, ulcerative colitis, and Crohn's disease. Breastfeeding during infancy is associated with lower mean blood pressure and total serum cholesterol, and with lower prevalence of type-2 diabetes, overweight and obesity during adolescence and adult life (2). Breastfeeding delays the return of a woman's fertility and reduces the risks of post-partum haemorrhage, pre-menopausal breast cancer and ovarian cancer (3).

Nevertheless, a small number of health conditions of the infant or the mother may justify recommending that she does not breastfeed temporarily or permanently (4). These conditions, which concern very few mothers and their infants, are listed below together with some health conditions of the mother that, although serious, are not medical reasons for using breast-milk substitutes.

Whenever stopping breastfeeding is considered, the benefits of breastfeeding should be weighed against the risks posed by the presence of the specific conditions listed.

INFANT CONDITIONS

Infants who should not receive breast milk or any other milk except specialized formula

- Infants with classic galactosemia: a special galactose-free formula is needed.
- Infants with maple syrup urine disease: a special formula free of leucine, isoleucine and valine is needed.
- Infants with phenylketonuria: a special phenylalanine-free formula is needed (some breastfeeding is possible, under careful monitoring).

Infants for whom breast milk remains the best feeding option but who may need other food in addition to breast milk for a limited period

- Infants born weighing less than 1500 g (very low birth weight).
- Infants born at less than 32 weeks of gestation (very preterm).
- Newborn infants who are at risk of hypoglycaemia by virtue of impaired metabolic adaptation or increased glucose demand (such as those who are preterm, small for gestational age or who have experienced significant intrapartum hypoxic/ischaemic stress, those who are ill and those whose mothers are diabetic (5) if their blood sugar fails to respond to optimal breastfeeding or breast-milk feeding.

MATERNAL CONDITIONS

Mothers who are affected by any of the conditions mentioned below should receive treatment according to standard guidelines.

Maternal conditions that may justify permanent avoidance of breastfeeding

- HIV infection[79]: if replacement feeding is acceptable, feasible, affordable, sustainable and safe (AFASS) (6). Otherwise, exclusive breastfeeding for the first six months is recommended.

Maternal conditions that may justify temporary avoidance of breastfeeding

- Severe illness that prevents a mother from caring for her infant, for example sepsis.
- Herpes simplex virus type 1 (HSV-1): direct contact between lesions on the mother's breasts and the infant's mouth should be avoided until all active lesions have resolved.
- Maternal medication:
  - sedating psychotherapeutic drugs, anti-epileptic drugs and opioids and their combinations may cause side effects such as drowsiness and respiratory depression and are better avoided if a safer alternative is available (7);
  - radioactive iodine-131 is better avoided given that safer alternatives are available - a mother can resume breastfeeding about two months after receiving this substance;
  - excessive use of topical iodine or iodophors (e.g., povidone-iodine), especially on open wounds or mucous membranes, can result in thyroid suppression or electrolyte abnormalities in the breastfed infant and should be avoided;
  - cytotoxic chemotherapy requires that a mother stops breastfeeding during therapy.

Maternal conditions during which breastfeeding can still continue, although health problems may be of concern

- Breast abscess: breastfeeding should continue on the unaffected breast; feeding from the affected breast can resume once treatment has started (8).
- Hepatitis B: infants should be given hepatitis B vaccine, within the first 48 hours or as soon as possible thereafter (9).
- Hepatitis C.
- Mastitis: if breastfeeding is very painful, milk must be removed by expression to prevent progression of the condition(8).
- Tuberculosis: mother and baby should be managed according to national tuberculosis guidelines (10).
- Substance use[80] (11):
  - maternal use of nicotine, alcohol, ecstasy, amphetamines, cocaine and related stimulants has been demonstrated to have harmful effects on breastfed babies;
  - alcohol, opioids, benzodiazepines and cannabis can cause sedation in both the mother and the baby.

  Mothers should be encouraged not to use these substances, and given opportunities and support to abstain.

79 The most appropriate infant feeding option for an HIV-infected mother depends on her and her infant's individual circumstances, including her health status, but should take consideration of the health services available and the counselling and support she is likely to receive. Exclusive breastfeeding is recommended for the first six months of life unless replacement feeding is AFASS. When replacement feeding is AFASS, avoidance of all breastfeeding by HIV-infected women is recommended. Mixed feeding in the first 6 months of life (that is, breastfeeding while also giving other fluids, formula or foods) should always be avoided by HIV-infected mothers.

80 Mothers who choose not to cease their use of these substances or who are unable to do so should seek individual advice on the risks and benefits of breastfeeding depending on their individual circumstances. For mothers who use these substances in short episodes, consideration may be given to avoiding breastfeeding temporarily during this time.

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Further information on maternal medication and breastfeeding is available at the following United States National Library of Medicine (NLM) website:
http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?LACT

For further information, please contact:

Department of Nutrition for Health and Development
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Web: www.who.int/nutrition

Department of Child and Adolescent Health and Development
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Web: www.who.int/child_adolescent_health

Address: 20 Avenue Appia, 1211 Geneva 27, Switzerland

Appendix 2: Knowledge Checks

Session 1 Knowledge Check

A colleague asks you why this course is taking place and how it would help mothers and babies that you care for. What will you reply?

Session 3 Knowledge Check

List two reasons why exclusive breastfeeding is important for the child.

List two reasons why breastfeeding is important for the mother.

What information do you need to discuss with a woman during her pregnancy that will help her to feed her baby?

List two antenatal practices that are helpful to breastfeeding and two practices that might be harmful.

If a woman is tested and found to be HIV-positive, where can she get infant feeding counselling?

Session 4 Knowledge Check *- mark the answer True (T) or False (F)*

1.Giving mothers company-produced leaflets about breast milk substitutes can affect infant feeding practices.	T	F
2.Breast-milk substitutes include formula, teas, and juices (as well as other products)	T	F
3.The International Code and BFHI prohibit the use of formula for infants in maternity wards	T	F
4.Health workers can be given any publication or materials by companies as long as they do not share these publications with mothers	T	F
5.Donations of formula should be given to mothers of infants in emergency situations	T	F

Session 5 Knowledge Check

List four labour or birth practices that can help the mother and baby get a good start with breastfeeding.

List three ways to assist a mother following a caesarean section with breastfeeding.

Name three possible barriers to early skin-to-skin contact and how each might be overcome.

Session 6 Knowledge Check

Describe to a new mother how to tell if her baby is well attached and suckling effectively.

Session 7 Knowledge Check

What are the four key points to look for with regard to the baby's position?

You are watching Donella breastfeed her four-day old baby. What will you look for to indicate that the baby is suckling well?

Session 8 Knowledge Check

Give three reasons why rooming-in is recommended as routine practice.

Explain as you would to a mother, what is meant by ‘demand feeding’ or baby-led feeding.

List three difficulties or risks that can result from supplement use.

Session 9 Knowledge Check

Keiko tells you that she thinks she does not have enough milk. What is the first thing you will say to her? What will you ask her in order to learn if she truly does have a low milk supply?

You decide that Ratna's baby Meena is not taking sufficient breast milk for his needs. What things can you do to help Ratna increase the amount of breast milk that her baby receives?

Session 10 Knowledge Check

Jacqueline has a 33-week preterm baby in the special care nursery. It is very important that her baby receive her breast milk. How will you help Jacqueline get her milk started? How will you help her with putting the baby to her breast after a few days?

Yoko gives birth to twin girls. She fears she cannot make enough milk to feed two babies and that she will need to give formula. What is the first thing you can say to Yoko to help give her confidence? What will you suggest for helping Yoko breastfeed her babies?

Session 11 Knowledge check

List four reasons why it is recommended that mothers learn to hand express.

List four reasons why cup feeding is preferred to feeding by other means if the baby cannot breastfeed.

Session 12 Knowledge Check

What breastfeeding difficulties would suggest to you that you need to examine a mother's breasts and nipples?

Rosalia tells you she became painfully engorged when she breastfed her last baby. She is afraid it will happen with the next baby too. What will you tell her about preventing engorgement?

Bola complains that her nipples are very sore. When you watch her breastfeed, what will you look for? What can you do to help her?

Describe the difference between a blocked duct, non-infective mastitis and infective mastitis. What is the most important treatment for all of these conditions?

Session 13 Knowledge Check

A pregnant woman says to you that she cannot breastfeed because she would need to buy special foods for herself that she could not afford. What can you say to her to help her see that breastfeeding is possible for her?

A co-worker says to you that a mother will need to stop breastfeeding because she needs to take a medication. What can you reply to this co-worker?

Session 14 Knowledge Check

List three sources of support for mothers in your community.

Give two reasons why mother-to-mother support may be useful to mothers.

Give two reasons why breastfeeding is important to the older baby and the mother.

Session 15 Knowledge Check

List two reasons why a hospital might seek BFHI external assessment.

Explain, as if to a co-worker, why achieving baby-friendly designation is not the end of the process and the importance of on-going monitoring.

The Baby-friendly Hospital Initiative (BFHI) is a global effort launched by WHO and UNICEF to implement practices that protect, promote and support breastfeeding. It was launched in 1991 in response to the Innocenti Declaration. The global BFHI materials have been revised, updated and expanded for integrated care. The materials reflect new research and experience, reinforce the International Code of Marketing of Breast-milk Substitutes, support mothers who are not breastfeeding, provide modules on HIV and infant feeding and mother-friendly care, and give more guidance for monitoring and reassessment.

The revised package of BFHI materials includes five sections: 1. Background and Implementation, 2. Strengthening and Sustaining the BFHI: A course for decision-makers, 3. Breastfeeding Promotion and Support in a Baby-friendly Hospital: a 20-hour course for maternity staff, 4. Hospital Self-Appraisal and Monitoring, and 5. External Assessment and Reassessment. Sections 1 to 4 are widely available while section 5 is for limited distribution.

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Revised Updated and Expanded
for Integrated Care

SECTION 4

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Many BFHI national co-coordinators and their colleagues around the world responded to the initial User Needs survey. Colleagues from many countries also generously shared various BFHI self-appraisal and assessment tools developed at country level.

Thorough and thoughtful reviews of drafts of the revised *Global Criteria, Self-Appraisal Tool, External Hospital Assessment Tool, Monitoring and Reassessment Tools,* and/or computer data entry and analysis tool were provided by BFHI experts from the various UNICEF and WHO regions, including Rufaro C. Madzima, Zimbabwe; Ngozi Niepuome, Nigeria; Dikolotu Morewane, Botswana; Meena Sobsamai, Thailand; Azza Abul-fadl, Egypt; Sangeeta Saxena, India; Marina Rea, Brazil; Veronica Valdes, Chile; Elizabeth Zisovska, Macedonia; Elizabeth Horman, Germany; and Laura Haiek, Canada; as well as Mwate Chintu, LINKAGES Project. Rae Davies, Linda J. Smith, Roberta Scaer and other colleagues with expertise on birthing and breastfeeding provided extensive assistance with development of the new “mother-friendly care” component.

Genevieve Becker of *BEST Services*, as the project coordinator, Moazzem Hossain and David Clark of UNICEF; Randa Jarudi Saadeh and Carmen Casanovas of the Department of Nutrition for Health and Development as well as colleagues from the Department of Child and Adolescent Health and Development at WHO, and Miriam Labbok of the Center for Infant and Young Child Feeding and Care, School of Public Health, University of North Carolina provided extensive technical and logistical support and feedback throughout the process.

The assessment materials were field tested in Ireland and Zimbabwe. In Ireland, support was provided by the Irish Network of Health Promoting Hospitals as the coordinating body for BFHI in Ireland, members of the National BFHI Advisory Committee and the assessment team, and staff of University College Hospital, Galway, which served as the field test site. In Zimbabwe, support was provided by the UNICEF and WHO Country Offices, the Ministry of Health and Child Welfare, the assessment team, and staff of Rusape General Hospital, which served as the field-test site.

These multi-country and multi-organizational contributions were invaluable in helping to fashion a set of tools and guidelines designed to address the current needs of countries and their mothers and babies, facing a wide range of challenges in many differing situations.

Preface for the 2009 BFHI materials: Revised, Updated and Expanded for Integrated Care

Since the Baby-friendly Hospital Initiative (BFHI) was launched by UNICEF and WHO in 1991-1992, the Initiative has grown, with more than 20,000 hospitals having been designated in 156 countries around the world over the last 15 years. During this time, a number of regional meetings offered guidance and provided opportunities for networking and feedback from dedicated country professionals involved in implementing BFHI. Two of the most recent were held in Spain, for the European region, and Botswana, for the Eastern and Southern African region. Both meetings offered recommendations for updating the Global Criteria, related assessment tools, as well as the "18-hour course", in light of experience with BFHI since the Initiative began, the guidance provided by the new Global Strategy for Infant and Young Child Feeding, and the challenges posed by the HIV pandemic. The importance of addressing "mother-friendly care" within the Initiative was raised by a number of groups as well.

As a result of the interest and strong request for updating the BFHI package, UNICEF, in close coordination with WHO, undertook the revision of the materials in 2004-2005, with various people assisting in the process (Genevieve Becker, Ann Brownlee, Miriam Labbok, David Clark, and Randa Saadeh). The process included an extensive "user survey" with colleagues from many countries responding. Once the revised course and tools were drafted they were reviewed by experts worldwide and then field-tested in industrialized and developing country settings. The full first draft of the materials was posted on the UNICEF and WHO websites as the "Preliminary Version for Country Implementation" in 2006. After more than a year's trial, presentations in a series of regional multi-country workshops, and feedback from dedicated users, UNICEF and WHO[1] met with the co-authors above[2] and resolved the final technical issues that had been raised. The final version was completed in late 2007. It is expected to update these materials no later than 2018.

The revised BFHI package includes:

Section 1: Background and Implementation, which provides guidance on the revised processes and expansion options at the country, health facility, and community level, recognizing that the Initiative has expanded and must be mainstreamed to some extent for sustainability, and includes:

1.1 Country Level Implementation
1.2 Hospital Level Implementation
1.3 The Global Criteria for BFHI
1.4 Compliance with the International Code of Marketing of Breast-milk Substitutes
1.5 Baby-Friendly Expansion and Integration Options
1.6 Resources, References and Websites

Section 2: Strengthening and sustaining the Baby-friendly Hospital Initiative: A course for decision-makers was adapted from WHO course "Promoting breast-feeding in health facilities: A short course for administrators and policy-makers". This can be used to orient hospital decisions-makers (directors, administrators, key managers, etc.) and policy-makers to the Initiative and the positive impacts it can have and to gain their commitment to promoting and sustaining "Baby-friendly". There is a Course Guide and eight Session Plans

[1] Moazzem Hossain, UNICEF NY, played a key role in organizing the multi-country workshops, launching the use of the revised materials. He, Randa Saadeh and Carmen Casanovas of WHO worked together with the co-authors to resolve the final technical issues.
[2] Miriam Labbok is currently Professor and Director, Center for Infant and Young Child Feeding and Care, Department. of Maternal and Child, University of North Carolina School of Public Health.

with handouts and PowerPoint Slides. Two alternative session plans and materials for use in settings with high HIV prevalence have been included.

Section 3: Breastfeeding Promotion and Support in a Baby-Friendly Hospital, a 20-hour course for maternity staff, which can be used by facilities to strengthen the knowledge and skills of their staff towards successful implementation of the Ten Steps to Successful Breastfeeding. This section includes:

3.1 Guidelines for Course Facilitators including a Course Planning Checklist
3.2 Outlines of Course Sessions
3.3 PowerPoint Slides for the Course

Section 4: Hospital Self-Appraisal and Monitoring, which provides tools that can be used by managers and staff initially, to help determine whether their facilities are ready to apply for external assessment, and, once their facilities are designated Baby-Friendly, to monitor continued adherence to the Ten Steps. This section includes:

4.1 Hospital Self-Appraisal Tool
4.2 Guidelines and Tool for Monitoring

Section 5: External Assessment and Reassessment, which provides guidelines and tools for external assessors to use both initially, to assess whether hospitals meet the Global Criteria and thus fully comply with the Ten Steps, and then to reassess, on a regular basis, whether they continue to maintain the required standards. This section includes:

5.1 Guide for Assessors, including PowerPoint slides for assessor training
5.2 Hospital External Assessment Tool
5.3 Guidelines and Tool for External Reassessment
5.4 The BFHI Assessment Computer Tool

Sections 1 through 4 are available on the UNICEF website at http://www.unicef.org/nutrition/index_24850.html or by searching the UNICEF website at http://www.unicef.org/ and, on the WHO website at http://www.who.int/nutrition/publications/infantfeeding/9789241594950/en/index.html or by searching the WHO website at www.who.int/nutrition.

Section 5: External Assessment and Reassessment, is not available for general distribution. It is only provided to the national authorities for BFHI who provide it to the assessors who are conducting the BFHI assessments and reassessments. A computer tool for tallying, scoring and presenting the results is also available for national authorities and assessors. Section 5 can be obtained, on request, from the country or regional offices or headquarters of UNICEF and WHO, Nutrition Sections.

SECTION 4:
HOSPITAL SELF-APPRAISAL AND MONITORING

4.1 The Hospital Self-Appraisal Tool 1

Using the hospital self-appraisal tool to assess policies and practices 1
Analysing the self-appraisal results 2
Action 2
Preparing for external assessment 3
The self-appraisal questionnaire 5
Annex 1: Hospital breastfeeding/infant feeding policy checklist 27
Annex 2: The International Code of Marketing of Breast-milk Substitutes 29
Annex 3: HIV and infant feeding recommendations 30
Annex 4: Acceptable medical reasons for use of breast-milk substitutes 31

4.2 Guidelines and Tools for Monitoring Baby-Friendly Hospitals 37

Guide to developing a national process for BFHI monitoring 39
Background 39
Rationale for monitoring and reassessment 39
Strategies for monitoring 41
Integrating BFHI monitoring into quality assurance or accreditation programs 43
Sample tools for monitoring 44
Annex 1: Infant feeding record and report 49
Annex 2: Staff training record and report 53
Annex 3: BFHI monitoring tool 59
Annex 4: The BFHI reassessment tool and its possible use for monitoring 83

4.1. THE HOSPITAL SELF-APPRAISAL TOOL

Using the hospital self-appraisal tool to assess policies and practices

Any hospital or health facility with maternity services that is interested in becoming Baby-friendly should - as a first step - appraise its current practices with regard to the *Ten Steps to Successful Breastfeeding*. This *Self-Appraisal Tool* has been developed for use by hospitals, maternity facilities, and other health facilities to evaluate how their current practices measure up to the *Ten Steps*, and how they practice other recommendations of the 1989 WHO/UNICEF Joint Statement titled *Protecting, Promoting and Supporting Breastfeeding: The Special Role of Maternity Services*. It also assists facilities in determining how well they comply with the *International Code of Marketing of Breast-milk Substitutes* and subsequent relevant World Health Assembly resolutions, whether they provide mother-friendly care , and how well they support HIV-positive women and their infants.

In many cases, it is useful if the hospital decision-makers and policy-maker attend an orientation to the goals and objectives of the Baby-friendly Hospital Initiative (BFHI), before the self appraisal. An orientation session can be developed, using Session 3: “The Baby-friendly Hospital Initiative”, in *Section 2: Strengthening and sustaining the Baby-friendly Hospital Initiative: A course for decision-makers* and/or Session 15 “Making your hospital baby-friendly” in *Section 3: Breastfeeding promotion and support in a Baby-friendly Hospital: A course for maternity staff*, along with a review of the *Self-appraisal tool* and *Global Criteria for BFHI* discussed in the following pages.

The *Self-appraisal tool* that follows will permit the director and heads of relevant units in a hospital or other health facility giving maternity care to make an initial appraisal or review of its practices in support of breastfeeding. Completion of this initial self-appraisal checklist is the first stage of the process, but does not in itself qualify the hospital for designation as Baby-friendly.

The *Global Criteria*, which guide the external assessment of whether the hospital qualifies as Baby-friendly, should also be reviewed by staff when reflecting upon the effectiveness of their breastfeeding programme. For ease of reference, the *Global Criteria* for each of the Steps, for the Code, mother-friendly care and HIV and infant feeding are reproduced with the respective sections in the *Self-appraisal tool.* The *Self-appraisal tool* also includes four Annexes:

- Annex 1, a checklist to assist in appraising the hospital’s breastfeeding or infant feeding policy.
- Annex 2, a list of the main points in the *International Code of Marketing* and the role of administrator and staff in upholding it.
- Annex 3, a set of recommendations for HIV and infant feeding.
- Annex 4, acceptable medical reasons for the use of breast-milk substitutes.

Nationally determined criteria and local experience may cause national and institutional authorities responsible for BFHI to consider the addition of other relevant queries to this global self appraisal tool. Whatever practices are seen by a facility to discourage breastfeeding may be considered during the process of self-appraisal.

If it does not do so already, it is important that the hospital consider adding the collection of statistics on feeding and implementation of the Ten Steps into its maternity record-keeping system, preferably integrated into whatever information gathering system is already in place. If the hospital needs guidance on how to gather this data and possible forms to use, responsible staff can refer to the sample data-gathering tools available in this document in *Section 4.2: Guidelines and tools for monitoring BFHI.*

Analysing the Self-Appraisal Results

Under ideal circumstances, most of the questions in this tool will be answered as "yes". Numerous negative answers will suggest divergence from the recommendations of the *WHO/UNICEF Joint Statement* and its *Ten Steps to successful breastfeeding*. In addition to answering the questions in the *Self appraisal*, the hospital could consider doing some informal testing of staff and mothers, using the *Global Criteria* listed for the various steps as a guide, to determine if they meet the required standards.

When a facility can answer most of the questions with "yes", it may then wish to take further steps towards being designated as a Baby-friendly Hospital. In some countries, a pre-assessment visit is the next step, with a local consultant visiting the health facility and working with managers and staff to make sure the facility is ready for assessment.

Then a visit by an external assessment team is arranged, in consultation with the national BFHI coordination group. The external assessors will use the *Hospital external assessment tool* to determine if the hospital meets the criteria for "Baby-friendly" designation.

A hospital with many "no" answers on the *Self-appraisal tool* or where exclusive breastfeeding or breast-milk feeding from birth to discharge is not yet the norm for at least 75%[3] of newborns delivered in the maternity facility may want to develop an action plan. The aim is to eliminate practices that hinder initiation of exclusive breastfeeding and to expand those that enhance it.

Action

Results of the self-appraisal should be shared with the national BFHI coordination group. If improvements in knowledge and practices are needed before arranging for an external assessment, training may be arranged for the facility staff, facilitated by senior professionals who have attended a national or international training-of-trainers course in lactation management and/or have received national or international certification as lactation consultants.

In many settings, it has been found valuable to develop various cadres of specialists who can provide help with breastfeeding, both in health care facilities and at the community level. Through community-based health workers (village health workers, traditional birth attendants, etc.) and mother support groups, mothers can be reached with education and support in their home settings, a vital service wherever exclusive and sustained breastfeeding have become uncommon.

It is useful if a "breastfeeding support" or BFHI committee or team is organized at the health facility at the time of the self-appraisal, if this has not been done earlier. This committee or team can be charged with coordination of all activities regarding the implementation and monitoring of BFHI, including monitoring compliance with the *Code of Marketing*. The committee can serve as leader and coordinator for all further activities, including arranging for training, if needed, further self-appraisal, external assessment, self-monitoring, and reassessment. Members should include professionals of various disciplines (for example, physicians such as neonatologists, paediatricians, obstetricians, nurses, midwives, nutritionists, social workers, etc.) with some members in key management or leadership positions.

[3] As mentioned elsewhere, if mothers are not breastfeeding for justified medical reasons, including by mothers who are HIV-positive, they can be counted as part of the 75%.

The facility can consult with the relevant local authority and the UNICEF and WHO country offices, which may be able to provide more information on policies and training, which can contribute to increasing the Baby-friendliness of health facilities.

Preparing for the external assessment

Before seeking assessment and designation as Baby-friendly hospitals are encouraged to develop:

- a written breastfeeding/infant feeding policy covering all *Ten Steps to successful breastfeeding* and compliance with the *Code*, as well as HIV and infant feeding, if included in the criteria,
- a written policy addressing mother-friendly care, if included in the criteria,
- a written curriculum for training given to hospital staff caring for mothers and babies on breastfeeding management, feeding of the non-breastfeeding infant, and mother-friendly care, and
- an outline of the content covered in antenatal health education on these topics.

If HIV and infant feeding criteria are being covered in the assessment, documents related to staff training and antenatal education on this topic should also be developed.

Also needed for the assessment are:

- proof of purchase of infant formula and various related supplies, and
- a list of the staff members who care for mothers and/or babies and the numbers of hours of training they have received on required topics.

The external assessment teams may request that these documents be assembled and sent to the team leader before the assessment.

The Self Appraisal Questionnaire

Hospital data sheet

General information on hospital and senior staff:

Hospital name and address: ____

Name and title of hospital director or administrator: ______________________________
Telephone or extension: ______________________ E-mail address: _________________

The hospital is: *[tick all that apply]*
- ☐ a maternity hospital
- ☐ a general hospital
- ☐ a teaching hospital
- ☐ a tertiary hospital
- ☐ a government hospital
- ☐ a privately run hospital
- ☐ other (specify:) ____________________

Total number of hospital beds: ____ Total number of hospital employees: ____

Information on antenatal services:

Hospital has antenatal services (either on or off site): ☐Yes ☐No
(if *"No"*, skip all but the last question in this section)

Name and title of the director of antenatal services/clinic: ________________________
Telephone or extension: _______________________ E-mail address: _________________

What percentage of mothers delivering at the hospital attends the hospital's antenatal clinic? ___%

Does the hospital hold antenatal clinics at other sites outside the hospital? ☐Yes ☐No
[if "Yes"] Please describe when and where they are held: __________________________
____

Are there beds designated for high-risk pregnancy cases? ☐Yes ☐No *[if "Yes"]*
How many?____

What percentage of women arrives for delivery without antenatal care? _____% ☐ Don't know

Information on labour and delivery services:

Name and title of the director of labour and delivery services: ______________________
Telephone or extension: ______________________ E-mail address: _________________

Information on maternity and related services:

Name and title of the director of maternity services: ______________________________
Telephone or extension: ______________________ E-mail address: _________________

Number of postpartum maternity beds: ______

Average daily number of mothers with full term babies in the postpartum unit(s): ______

Does the facility have unit(s) for infants needing special care (LBW, premature, ill, etc.)?
☐Yes ☐No
[if "Yes"] Name of first unit: ___________________________ Average daily census: ______
Name of director(s) of this unit: ____
Name of additional unit: __________________________________ Average daily census: ____
Name of director(s) of this unit: ____

Are there areas in the maternity wards designated as well baby observation areas? ☐Yes ☐No
[If "Yes"] Average daily census of each area: ____
Name of head/director(s) of these areas: ____

Staff responsible for breastfeeding/infant feeding

The following staff has direct responsibility for assisting women with breastfeeding (BF), feeding breast-milk substitutes (BMS), or providing counselling on HIV and infant feeding):
[tick all that apply]

	BF	BMS	HIV		BF	BMS	HIV
Nurses	☐	☐	☐	Paediatricians	☐	☐	☐
Midwives	☐	☐	☐	Obstetricians	☐	☐	☐
SCBU/NICU nurses	☐	☐	☐	Infant feeding counsellors	☐	☐	☐
Dieticians	☐	☐	☐	Lay/peer counsellors	☐	☐	☐
Nutritionists	☐	☐	☐	Other staff (specify):			
Lactation consultants	☐	☐	☐	____________________	☐	☐	☐General
physicians	☐	☐	☐	____________________	☐	☐	☐

[use information for completing I.C. 10, 13 and 17]

Are there breastfeeding and/or HIV and infant feeding committee(s) in the hospital? ☐Yes ☐No
[if "Yes"] Please describe: ____

____

Is there a BFHI coordinator at the hospital? ☐Yes ☐No (if "*Yes*", name:) ___________________

Statistics on births:

Total births in the last year: ______ of which:

____% were by C-section <u>without</u> general anaesthesia

____% were by C-section <u>with</u> general anaesthesia

____% infants were admitted to the SCBU/NICU or similar units

Statistics on infant feeding:

Total number of babies discharged from the hospital last year: ____ of which:

____% were exclusively breastfed (or fed human milk) from birth to discharge.

____% received at least one feed other than breast milk (formula, water or other fluids) in the hospital because of documented medical reason. (if a mother knew she was HIV positive and made an informed decision to replacement feed, this can be considered a medical reason).

____% received at least one feed other than breast milk <u>without</u> any documented medical reason.

[Note: the total percentages listed above should equal 100%]

The hospital data above indicates that at least 75% of the babies delivered in the past year were exclusively breastfed or fed human milk from birth to discharge, or, if they received any feeds other than human milk this was because of documented medical reasons:
[Note: add the percentages in categories one and two to calculate this percentage]

☐Yes ☐No

6.1

Statistics on HIV/AIDS:

Percentage of pregnant women who received testing and counselling for HIV: _____%

Percentage of mothers who were known to be HIV-positive at the time of babies' births: _____%

Data sources:

Please describe sources for the above data: ____

____

____

STEP 1. Have a written breastfeeding policy that is routinely communicated to all health care staff.

	YES	NO
1.1 Does the health facility have a written breastfeeding/infant feeding policy that addresses all 10 Steps to Successful Breastfeeding in maternity services and support for HIV-positive mothers?	☐	☐
1.2 Does the policy protect breastfeeding by prohibiting all promotion of breast-milk substitutes, feeding bottles, and teats?	☐	☐
1.3 Does the policy prohibit distribution of gift packs with commercial samples and supplies or promotional materials for these products to pregnant women and mothers?	☐	☐
1.4 Is the breastfeeding/infant feeding policy available so all staff who take care of mothers and babies can refer to it?	☐	☐
1.5 Is a summary of the breastfeeding/infant feeding policy, including issues related to the 10 Steps, The International Code of Marketing of Breast-milk Substitutes and subsequent WHA resolutions, and support for HIV-positive mothers posted or displayed in all areas of the health facility which serve mothers, infants, and/or children?	☐	☐
1.6 Is the summary of the policy posted in language(s) and written with wording most commonly understood by mothers and staff?	☐	☐
1.7 Is there a mechanism for evaluating the effectiveness of the policy?	☐	☐
1.8 Are all policies or protocols related to breastfeeding and infant feeding in line with current evidence-based standards?	☐	☐

Note: See "Annex 1: Hospital Breastfeeding/Infant Feeding Policy Checklist" for a useful tool to use in assessing the hospital policy. Tools for auditing or evaluating the policy should be developed at health system or hospital level.

Global Criteria - Step One

The health facility has a written breastfeeding or infant feeding policy that addresses all 10 Steps and protects breastfeeding by adhering to the International Code of Marketing of Breast-milk Substitutes. It also requires that HIV-positive mothers receive counselling on infant feeding and guidance on selecting options likely to be suitable for their situations. The policy should include guidance for how each of the "Ten Steps" and other components should be implemented (see Section 4.1, Annex 1 for suggestions).

The policy is available so that all staff members who take care of mothers and babies can refer to it. Summaries of the policy covering, at minimum, the Ten Steps, the Code and subsequent WHA Resolutions, and support for HIV-positive mothers, are visibly posted in all areas of the health care facility which serve pregnant women, mothers, infants, and/or children. These areas include the labour and delivery areas, antenatal care in-patient wards and clinic/consultation rooms, post partum wards and clinic/consultation rooms, all infant care areas, including well baby observation areas (if there are any), and any special care baby units. The summaries are displayed in the language(s) and written with wording most commonly understood by mothers and staff.

STEP 2. Train all health care staff in skills necessary to implement the policy.

	YES	NO
2.1 Are all staff members caring for pregnant women, mothers, and infants oriented to the breastfeeding/infant feeding policy of the hospital when they start work?	☐	☐
2.2 Are staff members who care for pregnant women, mothers and babies both aware of the importance of breastfeeding and acquainted with the facility's policy and services to protect, promote, and support breastfeeding?	☐	☐
2.3 Do staff members caring for pregnant women, mothers and infants (or all staff members, if they are often rotated into positions with these responsibilities) receive training on breastfeeding promotion and support within six months of commencing work, unless they have received sufficient training elsewhere?	☐	☐
2.4 Does the training cover all Ten Steps to Successful Breastfeeding and The International Code of Marketing of Breast-milk Substitutes?	☐	☐
2.5 Is training for clinical staff at least 20 hours in total, including a minimum of 3 hours of supervised clinical experience?	☐	☐
2.6 Is training for non-clinical staff sufficient, given their roles, to provide them with the skills and knowledge needed to support mothers in successfully feeding their infants?	☐	☐
2.6 Is training also provided either for all or designated staff caring for women and infants on feeding infants who are not breastfed and supporting mothers who have made this choice?	☐	☐
2.7 Are clinical staff members who care for pregnant women, mothers, and infants able to answer simple questions on breastfeeding promotion and support and care for non-breastfeeding mothers?	☐	☐
2.8 Are non-clinical staff such as care attendants, social workers, and clerical, housekeeping and catering staff able to answer simple questions about breastfeeding and how to provide support for mothers on feeding their babies?	☐	☐
2.9 Has the healthcare facility arranged for specialized training in lactation management of specific staff members?	☐	☐

The Global Criteria for Step 2 are on the next page.

Global Criteria - Step Two

The head of maternity services reports that all health care staff members who have any contact with pregnant women, mothers, and/or babies, have received orientation on the breastfeeding/infant feeding policy. The orientation that is provided is sufficient.

A copy of the curricula or course session outlines for training in breastfeeding promotion and support for various types of staff is available for review, and a training schedule for new employees is available.

Documentation of training indicates that 80% or more of the clinical staff members who have contact with mothers and/or infants and have been on the staff 6 months or more have received training at the hospital, prior to arrival. or through well-supervised self study or on-line courses that cover all 10 Steps, and the Code and subsequent WHA resolutions. It is likely that at least 20 hours of targeted training will be needed to develop the knowledge and skills necessary to adequately support mothers. At least three hours of supervised clinical experience are required.

Documentation of training also indicates that non-clinical staff members have received training that is adequate, given their roles, to provide them with the skills and knowledge needed to support mothers in successfully feeding their infants.

Training on how to provide support for non-breastfeeding mothers is also provided to staff. A copy of the course session outlines for training on supporting non-breastfeeding mothers is also available for review. The training covers key topics such as:

- the risks and benefits of various feeding options;
- helping the mother choose what is acceptable, feasible, affordable, sustainable and safe (AFASS) in her circumstances;
- the safe and hygienic preparation, feeding and storage of breast-milk substitutes;
- how to teach the preparation of various feeding options; and
- how to minimize the likelihood that breastfeeding mothers will be influenced to use formula.

The type and percentage of staff receiving this training is adequate, given the facility's needs.

Out of the randomly selected clinical staff members*:

- At least 80% confirm that they have received the described training or, if they have been working in the maternity services less than 6 months, have, at minimum, received orientation on the policy and their roles in implementing it.
- At least 80% are able to answer 4 out of 5 questions on breastfeeding support and promotion correctly.
- At least 80% can describe two issues that should be discussed with a pregnant woman if she indicates that she is considering giving her baby something other than breast milk.

Out of the randomly selected non-clinical staff members**:

- At least 70% confirm that they have received orientation and/or training concerning the promotion and support of breastfeeding since they started working at the facility.
- At least 70% are able to describe at least one reason why breastfeeding is important.
- At least 70% are able to mention one possible practice in maternity services that would support breastfeeding.
- At least 70% are able to mention at least one thing they can do to support women so they can feed their babies well.

** These include staff members providing clinical care for pregnant women, mothers and their babies.*

*** These include staff members providing non-clinical care for pregnant women, mother and their babies or having contact with them in some aspect of their work.*

STEP 3. Inform all pregnant women about the benefits and management of breastfeeding.

	YES	NO
3.1 Does the hospital include an antenatal clinic or satellite antenatal clinics or in-patient antenatal wards? *	☐	☐
3.2 If yes, are the pregnant women who receive antenatal services informed about the importance and management of breastfeeding?	☐	☐
3.3 Do antenatal records indicate whether breastfeeding has been discussed with pregnant women?	☐	☐
3.4 Does antenatal education, including both that provided orally and in written form, cover key topics related to the importance and management of breastfeeding?	☐	☐
3.5. Are pregnant women protected from oral or written promotion of and group instruction for artificial feeding?	☐	☐
3.6. Are the pregnant women who receive antenatal services able to describe the risks of giving supplements while breastfeeding in the first six months?	☐	☐
3.7 Are the pregnant women who receive antenatal services able to describe the importance of early skin-to-skin contact between mothers and babies and rooming-in?	☐	☐
3.8 Is a mother's antenatal record available at the time of delivery?	☐	☐

**Note: If the hospital has <u>no</u> antenatal services or satellite antenatal clinics, questions related to Step 3 and the Global Criteria do not apply and can be skipped.*

Global Criteria - Step Three

If the hospital has an affiliated antenatal clinic or in-patient antenatal ward:

A written description of the minimum content of the breastfeeding information and any printed materials provided to all pregnant women is available.

The antenatal discussion covers the importance of breastfeeding, the importance of immediate and sustained skin-to-skin contact, early initiation of breastfeeding, rooming-in on a 24-hour basis, feeding on cue or baby-led feeding, frequent feeding to help assure enough milk, good positioning and attachment, exclusive breastfeeding for the first 6 months, the risks of giving formula or other breast-milk substitutes, and the fact that breastfeeding continues to be important after 6 months when other foods are given.

Out of the randomly selected pregnant women in their third trimester who have come for at least two antenatal visits:

- At least 70% confirm that a staff member has talked with them individually or offered a group talk that includes information on breastfeeding.
- At least 70% are able to adequately describe what was discussed about two of the following topics: importance of skin-to-skin contact, rooming-in, and risks of supplements while breastfeeding in the first 6 months.

STEP 4. Help mothers initiate breastfeeding within a half-hour of birth.

This Step is now interpreted as:

Place babies in skin-to-skin contact with their mothers immediately following birth for at least an hour. Encourage mothers to recognize when their babies are ready to breastfeed and offer help if needed.

	YES	NO
4.1 Are babies who have been delivered vaginally or by caesarean section without general anaesthesia placed in skin-to-skin contact with their mothers immediately after birth and their mothers encouraged to continue this contact for an hour or more?	☐	☐
4.2 Are babies who have been delivered by caesarean section with general anaesthesia placed in skin-to-skin contact with their mothers as soon as the mothers are responsive and alert, and the same procedures followed?	☐	☐
4.3 Are all mothers helped, during this time, to recognize the signs that their babies are ready to breastfeed and offered help, if needed?	☐	☐
4.4 Are the mothers with babies in special care encouraged to hold their babies, with skin-to-skin contact, unless there is a justifiable reason not to do so?	☐	☐

Global Criteria - Step Four

Out of the randomly selected mothers with vaginal births or caesarean sections without general anaesthesia in the maternity wards:

- At least 80% confirm that their babies were placed in skin-to-skin contact with them immediately or within five minutes after birth and that this contact continued without separation for an hour or more, unless there were medically justifiable reasons.
  (Note: It is preferable that babies remain skin-to-skin even longer than an hour, if feasible, as they may take longer than 60 minutes to be ready to breastfeed)
- At least 80% also confirm that they were encouraged to look for signs for when their babies were ready to breastfeed during this first period of contact and offered help, if needed. *(Note: The baby should not be forced to breastfeed but, rather, supported to do so when ready. If desired, the staff can assist the mother with placing her baby so he or she can move to her breast and latch when ready)*

If any of the randomly selected mothers have had caesarean deliveries with general anaesthesia, at least 50% should report that their babies were placed in skin-to-skin contact with them as soon as the mothers were responsive and alert, with the same procedures followed.

At least 80% of the randomly selected mothers with babies in special care report that they have had a chance to hold their babies skin-to-skin or, if not, the staff could provide justifiable reasons why they could not.

Observations of vaginal deliveries, if necessary to confirm adherence to Step 4, show that in at least 75% of the cases babies are placed with their mothers and held skin-to-skin within five minutes after birth for at least 60 minutes without separation, and that the mothers are shown how to recognize the signs that their babies are ready to breastfeed and offered help, or there are justified reasons for not following these procedures (optional).

STEP 5. Show mothers how to breastfeed and how to maintain lactation, even if they should be separated from their infants.

	YES	NO
5.1 Does staff offer all breastfeeding mothers further assistance with breastfeeding their babies within six hours of delivery?	☐	☐
5.2 Can staff describe the types of information and demonstrate the skills they provide both to mothers who are breastfeeding and those who are not, to assist them in successfully feeding their babies?	☐	☐
5.3 Are staff members or counsellors who have specialized training in breast-feeding and lactation management available full-time to advise mothers during their stay in healthcare facilities and in preparation for discharge?	☐	☐
5.4 Does the staff offer advice on other feeding options and breast care to mothers with babies in special care who have decided not to breastfeed?	☐	☐
5.5 Are breastfeeding mothers able to demonstrate how to correctly position and attach their babies for breastfeeding?	☐	☐
5.6 Are breastfeeding mothers shown how to hand express their milk or given information on expression and advised of where they can get help, should they need it?	☐	☐
5.7 Do mothers who have never breastfed or who have previously encountered problems with breastfeeding receive special attention and support from the staff of the healthcare facility, both in the antenatal and postpartum periods?	☐	☐
5.8 Are mothers who have decided not to breastfeed shown individually how to prepare and give their babies feeds and asked to prepare feeds themselves, after being shown how?	☐	☐
5.9 Are mothers with babies in special care who are planning to breastfeed helped within 6 hours of birth to establish and maintain lactation by frequent expression of milk and told how often they should do this?	☐	☐

The Global Criteria for Step 5 are on the next page.

Global Criteria - Step Five

The head of maternity services reports that mothers who have never breastfed or who have previously encountered problems with breastfeeding receive special attention and support both in the antenatal and postpartum periods.

Observations of staff demonstrating how to safely prepare and feed breast-milk substitutes confirm that in 75% of the cases, the demonstrations are accurate and complete, and the mothers are asked to give “return demonstrations”.

Out of the randomly selected clinical staff members:

- At least 80% report that they teach mothers how to position and attach their babies for breastfeeding and are able to describe or demonstrate correct techniques for both, or, if not, can describe to whom they refer mothers on their shifts for this advice.
- At least 80% report that they teach mothers how to hand express and can describe or demonstrate an acceptable technique for this, or, if not, can describe to whom they refer mothers on their shifts for this advice.
- At least 80% can describe how non-breastfeeding mothers can be assisted to safely prepare their feeds, or can describe to whom they refer mothers on their shifts for this advice.

Out of the randomly selected mothers (including Caesarean):

- At least 80% of those who are breastfeeding report that someone on the staff offered further assistance with breastfeeding within six hours of birth.
- At least 80% of those who are breastfeeding report that someone on the staff offered them help with positioning and attaching their babies for breastfeeding.
- At least 80% of those who are breastfeeding are able to demonstrate or describe correct positioning of their babies for breastfeeding.
- At least 80% of those who are breastfeeding are able to describe what signs would indicate that their babies are attached and suckling well.
- At least 80% of those who are breastfeeding report that they were shown how to express their milk by hand or given written information and told where they could get help if needed.
- At least 80% of the mothers who have decided not to breastfeed report that they have been offered help in preparing and giving their babies feeds, can describe the advice they were given, and have been asked to prepare feeds themselves, after being shown how.

Out of the randomly selected mothers with babies in special care:

- At least 80% of those who are breastfeeding or intending to do so report that they have been offered help to start their breast milk coming and to keep up the supply within 6 hours of their babies’ births.
- At least 80% of those breastfeeding or intending to do so report that they have been shown how to express their breast milk by hand.
- At least 80% of those breastfeeding or intending to do so can adequately describe and demonstrate how they were shown to express their breast milk by hand.
- At least 80% of those breastfeeding or intending to do so report that they have been told they need to breastfeed or express their milk 6 times or more every 24 hours to keep up the supply.

STEP 6. Give newborn infants no food or drink other than breast milk, unless medically indicated.

	YES	NO
6.1 Does hospital data indicate that at least 75% of the full-term babies discharged in the last year have been exclusively breastfeed (or exclusively fed expressed breast milk) from birth to discharge or, if not, that there were acceptable medical reasons?	☐	☐
6.2 Are babies breastfed, receiving no food or drink other than breast milk, unless there were acceptable medical reasons or fully informed choices?	☐	☐
6.3 Does the facility take care not to display or distribute any materials that recommend feeding breast-milk substitutes, scheduled feeds, or other inappropriate practices?	☐	☐
6.4 Do mothers who have decided not to breastfeed report that the staff discussed with them the various feeding options, and helped them to decide what was suitable in their situations?	☐	☐
6.5 Does the facility have adequate space and the necessary equipment and supplies for giving demonstrations of how to prepare formula and other feeding options away from breastfeeding mothers?	☐	☐
6.6 Are all clinical protocols or standards related to breastfeeding and infant feeding in line with BFHI standards and evidence-based guidelines?	☐	☐

Global Criteria - Step Six

Hospital data indicate that at least 75% of the babies delivered in the last year have been exclusively breastfed or exclusively fed expressed breast milk from birth to discharge or, if not, that there were documented medical reasons.

Review of all clinical protocols or standards related to breastfeeding and infant feeding used by the maternity services indicates that they are in line with BFHI standards and current evidence-based guidelines.

No materials that recommend feeding breast milk substitutes, scheduled feeds or other inappropriate practices are distributed to mothers.

The hospital has an adequate facility/space and the necessary equipment for giving demonstrations of how to prepare formula and other feeding options away from breastfeeding mothers.

Observations in the postpartum wards/rooms and any well baby observation areas show that at least 80% of the babies are being fed only breast milk or there are acceptable medical reasons for receiving something else.

At least 80% of the randomly selected mothers report that their babies had received only breast milk or expressed or banked human milk or, if they had received anything else, it was for acceptable medical reasons, described by the staff.

At least 80 % of the randomly selected mothers who have decided not to breastfeed report that the staff discussed with them the various feeding options and helped them to decide what was suitable in their situations.

At least 80% of the randomly selected mothers with babies in special care who have decided not to breastfeed report that staff has talked with them about risks and benefits of various feeding options.

STEP 7. Practice rooming-in - allow mothers and infants to remain together – 24 hours a day.

	YES	NO
7.1 Do the mother and baby stay together and/or start rooming-in immediately after birth?	☐	☐
7.2 Do mothers who have had Caesarean sections or other procedures with general anaesthesia stay together with their babies and/or start rooming in as soon as they are able to respond to their babies' needs?	☐	☐
7.3 Do mothers and infants remain together (rooming-in or bedding-in) 24 hours a day, unless separation is fully justified?	☐	☐

Global Criteria - Step Seven

Observations in the postpartum wards and any well-baby observation areas and discussions with mothers and staff confirm that at least 80% of the mothers and babies are together or, if not, have justifiable reasons for being separated.

At least 80% of the randomly selected mothers report that their babies have been in the same room with them without separation, or, if not, there were justifiable reasons.

STEP 8. Encourage breastfeeding on demand.

	YES	NO
8.1 Are breastfeeding mothers taught how to recognize the cues that indicate when their babies are hungry?	☐	☐
8.2 Are breastfeeding mothers encouraged to feed their babies as often and for as long as the babies want?	☐	☐
8.3 Are breastfeeding mothers advised that if their breasts become overfull they should also try to breastfeed?	☐	☐

Global Criteria - Step Eight

Out of the randomly breastfeeding selected mothers:

- At least 80% report that they have been told how to recognize when their babies are hungry and can describe at least two feeding cues.
- At least 80% report that they have been advised to feed their babies as often and for as long as the babies want or something similar.

STEP 9. Give no artificial teats or pacifiers (also called dummies or soothers) to breastfeeding infants.

	YES	NO
9.1 Are breastfeeding babies being cared for without any bottle feeds?	☐	☐
9.2 Have mothers been given information by the staff about the risks associated with feeding milk or other liquids with bottles and teats?	☐	☐
9.3 Are breastfeeding babies being cared for without using pacifiers?	☐	☐

Global Criteria - Step Nine

Observations in the postpartum wards/rooms and any well baby observation areas indicate that at least 80% of the breastfeeding babies observed are not using bottles or teats or, if they are, their mothers have been informed of the risks.

Out of the randomly selected breastfeeding mothers:

- At least 80% report that, as far as they know, their infants have not been fed using bottles with artificial teats (nipples).
- At least 80% report that, as far as they know, their infants have not sucked on pacifiers.

STEP 10. Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or clinic.

	YES	NO
10.1 Do staff discuss plans with mothers who are close to discharge for how they will feed their babies after return home?	☐	☐
10.2 Does the hospital have a system of follow-up support for mothers after they are discharged, such as early postnatal or lactation clinic check-ups, home visits, telephone calls?	☐	☐
10.3 Does the facility foster the establishment of and/or coordinate with mother support groups and other community services that provide support to mothers on feeding their babies?	☐	☐
10.4 Are mothers referred for help with feeding to the facility's system of follow-up support and to mother support groups, peer counsellors, and other community health services such as primary health care or MCH centres, if these are available?	☐	☐
10.5 Is printed material made available to mothers before discharge, if appropriate and feasible, on where to get follow-up support?	☐	☐
10.6 Are mothers encouraged to see a health care worker or skilled breastfeeding support person in the community soon after discharge (preferably 2-4 days after birth and again the second week) who can assess how they are doing in feeding their babies and give any support needed?	☐	☐
10.7 Does the facility allow breastfeeding/infant feeding counselling by trained mother-support group counsellors in its maternity services?	☐	☐

Global Criteria - Step Ten

The head/director of maternity services reports that:

- Mothers are given information on where they can get support if they need help with feeding their babies after returning home, and the head/director can also mention at least one source of information.
- The facility fosters the establishment of and/or coordinates with mother support groups and other community services that provide breastfeeding/infant feeding support to mothers, and can describe at least one way this is done.
- The staff encourages mothers and their babies to be seen soon after discharge (preferably 2-4 days after birth and again the second week) at the facility or in the community by a skilled breastfeeding support person who can assess feeding and give any support needed and can describe an appropriate referral system and adequate timing for the visits.

A review of documents indicates that printed information is distributed to mothers before discharge, if appropriate, on how and where mothers can find help on feeding their infants after returning home and includes information on at least one type of help available.

Out of the randomly selected mothers at least 80% report that they have been given information on how to get help from the facility or how to contact support groups, peer counsellors or other community health services if they have questions about feeding their babies after return home and can describe at least one type of help that is available.

Compliance with the International Code of Marketing of Breast-milk Substitutes

	YES	NO
Code.1 Does the healthcare facility refuse free or low-cost supplies of breast-milk substitutes, purchasing them for the wholesale price or more?	☐	☐
Code.2 Is all promotion for breast-milk substitutes, bottles, teats, or pacifiers absent from the facility, with no materials displayed or distributed to pregnant women or mothers?	☐	☐
Code.3 Are employees of manufacturers or distributors of breast-milk substitutes, bottles, teats, or pacifiers prohibited from any contact with pregnant women or mothers?	☐	☐
Code.4 Does the hospital refuse free gifts, non-scientific literature, materials or equipment, money or support for in-service education or events from manufacturers or distributors of products within the scope of the Code?	☐	☐
Code.5 Does the hospital keep infant formula cans and pre-prepared bottles of formula out of view unless in use?	☐	☐
Code 6 Does the hospital refrain from giving pregnant women, mothers and their families any marketing materials, samples or gift packs that include breast-milk substitutes, bottles/teats, pacifiers or other equipment or coupons?	☐	☐
Code.7 Do staff members understand why it is important not to give any free samples or promotional materials from formula companies to mothers?	☐	☐

The Global Criteria for Code Compliance are on the following page.

Global Criteria – Code compliance

The head/director of maternity services reports that:

- No employees of manufacturers or distributors of breast-milk substitutes, bottles, teats or pacifiers have any direct or indirect contact with pregnant women or mothers.
- The hospital does not receive free gifts, non-scientific literature, materials or equipment, money, or support for in-service education or events from manufacturers or distributors of breast-milk substitutes, bottles, teats or pacifiers.
- No pregnant women, mothers or their families are given marketing materials or samples or gift packs by the facility that include breast-milk substitutes, bottles/teats, pacifiers, other infant feeding equipment or coupons.

A review of the breastfeeding or infant feeding policy indicates that it uphold the Code and subsequent WHA resolutions by prohibiting:

- the display of posters or other materials provided by manufacturers or distributors of breast-milk substitutes, bottles, teats and dummies or any other materials that promote the use of these products;
- any direct or indirect contact between employees of these manufacturers or distributors and pregnant women or mothers in the facility;
- distribution of samples or gift packs with breast-milk substitutes, bottles or teats or of marketing materials for these products to pregnant women or mothers or members of their families;
- acceptance of free gifts (including food), literature, materials or equipment, money or support for in-service education or events from these manufacturers or distributors by the hospital;
- demonstrations of preparation of infant formula for anyone that does not need them; and
- acceptance of free or low cost breast-milk substitutes or supplies.

A review of records and receipts indicates that any breast-milk substitutes, including special formulas and other supplies, are purchased by the health care facility for the wholesale price or more.

Observations in the antenatal and maternity services and other areas where nutritionists and dieticians work indicate that no materials that promote breast-milk substitutes, bottles, teats or dummies, or other designated products as per national laws, are displayed or distributed to mothers, pregnant women, or staff.

Observations indicate that the hospital keeps infant formula cans and pre-prepared bottles of formula out of view unless in use.

At least 80% of the randomly selected clinical staff members can give two reasons why it is important not to give free samples from formula companies to mothers.

Mother-friendly care

Note: These criteria should be required only after health facilities have trained their staff on policies and practices related to mother-friendly care (see Section 5.1 "Assessors Guide", p. 5, for discussion)

	YES	NO
MF.1 Do hospital policies require mother-friendly labour and birthing practices and procedures, including:		
Encouraging women to have companions of their choice to provide constant or continuous physical and/or emotional support during labour and birth, if desired?	☐	☐
Allowing women to drink and eat light foods during labour, if desired?	☐	☐
Encouraging women to consider the use of non-drug methods of pain relief unless analgesic or anaesthetic drugs are necessary because of complications, respecting the personal preferences of the women?	☐	☐
Encouraging women to walk and move about during labour, if desired, and assume positions of their choice while giving birth, unless a restriction is specifically required for a complication and the reason is explained to the mother?	☐	☐
Care that avoids invasive procedures such as rupture of the membranes, episiotomies, acceleration or induction of labour, instrumental deliveries, caesarean sections unless specifically required for a complication and the reason is explained to the mother?	☐	☐
MF.2 Has the staff received orientation or training on mother-friendly labour and birthing policies and procedures such as those described above?	☐	☐
MF.3 Are women informed during antenatal care (if provided by the facility) that women may have companions of their choice during labour and birth to provide continuous physical and/or emotional support, if they desire?	☐	☐
MF.4 Once they are in labour, are their companions made welcome and encouraged to provide the support the mothers want?	☐	☐
MF.5 Are women given advice during antenatal care (if provided by the facility) about ways to use non-drug comfort measures to deal with pain during labour and what is better for mothers and babies?	☐	☐
MF.6 Are women told that it is better for mothers and babies if medications can be avoided or minimized, unless specifically required for a complication?	☐	☐
MF.7 Are women informed during antenatal care (if provided by the facility) that they can move around during labour and assume positions of their choice while giving birth, unless a restriction is specifically required due to a complication?	☐	☐
MF.8 Are women encouraged, in practice, to walk and move around during labour, if desired, and assume whatever positions they want while giving birth, unless a restriction is specifically required due to a complication?	☐	☐

The Global Criteria for mother-friendly care are on the following page.

Global Criteria – Mother-friendly care

Note: These criteria should be required only after health facilities have trained their staff on policies and practices related to mother-friendly care.

A review of the hospital policies indicates that they require mother-friendly labour and birthing practices and procedures including:

- Encouraging women to have companions of their choice to provide continuous physical and/or emotional support during labour and birth, if desired.
- Allowing women to drink and eat light foods during labour, if desired.
- Encouraging women to consider the use of non-drug methods of pain relief unless analgesic or anaesthetic drugs are necessary because of complications, respecting the personal preferences of the women.
- Encouraging women to walk and move about during labour, if desired, and assume positions of their choice while giving birth, unless a restriction is specifically required for a complication and the reason is explained to the mother.
- Care that does not involve invasive procedures such as rupture of the membranes, episiotomies, acceleration or induction of labour, instrumental deliveries, or caesarean sections unless specifically required for a complication and the reason is explained to the mother.

Out of the randomly selected clinical staff members:

- At least 80% are able to describe at least two recommended practices and procedures that can help a mother be more comfortable and in control during labour and birth.
- At least 80% are able to list at least three labour or birth procedures that should not be used routinely, but only if required due to complications.
- At least 80% are able to describe at least two labour and birthing practices and procedures that make it more likely that breastfeeding will get off to a good start.

Out of the randomly selected pregnant women:

- At least 70% report that the staff has told them women can have companions of their choice with them throughout labour and birth and at least one reason it could be helpful.
- At least 70% report that they were told at least one thing by the staff about ways to deal with pain and be more comfortable during labour, and what is better for mothers, babies and breastfeeding.

HIV and infant feeding (optional)

Note: The national BFHI coordination group and/or other appropriate national decision-makers will determine whether or not maternity services should be assessed on whether they provide support related to HIV and infant feeding. See BFHI Section 1.2 for suggested guidelines for making this decision.

	YES	**NO**
HIV.1 Does the breastfeeding/infant feeding policy require support for HIV positive women to assist them in making informed choices about feeding their infants?	☐	☐
HIV.2 Are pregnant women told about the ways a woman who is HIV positive can pass the HIV infection to her baby, including during breastfeeding?	☐	☐
HIV.3 Are pregnant women informed about the importance of testing and counselling for HIV?	☐	☐
HIV.4 Does staff receive training on: ▪ the risks of HIV transmission during pregnancy, labour and delivery and breastfeeding and its prevention, ▪ the importance of testing and counselling for HIV, and ▪ how to provide support to women who are HIV- positive to make fully informed feeding choices and implement them safely?	☐	☐
HIV.5 Does the staff take care to maintain confidentiality and privacy of pregnant women and mothers who are HIV-positive?	☐	☐
HIV.6 Are printed materials available that are free from marketing content on how to implement various feeding options and distributed to mothers, depending on their feeding choices, before discharge?	☐	☐
HIV.7 Are mothers who are HIV-positive or concerned that they are at risk informed about and/or referred to community support services for HIV testing and infant feeding counselling?	☐	☐

Global Criteria – HIV and infant feeding (optional)

The head/director of maternity services reports that:

- The hospital has policies and procedures that seem adequate concerning providing or referring pregnant women for testing and counselling for HIV, counselling women concerning PMTCT of HIV, providing individual, private counselling for pregnant women and mothers who are HIV positive on infant feeding options, and insuring confidentiality.
- Mothers who are HIV positive or concerned that they are at risk are referred to community support services for HIV testing and infant feeding counselling, if they exist.

A review of the infant feeding policy indicates that it requires that HIV-positive mothers receive counselling, including information about the risks and benefits of various infant feeding options and specific guidance in selecting the options for their situations, supporting them in their choices.

continued on next page

Global Criteria – HIV and infant feeding

(continued from previous page)

A review of the curriculum on HIV and infant feeding and training records indicates that training is provided for appropriate staff and is sufficient, given the percentage of HIV positive women and the staff needed to provide support for pregnant women and mothers related to HIV and infant feeding. The training covers basic facts on:

- The risks of HIV transmission during pregnancy, labour and delivery and breastfeeding and its prevention.
- The importance of testing and counselling for HIV.
- Local availability of feeding options.
- The dangers of mixed feeding for HIV transmission.
- Facilities/provision for counselling HIV positive women on advantages and disadvantages of different feeding options; assisting them in exclusive breastfeeding or formula feeding (note: may involve referrals to infant feeding counsellors).
- How to assist HIV positive mothers who have decided to breastfeed; including how to transition to replacement feeds at the appropriate time.
- How to minimize the likelihood that a mother whose status is unknown or HIV negative will be influenced to replacement feed.

A review of the antenatal information indicates that it covers the important topics on this issue (these include the routes by which HIV-infected women can pass the infection to their infants, the approximate proportion of infants that will (and will not) be infected by breastfeeding; the importance of counselling and testing for HIV and where to get it; and the importance of HIV positive women making informed infant feeding choices and where they can get the needed counselling).

A review of documents indicates that printed material is available, if appropriate, on how to implement various feeding options and is distributed to or discussed with HIV positive mothers before discharge. It includes information on how to exclusively replacement feed, how to exclusively breastfeed, how to stop breastfeeding when appropriate, and the dangers of mixed feeding.

Out of the randomly selected clinical staff members:

- At least 80% can describe at least one measure that can be taken to maintain confidentiality and privacy of HIV positive pregnant women and mothers.
- At least 80% are able to mention at least two policies or procedures that help prevent transmission of HIV from an HIV positive mother to her infant during feeding within the first six months.
- At least 80% are able to describe two issues that should be discussed when counselling an HIV positive mother who is deciding how to feed her baby.

Out of the randomly selected pregnant women who are in their third trimester and have had at least two antenatal visits or are in the antenatal in-patient unit:

- At least 70% report that a staff member has talked with them or given a talk about HIV/AIDS and pregnancy.
- At least 70% report that the staff has told them that a woman who is HIV-positive can pass the HIV infection to her baby.
- At least 70% can describe at least one thing the staff told them about why testing and counselling for HIV is important for pregnant women..
- At least 70% can describe at least one thing the staff told them about what women who do not know their HIV status should consider when deciding how to feed their babies.

Summary

	YES	NO
Does your hospital fully implement all **10 STEPS** for protecting, promoting, and supporting breastfeeding? (if "No") List questions for each of the 10 Steps where answers were "No":	☐	☐
Does your hospital fully comply with the **Code of Marketing of Breast-milk Substitutes**? (if "No") List questions concerning the Code where answers were "No":	☐	☐
Does your hospital provide **mother-friendly care**? (if "No") List questions concerning mother-friendly care where answers were "No"	☐	☐
Does your hospital provide adequate support related to **HIV-and infant feeding** (if required)? (if "No") List questions concerning HIV and infant feeding where answers were "No":	☐	☐
If the answers to any of these questions in the "Self Appraisal" are "no", what improvements are needed? If improvements are needed, would you like some help? If yes, please describe:		

This form is provided to facilitate the process of hospital self-appraisal. The hospital or health facility is encouraged to study the Global Criteria as well. If it believes it is ready and wishes to request a pre-assessment visit or an external assessment to determine whether it meets the global criteria for Baby-friendly designation, the completed form may be submitted in support of the application to the relevant national health authority for BFHI.

If this form indicates a need for substantial improvements in practice, hospitals are encouraged to spend several months in readjusting routines, retraining staff, and establishing new patterns of care. The self-appraisal process may then be repeated. Experience shows that major changes can be made in three to four months with adequate training. In-facility or in-country training is easier to arrange than external training, reaches more people, and is therefore encouraged.

Note: List the contact information and address to which the form and request for pre-assessment visit or external assessment should be sent.

Annexes to Section 4.1

Annex 1: Hospital breastfeeding/infant feeding policy checklist

(Note: A hospital policy does not have to have the exact wording or points as in this checklist, but should cover most or all of these key issues. Care should be taken that the policy is not too long. Shorter policies (3 to 5 pages) have been shown to be more effective as longer ones often go unread).

The policy should clearly cover the following points:		YES	NO
Step 1:	The policy is routinely communicated to all (new) staff.	☐	☐
	A summary of the policy that addresses the Ten Steps and support for non-breastfeeding mothers is displayed in all appropriate areas in languages and with wording staff and mothers can easily understand.	☐	☐
Step 2:	Training for all clinical staff (according to position) includes: Breastfeeding and lactation management (20 hours minimum or covering all essential topics, including at least 3 hours of clinical practice).	☐	☐
	Feeding the infant who is not breastfed.	☐	☐
	The role of the facility and its staff in upholding the International Code of Marketing and subsequent WHA resolutions.	☐	☐
	New staff members are trained within 6 months of appointment.	☐	☐
Step 3:	All pregnant women are informed of: Basic breastfeeding management and care practices.	☐	☐
	The risks of giving supplements to their babies during the first six months.	☐	☐
Step 4:	All mothers and babies receive: Skin-to-skin contact immediately after birth for at least 60 minutes.	☐	☐
	Encouragement to look for signs that their babies are ready to breastfeed and offer of help if needed.	☐	☐
Step 5:	All breastfeeding mothers are offered further help with breastfeeding within 6 hours of birth.	☐	☐
	All breastfeeding mothers are taught positioning and attachment.	☐	☐
	All mothers are taught hand expression (or given leaflet and referral for help).	☐	☐
	All mothers who have decided not to breastfeeding are: Informed about risks and management of various feeding options and helped to decide what is suitable in their circumstances.	☐	☐
	Taught to prepare their feedings of choice and asked to demonstrate what they have learned.	☐	☐
	Mothers of babies in special care units are: Offered help to initiate lactation offered help to start their breast milk coming and to keep up the supply within 6 hours of their babies' births.	☐	☐
	Shown how to express their breast milk by hand and told they need to breastfeed or express at least 6-8 times in 24 hours to keep up their supply.	☐	☐
	Given information on risks and benefits of various feeding options and how to care for their breasts if they are not planning to breastfeed.	☐	☐
Step 6:	Supplements/replacement feeds are given to babies only: If medically indicated.	☐	☐
	If mothers have made "fully informed choices" after counselling on various options and the risks and benefits of each.	☐	☐

	Reasons for supplements are documented.	☐	☐
Step 7:	All mothers and babies room-in together, including at night.	☐	☐
	Separations are only for justifiable reasons with written documentation.	☐	☐
Step 8:	Breastfeeding mothers are taught how to recognize the signs that their babies are hungry and that they are satisfied.	☐	☐
	No restrictions are placed on the frequency or duration of breastfeeding.	☐	☐
Step 9:	Breastfeeding babies are not fed using bottles and teats.	☐	☐
	Mothers are taught about the risks of using feeding bottles.	☐	☐
	Breastfeeding babies are not given pacifiers or dummies.	☐	☐
Step10:	Information is provided on where to access help and support with breastfeeding/ infant feeding after return home, including at least one source (such as from the hospital, community health services, support groups or peer counsellors).	☐	☐
	The hospital works to foster or coordinate with mother support groups and/or other community services that provide infant feeding support.	☐	☐
	Mothers are provided with information about how to get help with feeding their infants soon after discharge (preferably 2-4 days after discharge and again the following week).	☐	☐
The Code:	The policy prohibits promotion of breast milk substitutes.	☐	☐
	The policy prohibits promotion of bottles, teats, and pacifiers or dummies.	☐	☐
	The policy prohibits the distribution of samples or gift packs with breast-milk substitutes, bottles or teats or of marketing materials for these products to pregnant women or mothers or members of their families.	☐	☐
Mother friendly care:	Policies require mother-friendly practices including: Encouraging women to have constant labour and birthing companions of their choice.	☐	☐
	Encouraging women to walk and move about during labour, if desired, and to assume the positions of their choice while giving birth, unless a restriction is specifically required for a complication and the reason is explained to the mother.	☐	☐
	Not using invasive procedures such as rupture of membranes, episiotomies, acceleration or induction of labour, caesarean sections or instrumental deliveries, unless specifically required for a complication and the reason is explained to the mother.	☐	☐
	Encouraging women to consider the use of non-drug methods of pain relief unless analgesic or anaesthetic drugs are necessary because of complications, respecting the personal preferences of the women.	☐	☐
HIV*	All HIV-positive mothers receive counselling, including information about the risks and benefits of various infant feeding options and specific guidance in selecting what is best in their circumstances.	☐	☐
	Staff providing support to HIV-positive women receive training on HIV and infant feeding.	☐	☐

* The **HIV-related content** in the policy should be assessed only if national authorities have made the decision that the BFHI assessment should include HIV criteria.

Annex 2: The International Code of Marketing of Breast-milk Substitutes[4]

Summary of the main points

- No advertising of breast-milk substitutes and other products to the public
- No donations of breast-milk substitutes and supplies to maternity hospitals
- No free samples to mothers
- No promotion in the health services
- No company personnel to advise mothers
- No gifts or personal samples to health workers
- No use of space, equipment or educational materials sponsored or produced by companies when teaching mothers about infant feeding
- No pictures of infants or other pictures idealizing artificial feeding on the labels of the products
- Information to health workers should be scientific and factual
- Information on artificial feeding, including labels, should explain the benefits of exclusive breastfeeding and the costs and dangers associated with artificial feeding
- Unsuitable products, such as sweetened condensed milk, should not be promoted for babies.

The role of administrators and staff in upholding the Code

- Free or low-cost supplies of breast-milk substitutes should not be accepted in health care facilities.
- Breast-milk substitutes should be purchased by the health care facility in the same way as other foods and medicines, for at least wholesale price. Promotional material for infant foods or drinks other than breast milk should not be permitted in the facility.
- Pregnant women should not receive materials that promote artificial feeding.
- Feeding with breast-milk substitutes should be demonstrated by health workers only, and only to pregnant women, mothers, or family members who need to use them.
- Breast-milk substitutes in the health facility should be kept out of the sight of pregnant women and mothers.
- The health facility should not allow sample gift packs with breast-milk substitutes or related supplies that interfere with breastfeeding to be distributed to pregnant women or mothers.
- Financial or material inducements to promote products within the scope of the Code should not be accepted by health workers or their families.
- Manufacturers and distributors of products within the scope of the Code should disclose to the institution any contributions made to health workers such as fellowships, study tours, research grants, conferences, or the like. Similar disclosures should be made by the recipient.

[4] Adapted from *Promoting breastfeeding in health facilities: A short course for administrators and policy-makers.* World Health Organization and Wellstart International, Geneva, Switzerland, revised as Section 2 of this BFHI series.

Annex 3: HIV and infant feeding recommendations[5]

Situation	Guidelines for health workers
Mother's HIV status is unknown	– Encourage that she obtain HIV testing and counselling – Promote optimal feeding practices (exclusive breastfeeding for first 6 months, introduction of appropriate complementary foods at about 6 months, and continued breastfeeding to 24 months and beyond) – Counsel the mother and her partner on how to avoid exposure to HIV
Mother's HIV status is negative	– Promote exclusive breastfeeding as safest infant feeding method (exclusive breastfeeding for the first 6 months, introduction of appropriate complementary foods at about 6 months, and continued breastfeeding to 24 months and beyond) – Counsel the mother and her partner on how to avoid exposure to HIV
Mother's HIV status is positive	– Provide access to anti-retroviral drugs to prevent mother-to-child-transmission, according to country guidelines – Provide counselling for the mother on the risks and benefits of infant-feeding options, including the acceptability, feasibility, affordability, sustainability and safety of the options – Assist the mother to choose the most appropriate infant-feeding option, according to her own situation, or refer her for guidance – Provide counselling for the mother on infant feeding after early cessation, or refer her for guidance – Refer the mother to family planning and childcare services, as appropriate – Refer the mother for long-term health care, including ARVs where available and appropriate
Mother is HIV-positive and chooses to breastfeed	– Explain the need to exclusively breastfeed for the first six months with cessation when replacement feeding is acceptable, feasible, affordable, sustainable and safe – Support the mother in planning and carrying out a safe transition from exclusive breastfeeding to exclusive replacement feeding – Prevent and treat breast conditions of mothers. Treat thrush in infants – Insure that mother knows where to seek skilled care if any problems
Mother is HIV-positive and chooses another breast milk option	– Provide support to the mother to carry out her option as safely as possible
Mother is HIV-positive and chooses replacement feeding	– Provide the mother with the skills to carry out her choice – Teach the mother replacement feeding skills, including cup-feeding and hygienic preparation and storage, away from breastfeeding mothers

[5] Table adapted from Annex 10, page 137 of the WHO/Linkages document, *Infant and Young Child Feeding: A Tool for Assessing National Practices, Policies and Programmes,* World Health Organization, Geneva, 2003. (website: http://www.who.int/child-adolescent-health/publications/NUTRITION/IYCF_AT.htm)

Annex 4:

WHO/NMH/NHD/09.01
WHO/FCH/CAH/09.01

Acceptable medical reasons for use of breast-milk substitutes

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Preface

A list of acceptable medical reasons for supplementation was originally developed by WHO and UNICEF as an annex to the Baby-friendly Hospital Initiative (BFHI) package of tools in 1992.

WHO and UNICEF agreed to update the list of medical reasons given that new scientific evidence had emerged since 1992, and that the BFHI package of tools was also being updated. The process was led by the departments of Child and Adolescent Health and Development (CAH) and Nutrition for Health and Development (NHD). In 2005, an updated draft list was shared with reviewers of the BFHI materials, and in September 2007 WHO invited a group of experts from a variety of fields and all WHO Regions to participate in a virtual network to review the draft list. The draft list was shared with all the experts who agreed to participate. Subsequent drafts were prepared based on three inter-related processes: a) several rounds of comments made by experts; b) a compilation of current and relevant WHO technical reviews and guidelines (see list of references); and c) comments from other WHO departments (Making Pregnancy Safer, Mental Health and Substance Abuse, and Essential Medicines) in general and for specific issues or queries raised by experts.

Technical reviews or guidelines were not available from WHO for a limited number of topics. In those cases, evidence was identified in consultation with the corresponding WHO department or the external experts in the specific area. In particular, the following additional evidence sources were used:
-*The Drugs and Lactation Database* (LactMed) hosted by the United States National Library of Medicine, which is a peer-reviewed and fully referenced database of drugs to which breastfeeding mothers may be exposed.
-*The National Clinical Guidelines for the management of drug use during pregnancy, birth and the early development years of the newborn*, review done by the New South Wales Department of Health, Australia, 2006.

The resulting final list was shared with external and internal reviewers for their agreement and is presented in this document.

The list of acceptable medical reasons for temporary or long-term use of breast-milk substitutes is made available both as an independent tool for health professionals working with mothers and newborn infants, and as part of the BFHI package. It is expected to be updated by 2012.

Acknowledgments

This list was developed by the WHO Departments of Child and Adolescent Health and Development and Nutrition for Health and Development, in close collaboration with UNICEF and the WHO Departments of Making Pregnancy Safer, Essential Medicines and Mental Health and Substance Abuse. The following experts provided key contributions for the updated list: Philip Anderson, Colin Binns, Riccardo Davanzo, Ros Escott, Carol Kolar, Ruth Lawrence, Lida Lhotska, Audrey Naylor, Jairo Osorno, Marina Rea, Felicity Savage, María Asunción Silvestre, Tereza Toma, Fernando Vallone, Nancy Wight, Anthony Williams and Elizabeta Zisovska. They completed a declaration of interest and none identified a conflicting interest.

Introduction

Almost all mothers can breastfeed successfully, which includes initiating breastfeeding within the first hour of life, breastfeeding exclusively for the first 6 months and continuing breastfeeding (along with giving appropriate complementary foods) up to 2 years of age or beyond.

Exclusive breastfeeding in the first six months of life is particularly beneficial for mothers and infants.

Positive effects of breastfeeding on the health of infants and mothers are observed in all settings. Breastfeeding reduces the risk of acute infections such as diarrhoea, pneumonia, ear infection, *Haemophilus influenza*, meningitis and urinary tract infection (1). It also protects against chronic conditions in the future such as type I diabetes, ulcerative colitis, and Crohn's disease. Breastfeeding during infancy is associated with lower mean blood pressure and total serum cholesterol, and with lower prevalence of type-2 diabetes, overweight and obesity during adolescence and adult life (2). Breastfeeding delays the return of a woman's fertility and reduces the risks of post-partum haemorrhage, pre-menopausal breast cancer and ovarian cancer (3).

Nevertheless, a small number of health conditions of the infant or the mother may justify recommending that she does not breastfeed temporarily or permanently (4). These conditions, which concern very few mothers and their infants, are listed below together with some health conditions of the mother that, although serious, are not medical reasons for using breast-milk substitutes.

Whenever stopping breastfeeding is considered, the benefits of breastfeeding should be weighed against the risks posed by the presence of the specific conditions listed.

INFANT CONDITIONS

Infants who should not receive breast milk or any other milk except specialized formula

- Infants with classic galactosemia: a special galactose-free formula is needed.
- Infants with maple syrup urine disease: a special formula free of leucine, isoleucine and valine is needed.
- Infants with phenylketonuria: a special phenylalanine-free formula is needed (some breastfeeding is possible, under careful monitoring).

Infants for whom breast milk remains the best feeding option but who may need other food in addition to breast milk for a limited period

- Infants born weighing less than 1500 g (very low birth weight).
- Infants born at less than 32 weeks of gestation (very preterm).
- Newborn infants who are at risk of hypoglycaemia by virtue of impaired metabolic adaptation or increased glucose demand (such as those who are preterm, small for gestational age or who have experienced significant intrapartum hypoxic/ischaemic stress, those who are ill and those whose mothers are diabetic (5) if their blood sugar fails to respond to optimal breastfeeding or breast-milk feeding.

MATERNAL CONDITIONS

Mothers who are affected by any of the conditions mentioned below should receive treatment according to standard guidelines.

Maternal conditions that may justify permanent avoidance of breastfeeding

- HIV infection[6]: if replacement feeding is acceptable, feasible, affordable, sustainable and safe (AFASS) (6). Otherwise, exclusive breastfeeding for the first six months is recommended.

Maternal conditions that may justify temporary avoidance of breastfeeding

- Severe illness that prevents a mother from caring for her infant, for example sepsis.
- Herpes simplex virus type 1 (HSV-1): direct contact between lesions on the mother's breasts and the infant's mouth should be avoided until all active lesions have resolved.
- Maternal medication:
  - sedating psychotherapeutic drugs, anti-epileptic drugs and opioids and their combinations may cause side effects such as drowsiness and respiratory depression and are better avoided if a safer alternative is available (7);
  - radioactive iodine-131 is better avoided given that safer alternatives are available - a mother can resume breastfeeding about two months after receiving this substance;
  - excessive use of topical iodine or iodophors (e.g., povidone-iodine), especially on open wounds or mucous membranes, can result in thyroid suppression or electrolyte abnormalities in the breastfed infant and should be avoided;
  - cytotoxic chemotherapy requires that a mother stops breastfeeding during therapy.

Maternal conditions during which breastfeeding can still continue, although health problems may be of concern

- Breast abscess: breastfeeding should continue on the unaffected breast; feeding from the affected breast can resume once treatment has started (8).
- Hepatitis B: infants should be given hepatitis B vaccine, within the first 48 hours or as soon as possible thereafter (9).
- Hepatitis C.
- Mastitis: if breastfeeding is very painful, milk must be removed by expression to prevent progression of the condition(8).
- Tuberculosis: mother and baby should be managed according to national tuberculosis guidelines (10).
- Substance use[7] (11):
  - maternal use of nicotine, alcohol, ecstasy, amphetamines, cocaine and related stimulants has been demonstrated to have harmful effects on breastfed babies;
  - alcohol, opioids, benzodiazepines and cannabis can cause sedation in both the mother and the baby.

  Mothers should be encouraged not to use these substances, and given opportunities and support to abstain.

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[6] The most appropriate infant feeding option for an HIV-infected mother depends on her and her infant's individual circumstances, including her health status, but should take consideration of the health services available and the counselling and support she is likely to receive. Exclusive breastfeeding is recommended for the first six months of life unless replacement feeding is AFASS. When replacement feeding is AFASS, avoidance of all breastfeeding by HIV-infected women is recommended. Mixed feeding in the first 6 months of life (that is, breastfeeding while also giving other fluids, formula or foods) should always be avoided by HIV-infected mothers.

[7] Mothers who choose not to cease their use of these substances or who are unable to do so should seek individual advice on the risks and benefits of breastfeeding depending on their individual circumstances. For mothers who use these substances in short episodes, consideration may be given to avoiding breastfeeding temporarily during this time.

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(10) *Breastfeeding and Maternal tuberculosis*. Geneva, World Health Organization, 1998 (Update No. 23).

(11) *Background papers to the national clinical guidelines for the management of drug use during pregnancy, birth and the early development years of the newborn.* Commissioned by the Ministerial Council on Drug Strategy under the Cost Shared Funding Model. NSW Department of Health, North Sydney, Australia, 2006. http://www.health.nsw.gov.au/pubs/2006/bkg_pregnancy.html

Further information on maternal medication and breastfeeding is available at the following United States National Library of Medicine (NLM) website:
http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?LACT

For further information, please contact:

Department of Nutrition for Health and Development
E-mail: nutrition@who.int
Web: www.who.int/nutrition

Department of Child and Adolescent Health and Development
E-mail: cah@who.int
Web: www.who.int/child_adolescent_health

Address: 20 Avenue Appia, 1211 Geneva 27, Switzerland

4.2 GUIDELINES AND TOOLS FOR MONITORING BABY-FRIENDLY HOSPITALS[8]

Guidelines and Tools for Monitoring Baby-Friendly Hospitals 37

Guide to developing a national process for BFHI monitoring 39
Background 39
Rationale for monitoring and reassessment 39
Strategies for monitoring 41
Integrating BFHI monitoring into quality assurance or accreditation programs 43
Sample tools for monitoring 44
Annex 1: Infant feeding record and report 49
Annex 2: Staff training record and report 53
Annex 3: BFHI monitoring tool 59
Annex 4: The BFHI reassessment tool and its possible use for monitoring 83

[8] This set of guidelines and tools for monitoring includes material both from the original Part VII of the UNICEF BFHI documents and from the WHO/Wellstart document, *BFHI Monitoring and Reassessment: Tools to Sustain Progress*. Geneva, Switzerland, 1999 (WHO/NHD/99.2).

Guide to Developing a National Process for BFHI Monitoring

Background[9]

Between the launching of the Baby-friendly Hospital Initiative (BFHI) and 2007more than 20,000 facilities worldwide had been officially assessed and designated as "baby-friendly". This major achievement is contributing to increases in breastfeeding and decreases in morbidity and mortality in every region. This is the world's first major initiative for breastfeeding to cut across all regional, linguistic, economic and political boundaries. By a conservative estimate, over a million health workers have received in-service training through BFHI, using WHO/UNICEF materials available in all UN languages and many national languages.

Every woman who gives birth has the potential resource of breast milk for her child. Rich or poor, highly educated or illiterate, every mother has in her control and in her own household the very best food for her infant. Through the BFHI, means have been found to empower women everywhere to make use of this resource, fulfilling their right to breastfeed for their own and their children's health. Few other interventions return such high dividends in health, self-reliance and child development, and almost none at such low cost.

At the same time, Baby-friendly practices ensure that women who do not breastfeed also receive support for the feeding options they have chosen with full, unbiased information, free of commercial pressures, and the early continuous contact that promotes good bonding.

Maintaining the momentum of this global initiative is among the actions stressed in the *WHO/UNICEF Global Strategy for Infant and Young Child Feeding* that was endorsed by the World Health Assembly and UNICEF in 2002. The *Global Strategy* reaffirms the relevance and urgency of the operational targets of the *Innocenti Declaration,* including implementation of the *Ten Steps to Successful Breastfeeding* and full application of the *International Code of Marketing of Breast-milk Substitutes* and its subsequent resolutions, stressing that BFHI should continue to be implemented, and that designated health facilities be monitored and reassessed on an on-going basis. Keeping those that have already been designated as Baby-friendly up to the same high standards of quality is critical if BFHI is to have a sustained impact.

Rationale for Monitoring and Reassessment

Maintaining the global standards

These guidelines respond to requests from the national authorities responsible for BFHI that have noted tendencies of health facilities to backslide somewhat, and even to revert to old patterns of maternity care, and have requested UNICEF offices for guidance on how to maintain the Baby-Friendly standards.

Reasons for deterioration vary. New administrators unfamiliar with BFHI may be assigned, staff turnover may be high with new arrivals not yet trained, or families may demand the former familiar patterns of care and gifts of formula. Commercial influences may have intensified, with new marketing approaches. Practices can also shift and erode due to ordinary human inconsistencies. Whatever the cause, slippage in practices can occur despite the best intentions of administrators, the dedicated work of many staff members, and the continued existence on paper of exemplary BFHI policies.

[9] The first two sections of this Guide are identical to the same sections in the "Guidelines and Tools for BFHI Reassessment" to ensure that the same information about the rationale for both monitoring and reassessment and their varying purposes is provided in both documents.

To maintain the credibility of the BFHI, monitoring and reassessment is periodically needed. How to do this in a positive spirit without creating an enormous burden on central authorities is a challenge. A mixture of random checks and directed checks may be helpful.

Specific purposes of monitoring and reassessment

There are three common purposes:

- To support and motivate facility staff to maintain baby-friendly practices.
- To verify whether mothers' experiences at the facility are helping them to breastfeed.
- To identify if the facility is doing poorly on any of the Ten Steps and thus whether needs to do further work to make needed improvements.

A fourth purpose relates to national measures to end free and low-cost supplies of breast-milk substitutes, feeding bottles and teats:

- To verify if governments and other responsible organizations are implementing and enforcing the International Code of Marketing of Breast-milk Substitutes and subsequent WHA resolutions.

Monitoring and reassessment, however, each has a different focus.

Monitoring is a dynamic system for data collection and review that can provide information on implementation of the *Ten Steps* to assist with on-going management of the *Initiative*. It can be organized by the hospitals themselves or at a higher level in the system. It can be relatively inexpensive, if the monitors are either from the hospitals or already employed within the health care system. Data should be collected either on an on-going basis or periodically, for example on a semi-annual or yearly basis, to measure both breastfeeding support provided by the hospitals and mothers' feeding practices. Hospital management and staff should use the results to identify areas needing improvement and then develop plans of action to make needed changes. The monitoring results and plan of action should be shared with the national authority responsible for BFHI, including whatever BFHI coordination group is in place. Plans for making any improvements indicated can be discussed as well as any technical guidance or support needed from the national level.

When possible, monitoring of adherence of selected *Global Criteria* should be integrated into a broader system of hospital auditing or quality assurance (see discussion later in this document).

Reassessment can be described as a "re-evaluation" of already designated baby-friendly hospitals to determine if they continue to adhere to the *Ten Steps* and other baby-friendly criteria. It is usually planned and scheduled by the national authority responsible for BFHI for the purpose of evaluating on-going compliance with the *Global Criteria* and includes a reassessment visit by an outside team. The outside team can be from the same area or region, to reduce costs. Reassessment is often more comprehensive than monitoring and usually involves the need for additional resources, even if reassessment teams are fielded locally. Because of the human and financial resources required, in many countries it may be feasible to reassess hospitals only once every three years, but the final decision concerning how often reassessment is required should be left to the national authority.

Countries may decide to implement either a system for monitoring or reassessment or both. If feasible, it is recommended that both be implemented, as they have different purposes.

Strategies for monitoring are discussed in the material that follows. Some tools that may be used for monitoring are then presented in the annexes to this Section 4.2. Strategies and a tool for reassessment are presented in Section 5.3 of the BFHI document set, after the assessment tools. Section 5.3 should be only available to UNICEF Offices, national authorities responsible for BFHI, and the assessors involved in reassessments. The tool used for reassessment should not be available to the hospitals themselves or their staff, as this would give hospitals unfair advantage if they knew exactly how they would be tested.

However, some countries may decide that the most efficient and cost-effective way to maintain BFHI standards would be to develop an on-going internal monitoring system, rather than using any external (and therefore more expensive) reassessment process. If so, these countries may wish to use the reassessment tool presented in Section 5.3 for monitoring and can make it available to the hospitals for monitoring purposes (care should be taken to minimize the possibility that this tool, used for external reassessment in other countries, will not get distributed to hospitals elsewhere, thus jeopardizing the integrity of the external assessment process).

Strategies for Monitoring

How can the facility itself maintain standards?

Ideally, practices that promote and support breastfeeding should be routinely verified. It is suggested that administrators find some means of ongoing self-appraisal by the facility, perhaps through a BFHI or infant feeding committee with representation of all levels of care. A request for monitoring reports from the national authority could serve as an incentive for maintaining standards. Reports could be requested on an annual basis by the national authority from the committee responsible for BFHI at each facility, specifying degree of implementation of all 10 Steps, the absence of free and low-cost supplies, provision of mother-friendly care, and compliance with criteria related to HIV and infant feeding, if these are being monitored.

Internal monitoring approaches

Self-Appraisal Tool: Consistent use of the *Hospital Self-Appraisal Tool* (found in Section 4.1 of the BFHI documents) can be integrated into any periodic review of care practices and provide early notice of any deterioration in practice.

Chart review: Periodic review of patient charts might reveal any tendency to slip back to old patterns of care such as limited skin-to-skin contact, separation of mother and newborn, or use of pacifiers and bottles. The review should also cover women who are not breastfeeding to ensure that a double standard of care has not developed. For example, mothers who are not breastfeeding nevertheless need continuous skin-to-skin contact with their newborns, rooming in, and protection from commercial influences.

Review of "mother or baby cards" or "passports": In some countries it may be feasible to have key information regarding immediate skin-to-skin contact, the first breastfeed, and whether the baby receives any other liquids or foods before discharge included in the mother or baby card or "passport". If included, this would help emphasize the fundamental importance of these practices and comprise a standard record from which data on these indicators could be collected.

Review of hospital infant feeding policies: It is useful, periodically, to perform an audit of the hospital's infant feeding policies, both to make sure that they are in line with the revised BFHI global criteria related to Step 1 and the Code of Marketing requirements that apply to hospitals, as well as to determine whether these policies are being followed. Labour and

delivery policies should be reviewed as well, to assess if they address the criteria for mother-friendly care.

Review of training materials and records: In many settings staff turnover is quite common and the knowledge and skills of those remaining tends to deteriorate over time as well. Thus it is essential for health facilities to have an on-going system for training new staff and providing needed refresher courses for those still on the job. A good monitoring system should review both the current training curricula and recent staff training records to assure that the knowledge and skills needed are maintained.

Review of receipted invoices: By reviewing records of use, purchase and full payment, administrators can assure themselves that no free or low-cost supplies of infant feeding products, including breast-milk substitutes, bottles and teats, are entering their hospitals.[10]

Micro-planning. Groups of staff can perform their own Triple A process: *assessment* and *analysis* of the BFH implementation, leading to decisions on appropriate *actions*. Staff involved should include members of the hospital's breastfeeding or infant feeding committee and representatives of any affiliated MCH clinics. Staff with the closest contact with mothers and infants may be best placed to suggest possible improvements.

Learning from mothers' experiences

Feedback from a random sample of mothers might also be used to establish what the current practices are:

Oral discharge questions for mothers. Selected questions may be asked of mothers when they are being discharged by someone who did not provide care for the mothers and is not associated in the mothers' minds with the maternity services. The interviewer could be either from outside the facility or from a department or unit other than the maternity services.

Written discharge questions for mothers. Where many mothers are well schooled, they can be given brief forms at discharge to fill out before leaving, depositing them in a box designed for that purpose. Alternatively they can be asked to fill them out as soon as they arrive home, sending them back in self-addressed envelopes, but this may not be feasible in some countries, and if the forms are not completed and turned in before the mother departs, the response rate is likely to be much lower.

MCH Clinic questions for individual mothers. At any MCH clinic in the area served by the hospital a few randomly selected women each month can be asked about their experience in the maternity service. Their first postpartum visit to the clinic would be perhaps the best time. Written answers can also be collected in clinics, where appropriate, given educational levels.

MCH Clinic focus groups. One member of the hospital maternity staff or a person not connected with the maternity facility might go to an MCH clinic and talk with groups of mothers of newborns to learn about any difficulties or doubts regarding breastfeeding. Her report back to her facility could be used to improve the help given before discharge and the system of referral to community support.

Open questions inviting mothers to talk freely about their experiences could include:

- What information on feeding your infant were you given during your pregnancy?
- What information were you given about hospital practices and support for feeding your infant that would be available to you after delivery?

[10] This may be challenging in large hospital systems where purchasing is done by a central purchasing unit outside the hospital, or in facilities where ready-made feeds are used that are available only in hospitals, thus making it hard to compare with the price for feeds given at home (either liquid or powdered formula not in disposable bottles). Creative ways of estimating what is "fair" may need to be devised, possibly in collaboration with the national BFHI coordination group.

- What information were you given related to labour and delivery practices and how they affect breastfeeding?
- What did you learn that was helpful to you during this period?
- How well do you feel you were prepared for breastfeeding before your delivery?
- What was most helpful related to support you received on feeding your infant during your hospital stay?
- What was least helpful?
- How well were your expectations met concerning the support you would receive in the hospital?
- What have you learned since discharge, that you wish you had been told in hospital?
- What would you like other women to learn while in hospital, so that feeding their infants would be easier for them?
- Whom do you talk to or where do you go when you have questions about feeding your baby?

Data collection during home visits: In some countries mothers are entitled to postpartum midwifery services or the follow-up system includes "health visitor" visits to mothers in their homes for postpartum and postnatal support. These midwives/health visitors could be asked to collect data, using a brief checklist, with care taken not to add much extra paperwork or time to their visits.

Paediatric re-admissions: When infants born at a facility are re-admitted for diarrhoea, respiratory infections, or malnutrition, questions added to the admission history can indicate if the illness is related to lack of information or help with breastfeeding.

Collection, recording and evaluating information are time-consuming and costly in terms of staff time. A baby-friendly hospital needs to calculate that into its monitoring system so it does not become just an extra thankless task for its staff. Carefully planned interviewing of mothers and gathering of statistics could become an ongoing project carried out by nursing, midwifery, medical or doctoral students. In a university affiliated hospital it could become an inter-disciplinary part of the curriculum on statistics, research methods and, of course, breastfeeding.

Integrating BFHI monitoring into quality assurance or accreditation programs

In the interests of an integrated and cost-effective approach to monitoring compliance with the BFHI standards, it is important to consider the possibilities for integrating BFHI monitoring into hospital programs for auditing or quality assurance and to explore mechanisms for integrating BFHI assessment and/or reassessment into national systems for hospital accreditation.

In situations where hospitals have auditing or quality assurance (QA) systems in place, it is useful to explore whether measurement of some or all of the key BFHI Steps and related criteria can be integrated into the systems. Usually it will be necessary to select a small number of breastfeeding and BFHI-related indicators to be measured, as QA programs often cover a wide range of health indicators. While this will mean that it will not be possible to fully track compliance with the Ten Steps, the advantages are that integration within the auditing or QA system will help insure sustainability of the measurement process.

In countries where national systems for hospital accreditation are in place, it is useful to explore the possibility of adding BFHI related criteria to the list of requirements for facility accreditation. Periodic evaluations to assess whether the hospitals continue to meet standards stimulates the institutions to maintain and improve the quality of the services measured. If the

most essential BFHI criteria can be integrated into the standards mentioned, this will insure periodic assessment of key standards.

Sample Tools for Monitoring

Over the years since the launching of BFHI in 1991, several monitoring strategies and tools have been developed that may be useful for hospitals to consider. These strategies and tools are presented in the *Annexes* that follow, and are described briefly below. They vary from very simple record-keeping strategies, to a fuller monitoring tool including brief reviews and observations and self-administered questionnaires for mothers. Care needs to be taken to devise simple monitoring systems, with clear assignments for data collection, analysis and use, and sufficient time allotted for those assigned. The strategies and tools featured in the Annexes include:

Annex 1: Infant feeding records and reports. A simple *Infant Feeding Record* can be used to keep track of mothers' experiences in the maternity wards, as a way of monitoring implementation of many of the Ten Steps and mothers' feeding practices. One example of a compact form, with guidelines for data entry and a summary "Infant Feeding Report" for presenting the data, is included in *Annex 1*. This form, which records the inputs for individual infants and their mothers, can be easily adapted, depending on what works best in a particular setting. It covers type of delivery; early skin-to-skin contact and breastfeeding assistance, breastfeeding; supplements or replacement feeds given, why and how; baby's location (rooming-in, nursery, etc.), and any problems related to infant feeding. It also includes a section for recording actions taken to address problems. Keeping a record of this type is the best way to collect information on the key breastfeeding indicators of the maternity facility, without doing special studies.

The information from the records can be periodically (monthly or quarterly) summarized in a *Summary Infant Feeding Report.* The information in this report is useful in tracking how well a baby-friendly health facility continues to adhere to important BFHI-related practices such as early skin-to-skin contact, exclusively breastfeeding except for medical reasons, no bottle-feeding, and rooming-in.

If a system for collecting data on infant feeding practices is already in place, existing data can simply be entered in the summary report. If the health facility does not yet collect data on infant feeding practices and determines that, due to limited staff time or resources, it would not be possible to do so on a regular basis, the facility might decide to assign someone to record the data over a limited period – for two weeks or month or a quarter, for example – to provide a sample of practices over time. It is good, if at all possible, to encourage the facility to incorporate collection of key feeding data into its routine. This data will be helpful for determining what improvements are needed, and will be needed as part of the reassessment reviews.

Annex 2: Staff training record and report. This training record can be used by health facilities to keep an on-going record of clinical staff members who care for mothers and babies and what basic and refresher training they have received on breastfeeding promotion and support, as well as on support for the non-breastfeeding mother. It also provides space for recording what training they have received on mother-friendly care and on HIV and infant feeding , depending on the decision of the national authority responsible for BFHI.

One row should be used for each staff member. The rows are wide enough for data to be entered over time. For example, data on several training experiences for a staff member can be entered under the training section. The record can be kept in pencil for easy updating. If the

staff member is transferred from the unit or resigns, the name can be crossed out. Alternatively, the record can be updated on computer.

The information from the record can be periodically summarized in a *Summary Staff Training Report.* It provides a quick way to calculate what proportion of the staff is currently up-to-date with required training and whether necessary refresher training has taken place.

If a system for collecting data on staff training is already in place, existing data can simply be entered in the summary report. If necessary, the current data collecting system can be improved, entering additional categories or fields and, if feasible, computerizing it.

Annex 3: BFHI monitoring tool .

Annex 3 provides both a format for a simple set of record and material reviews and a questionnaire that can be used with mothers at discharge. The reviews focus on:

1) Gathering essential data to determine whether the hospital infant feeding policy is currently in place and being followed and whether it provides needed guidance related to the Ten Steps, and adherence to the Code of Marketing and other criteria.
2) A review of training materials and records to assure that an on-going, effective system is in place for training new staff and providing periodic refresher courses for those still on the job.
3) Examination of receipted invoices and other records related to the purchase of breast-milk substitutes and related supplies to assure that procedures are in compliance with the Code.

These reviews provide a simple mechanism for insuring that the health facility is adhering to Step 1 (policy), Step 2 (training), and the Code.

The use of a questionnaire with mothers just prior to discharge can be a cost-effective strategy for on-going monitoring of whether a hospital is adhering to the remaining Steps (3 through 10) and components related to support for non-breastfeeding mothers, mother-friendly care and HIV and infant feeding.

Mothers can be requested to fill out written questionnaires, if mothers are well enough schooled to complete them. The example presented in the *Annex* includes a description of how the survey can be conducted, a letter to the mothers requesting their participation, and the instrument itself, as well as a system for tallying and presenting the results. It asks mothers, for the most part, to “tick” the answers that apply, and thus is easy to complete and analyse.

If literacy is a challenge, the questionnaire can be used as an interview form, with mothers asked the questions orally at the time of discharge. If interviews are conducted, care should be taken, if at all possible, to select interviewers not associated with the mothers’ care or the maternity services, so respondents don’t feel pressured to provide a favourable assessment of the care they have received. The monitoring tool also includes a follow-up questionnaire to use with mothers several months after discharge and summary sheets to use after gathering this data.

Annex 4: Description of the BFHI Reassessment Tool and its possible use for monitoring.
In some countries a decision may be taken to focus on an internal monitoring system as the sole means for keeping track of the current status of facilities designated baby-friendly. External reassessment is usually a more costly process than internal monitoring, as it involves the displacement and time of external assessors, although they can be from the same area or region, to reduce costs. Internal monitoring, on the other hand, can be conducted by staff within the health facility itself. While external assessment is the best strategy for assuring lack of bias, internal monitoring can provide useful results, if the staff is motivated to give honest feedback.

It is helpful if internal monitors can be identified from departments within the facility unrelated to those being assessed, to help insure impartiality. This may be difficult, however, both because of internal politics and because the monitors need to know about breastfeeding to do accurate appraisals.

This annex describes the BFHI reassessment tool that is presented in Section 5.3 of the BFHI documents. It is usually only available to UNICEF officers, the national authorities responsible for BFHI, and assessors who will be involved in reassessment. However, if internal monitoring will be the sole strategy, the UNICEF officer or national authority may decide to make the reassessment tool available for use in the monitoring process.

Annexes to Section 4.2

Annex 1. Infant Feeding Record and Report

Introduction

The *Infant Feeding Record*[11] is a sample form which can be used by hospitals to keep a record of key data related to infant feeding practices for mother-baby pairs delivering in their maternity services. The record is meant to be updated daily. One line of the record is to be used for each baby. When changes or problems occur, the record can be updated. For example, the baby may be fully rooming-in the first day but be separated for more than an hour the second day for a procedure, and this change would be recorded when it happens. Guidelines for filling in the Infant Feeding Record are provided on the page following and an "Infant Feeding Report" is presented for displaying the data in summary form.

The data can be used to monitor how well the hospital is doing on key BFHI "Steps" such as Step 4 (early initiation), Step 6 (no supplementation), Step 7 (rooming-in), and Step 9 (no teats or pacifiers for breastfeeding babies). The columns labelled "Any problems" and Action taken" have been included to provide a simple way for staff to note any infant feeding problems and to record what was done to solve them. Thus the Record can serve both as a general data-gathering tool and a form for recording problems and actions taken to assist individual mother/baby pairs. The form can be adapted so it is most useful for a particular hospital, given what other monitoring mechanisms are already in place. For example, if problems and actions taken are already recorded in each mother's chart or notes, the columns used for this might be adjusted to record help with positioning and attachment (*Step 5*) and/or whether follow-up information is provided at discharge (*Step 10*).

[11] This form is adapted from "I.A. Infant feeding record" in Section II: BFHI Monitoring Tool, of the WHO/Wellstart document, *BFHI: Monitoring and Reassessment: Tools to Sustain Progress*, Geneva, World Health Organization, 1999 (WHO/NHD99.2). http://www.who.int/nut/publications.htm

Infant Feeding Record

Name of health facility: ___________________________

[Record information daily or when changes or problems occur and at discharge. Use additional pages if needed] Recorder: ___________________________

Baby's ID	**Date of delivery**	**Type of delivery** 1 = vag 2 = C-sec w/o gen 3 = C-sec w/ gen	**Skin-to-skin contact and offer of BF help**[1] 1 = meets criterion 2 = does not meet criterion *[see below.]*	**Breast-feeding** 1 = Yes 2 = No	**Supplements** [2]**/ Replacement feeds** [3] **What** 0 = None 1 = Water 2 = Formula 3 = Home prep 4 = Other (list)	**Why** [4]	**How baby fed** 1 = Breast 2 = Bottle 3 = Cup 4 = Other (spec.)	**Baby's location** 1 = Rooming-in[5] 2 = Nursery/obs. Room 3 = Special care unit 4 = Other (list)	**Any problems related to positioning or attachment or infant feeding**	**Actions taken**	**Date of discharge**

1. **Skin-to-skin contact and offer of breastfeeding help:** Mother and baby together skin-to-skin from within 5 minutes of birth or recovery for at least an hour and mother shown how to tell when baby ready for breastfeeding and offered help if needed (unless delay in contact is justified).
2. **Supplements:** Any liquids/foods besides breast milk.
3. **Replacement feeds:** Feeding infants who are receiving no breast milk with a diet that provides the nutrients they need until the age when they can be fully fed on family foods.
4. **Why:** 1. Premature baby, 2. Baby with severe hypoglycaemia, 3. Baby with inborn error of metabolism, 4. Baby with acute water loss (i.e., phototherapy for jaundice), 5. Severe maternal illness, 6. Mother on medication, 7.Mother HIV positive and replacements feeds are AFASS, 8. Mother's fully informed choice, 9. Other (specify):
5. **Definition of rooming-in:** Mother and baby stay in the same room 24 hours a day and not separated unless for justified reason.

Guidelines for filling in the Infant Feeding Record

The correct filling in and analysis of results of the infant feeding record are very important because the record allows easy and simple monitoring of infant feeding and practices that promote optimal feeding. These guidelines should be used to collect data on infant feeding by staff specifically assigned and trained for this task. One entry should be made for each baby born at the hospital. The record may be needed to be updated, if there are any changes in the baby's status or practices before the baby is discharged.

Name of health facility: Write down the name of the health facility being monitored.

Recorder(s): Write down the name of person(s) assigned to fill in the form.

Baby's ID: Register the chart number assigned to the baby in the service/ward.

Date of delivery: Register day, month and year the baby was born.

Delivery type: Insert (1) for vaginal delivery, (2) for caesarean section without general anaesthesia, or (3) for caesarean section with general anaesthesia.

Skin-to-skin contact and offer of BF help: Record (1) if mother and baby were together skin-to-skin from within 5 minutes of birth (or the mother's recovery from a C-section with general anaesthesia) for at least an hour and the mother shown how to tell when her baby is ready for breastfeeding and offered help if needed, or there were justified reasons for delayed or interrupted contact, or (2) if this criterion was not met.

Breastfeeding: Record a (1) if yes, (2) if no. If mother starts breastfeeding but then stops, make a note of this in this column.

Supplements: Feeding breastfeeding infants other liquids or foods. This is divided into two columns including:

> *What?:* Record (1) if the baby received water, (2) if the supplement was formula, (3) home prepared formula, and (4) if the baby received something else, specifying what was given.
>
> *Why?:* Write (1) if the reason is a premature baby (gestational week/weight), (2) if the baby is severely hypoglycaemic, (3) if the baby has an inborn error of metabolism, (4) if the baby has an acute water loss (i.e., photo therapy for jaundice) which cannot be corrected by frequent breastfeeding, (5) if there is severe maternal illness, (6) if the mother is on medication, (7) mother is HIV positive and replacement feeds are acceptable, feasible, affordable, sustainable and safe (AFASS), (8) mother has made fully informed choice, (9) other (specify).

Replacement feeds: Feeding infants who are receiving no breast milk with a diet that provides the nutrients they need until the age when they can be fully fed on family foods. The possible replacement feeds and reasons are the same as listed above under supplements.

How baby fed: Record a (1) if the baby has been breastfed, (2) if the baby received a bottle, (3) if the baby has been fed with a cup, and (4) if the baby has been fed using something else, and specify what.

Baby's location: Write (1) if the baby is rooming-in (mother and baby stay in the same room 24 hours a day (day and night) and not separated unless for justified reason, (2) if the baby is in a nursery or well baby observation area, (3) if the baby is in a special care unit, (4) other (specify the place).

Any problems related to positioning or attachment or infant feeding: Briefly specify the problem(s).

Actions taken: This refers to the how the problem(s) have been addressed and what the results were. Please summarize in a few words.

Date of discharge: Record day, month and year when the baby is discharged from the hospital.

Name of health facility:______________________
Period of data collection: ________ to _________
Reporter: _________________________________
Date of report: _____/_____/____
(day/month/year)

Summary infant feeding report

Enter the data for the current monitoring period from the "Infant feeding record" and calculate the percentages for the indicators below. If the "Infant feeding record" has not been used but the hospital entered data from some other source, indicate the source.

Type of data	**Number**	**Percentage**
Total number of babies discharged in the period of data collection:		
Type of delivery:		
Vaginal		_____%
Caesarean section without general anaesthesia		_____%
Caesarean section with general anaesthesia		_____%
Skin-to-skin contact starting within 5 minutes of birth (or ability to respond) for at least an hour, with offer of breastfeeding help		_____%
Type of feeding: *(Totals should equal 100%)*		
Exclusive breastfeeding (no supplements)		_____%
Mixed feeding (breastfeeding and supplements)		_____%
Replacement feeding (no breastfeeding, other liquids or foods given)		_____%
How babies are fed:		
Breast		_____%
Bottle		_____%
Cup		_____%
Other (please list)		_____%
Babies' location		
Rooming/bedding-in		_____%
Nursery/observation room		_____%
Special care unit		_____%
Other		_____%
Types of problems related to positioning, attachment and/or infant feeding *(please summarize):*		

Data sources:
____
____

Annex 2: Staff Training Record and Report

Introduction

This form can be used for keeping records of infant feeding-related training for clinical staff members who take care of mothers and/or infants. A record should also be kept of training for non-clinical staff. Since this training will probably not be as extensive, a simpler form can be devised for recording this information, with its format depending on what type of training is given.

The **Staff Training Record** covers four types of training that may be important for facilities participating in the Baby-friendly Hospital Initiative. These include training on:

- Breastfeeding promotion and support
- Supporting the non-breastfeeding mother
- Mother friendly care
- HIV and infant feeding

The new Global Criteria for BFHI requires training on breastfeeding promotion and support for all staff members who care for mothers and babies. They also require training on how to provide support for mothers who are not breastfeeding, with sufficient staff receiving this training to ensure that the needs of these mothers are met. Labour and delivery staff (and those likely to rotate into positions in these units) should receive training related to mother-friendly labour and birthing practices, and other staff should be oriented to these issues. Training on HIV and infant feeding is optional, depending on whether national authorities responsible for BFHI have decided to include this component in the Initiative. The number and types of staff that should receive training on HIV will depend on what staff is needed to meet the needs of HIV positive pregnant women and mothers. Training on HIV and infant feeding may adequately cover how to provide support for the non-breastfeeding mother. If so, the facility may wish to combine the categories related to these two topics.

Two pages are provided for keeping a record on the training individual staff members have received on the four topics listed earlier. The ID and/or name of each staff member can be listed in the first column on the first page. The same ID and/or name would be transferred to the first column of the second page and the record continued for listing information on training on mother-friendly care and HIV and infant feeding. A page entitled **Types and Content of Training related to Infant Feeding** has been included to allow staff keeping training records to list the courses, sessions and training activities that are provided for facility staff, along with the content covered by each of them. If staff members listed in the Staff Training Record receive the types of training listed, the ID number for the course or other activity can simply be listed in the column asking for Course/Content, thus saving the need to list content covered repeatedly.

Finally, a **Summary Clinical Staff Training Report** provides a format that can be used by the facility to present statistics regarding the numbers and percentages of clinical staff that have received various types of training. While all staff caring for mothers and babies should receive training on breastfeeding promotion and support, the types and percentages of staff that should receive training on the other topics, as mentioned earlier, will depend on the facilities' needs.

Name of health facility: ______________________________

Name of data collector: ______________________________

Staff Training Record

ID/ Name	Date started working	Position/ Profession	Place of assignment	Training on breastfeeding (BF) promotion and support				Training on support for non-BF mother (may be same as HIV and infant feeding training)		
				Dates	Course/Content[1]	Total hours	Hours clinical	Dates	Session/Content [1]	Total hours

1. List courses, training sessions, and types of on-the-job and clinical training or supervision and their content by number in the table on "Types and Content of Training" and use the numbers as "keys" in the columns for "Content/course" for each type of training.

Name of health facility: ______________________________

Staff Training Record *(page 2)*

ID/Name (List same as page 1)	Training on mother-friendly care practices			Training on HIV and infant feeding (optional)		
	Dates	Session/Content [1]	Total hours	Dates	Session/Content [1]	Total hours

1. List courses, training sessions, and types of on-the-job and clinical training or supervision and their content by number in the table on "Types and Content of Training" and use the numbers as "keys" in the columns for "Content/course" for each type of training.

Guidelines for filling in the Clinical Staff Training Record

Instructions for completing this form are as follows:

Name: List the names of all clinical staff in the health facility that care for mothers and/or infants (even those that may not have received any training).

Date started working: List the date (dd/mm/yyyy) that the staff member started working in the facility in a position in which he/she had responsibility for caring for (or making decisions concerning) mothers and/or infants.

Position: List title of position and also profession, if this is not evident from the title. Types of clinical professions that should be included in this list include paediatricians, obstetricians, other physicians (list type), nurses, midwives, nutritionists, dieticians, medical and nursing interns and students (if involved in patient care), care attendants, etc. (the list will vary depending on the country and type of health system).

Place of assignment: List place of primary assignment - for example, antenatal in-patient unit, antenatal clinic, labour and delivery unit, postpartum unit or ward, etc.

Training information: For each type of training (breastfeeding promotion and support, support for the non-breastfeeding mother, mother-friendly care, and HIV and infant feeding), list the dates any training took place, the content/course, and total hours. For training on breastfeeding promotion and support, both the total hours and the time included in those hours that was devoted to supervised clinical experience should be listed. There may be more than one training listed for each staff member. If no training has been received on particular subjects, leave those sections blank.

Content/Course: Training can include formal courses, individual sessions, and on-the-job training or supervised experience. All of these types of training should be listed. In order to simplify the completion of the Training Record, please list the names of courses or sessions that have been given to several staff and their content in the table on “Types and Content of Training…” on the following page, and use the numbers as “keys” to insert in the columns on “Course/Content” in the Training Record.

Types and Content of Training related to Infant Feeding

Note: If the facility uses full content of standard WHO/UNICEF courses, it is only necessary to list the course name.

ID for training	Course, session or training activity name	Content (topics covered)
	Training on breastfeeding promotion and support:	
	Training on support for non- breastfeeding mothers:	
	Training on mother-friendly care practices:	
	Training on HIV and infant feeding:	

Name of health care facility: ______________________

Summary Clinical Staff Training Report

Type of data	Number	Percentage
Number of clinical staff that care for mothers and infants	_____	
Training on breastfeeding (BF) promotion and support		
Number of clinical staff that have received at least 20 hours of training on BF promotion and support	_____	
Number of staff that have receive at least 3 hours of supervised clinical training, as part of the above training	_____	
Percentage of clinical staff fully trained on BF support and promotion		_____%
Training on support for the non-breastfeeding (non-BF) mother		
Number of clinical staff that have received training covering required content on support for the non-BF mother	_____	
Percentage of clinical staff fully trained to provide this support		_____%
Training on mother-friendly care		
Number of clinical staff that have received training covering essential content related to mother-friendly care	_____	
Percentage of clinical staff fully trained to provide mother-friendly care and support		_____%
Training on HIV and infant feeding		
Number of clinical staff that have received training covering essential content on HIV and infant feeding	_____	
Percentage of clinical staff fully trained to provide support regarding HIV and infant feeding		_____%

Annex 3. BFHI monitoring tool

Introduction

Annex 3 provides a format for a simple set of record and material reviews and a questionnaire that can be used with mothers at discharge. It also includes a "Summary of Results" grid that can be used to tally results for all Ten Steps and other components of the BFHI being implemented by facilities. In addition a follow-up questionnaire is provided to use to collect information on how the babies are being fed several months after returning home.

The reviews focus on:

1) Gathering essential data to determine whether the hospital infant feeding policy is currently in place and being followed and whether it provides needed guidance related to the Ten Steps, adherence to the Code of Marketing of Breast-milk Substitutes, mother-friendly care, and HIV and infant feeding.
2) A review of training materials and records to assure that an on-going, effective system is in place for training new staff and providing periodic refresher courses for those still on the job.
3) An examination of receipted invoices and other records related to the purchase of breast-milk substitutes and related supplies to assure that procedures are in compliance with the Code.

These reviews provide a simple mechanism for insuring that the health facility is adhering to Step 1 (policy), Step 2 (training) and the Code.

The use of a questionnaire with mothers just prior to discharge can be a cost-effective strategy for on-going monitoring of whether a hospital is adhering to the remaining Steps and the components related to support for non-breastfeeding babies, mother-friendly care and HIV and infant feeding.

Mothers can be requested to fill out written questionnaires at the time of discharge if mothers are well enough schooled to complete them. The materials in this Annex include a description of how the survey can be conducted, a letter to the mothers requesting their participation, and the instrument itself, as well as a system for tallying and presenting the results. It asks mothers, for the most part, to "tick" the answers that apply, and thus is easy to complete and analyse.

If literacy is a challenge, the questionnaire can be used as an interview form, with mothers asked the questions orally at the time of discharge. If interviews are conducted, care should be taken, if at all possible, to select interviewers not associated with the mothers' care or the maternity services, so respondents don't feel pressured to provide a favourable assessment of the care they have received.

Since both completing the questionnaires or interviews and analyzing the results takes some time, both for the mothers and the staff involved in the process, it may be useful to consider asking only a certain number or percentage of the mothers to complete the forms, ideally selecting them on a random basis. Another approach would be to collect the information only for a specific time period (such as a two-week or month long period each year). The results can be easily tallied, using the summary sheets provided, which are similar to those used in the assessment tool. It is important to insure that the data is analyzed and reviewed in a timely manner, with results used to guide plans for any improvements needed.

The follow-up questionnaire can be sent to mothers after they have returned home, to determine what type of feeding practices they are currently using and whether they have received any help needed for feeding problems. This short questionnaire uses the "24 hour recall" type questions recommended by WHO and UNICEF. It is recommended that the questionnaires be sent when the babies are at a specific age, such as 3 or 4 months, so the data can be compared across monitoring periods to ascertain trends (the babies should be less than 5 months, so they would be at an age when many would be expected to still be exclusively breastfeeding). Since the return rate for mailed questionnaires is often low and, in some settings, mailing may not be a viable option, the monitoring team might consider contacting mothers by phone (if widely accessible). If a large percentage of mothers return to the facility when their infants reach a specific age for well-baby check-ups or routine care (such as vaccinations), or home visits are scheduled for babies of a similar age (less than five months), this could offer a good opportunity for conducting short interviews, using the questionnaire. It might be

possible for surveyors to visit mothers in their homes specifically to conduct the interviews, but this option could be quite expensive, unless done by volunteers or as a student project.

The results from this follow-up survey can provide useful feedback for the facility on what percentage of the mothers surveyed follow the WHO recommendation to breastfeed exclusively for six months and whether mothers are receiving the support they feel they need. If surveys are done periodically, always measuring the feeding practices of mothers with babies of the same age, the hospital can monitor trends over time. It would be useful to determine if mothers' feeding practices improve if the facility improves its implementation of the Ten Steps and thus its breastfeeding support. If exclusive breastfeeding rates remain low the hospital should explore whether it can do more on Step 10, such as fostering mother support groups and/or providing other facility and community services to assist mothers with breastfeeding their infants after they return home.

Review of selected records and materials

Step 1: Policy Review

1.1	A review of the breastfeeding or infant feeding policy indicates that it covers the following topics adequately: ☐ The Ten Steps to Successful Breastfeeding (not only listing the Steps but also giving appropriate policy guidance) ☐ The International Code of Marketing of Breast-milk Substitutes and regulations the facility and staff need to follow to comply ☐ A requirement that HIV-positive mothers receive counselling, including information about the advantages and disadvantages of various infant feeding options and specific guidance in selecting the options likely to be suitable for their situations, supporting them in their choices	Covers all topics adequately: ☐Yes ☐No	1.1
1.2	Observations indicate that the policy is displayed in all appropriate areas of the facility in appropriate languages:	☐Yes ☐No	1.2
1.3	Discussions with managers and staff indicate that staff is aware of the policy and it is being appropriately implemented:	☐Yes ☐No	1.3

Step 2: Review of training materials and records

2.1	A review of the training curriculum, course outlines and attendance sheets indicates that: ☐ At least 80% of the clinical staff members responsible for the care of pregnant women, mothers and infants have been given training of at least 20 hours in length ☐ The training includes at least 3 hours of supervised clinical experience	Complies with both criteria: ☐Yes ☐No	2.1
2.2	The training curriculum or course outlines cover the following topics adequately: ☐ The Ten Steps to Successful Breastfeeding ☐ Compliance with the Code ☐ Support for the non-breastfeeding mother ☐ Mother-friendly care ☐ HIV and infant feeding (optional)	Covers all topics adequately: ☐Yes ☐No	2.2
2.3	Appropriate refresher training is provided for staff at least every two years.	☐Yes ☐No	2.3

Code compliance: Review of records related to purchase of breast-milk substitutes

C.1	Records and receipts indicate that any breast-milk substitutes, including special formulas and other feeding supplies used, are purchased by the health care facility for the wholesale price or more – Sources and dates of records and receipts reviewed: ____________________ ____________________ ____________________	☐Yes ☐No ☐None used	C.1

Questionnaire or interview for mothers at discharge

Introduction

The questionnaire[12] that follows is an example of a form that can be used to gather feedback from mothers concerning their experiences with both antenatal services and in the maternity ward, after delivery.

Use of this questionnaire can be considered either for entire countries or for specific maternity facilities. It is a very useful tool for on-going monitoring. Mothers can be asked to fill out the questionnaires before they leave the hospital, placing them in envelopes and sealing them, so their responses will be confidential. The questionnaires can be distributed during one specific period (for example, during two weeks or a month, depending the census), or given to a certain number of mothers to complete each month, selecting them on a random basis. The "Summary of Results" table has space for recording the data from 30 respondents. This would be the minimum number recommended. If it is feasible to do more, additional sheets can be used..

The questionnaire, if it can be filled out by the mothers themselves, is quite cost-effective because it does not involve staff time in interviewing mothers. If the mothers can read, it should easy for them to complete, as it involves "ticking" responses rather than writing them out. It would not be appropriate, of course, in situations were many women have a low level of literacy. In situations where literacy is poor, the questionnaire can be used as an interview schedule, with the questions posed orally. If this approach is used, care should be taken, if at all feasible, to ensure that interviewers have not provided care for the women being surveyed and are not associated with the maternity services in a way that might influence mothers' responses.

There are questions related to each of Steps 3 -10 and to compliance with the International Code of Marketing of Breast-milk Substitutes, mother-friendly birthing practices, and support for non-breastfeeding mothers, with optional questions on HIV and infant feeding. Since the questionnaire is for mothers, it does not cover the policy (Step 1) or staff training (Step 2), These Steps are assessed by the brief "Review of Selected Records and Materials" presented earlier.

Two questionnaires are provided, one for breastfeeding mothers and one for non-breastfeeding mothers, with the mothers asked to choose whichever is appropriate. This eliminates the confusion of too many "skip patterns", as breastfeeding mothers would need to be asked to skip questions for those who are not breastfeeding and visa versa. If feasible, the staff distributing the questionnaires or conducting the interviews can ask the mother if she is breastfeeding at all and then give her or use the appropriate questionnaire.

There are two items related to HIV and infant feeding in Question 3. If the BFHI program does not cover this component, these two items can be deleted along with the Summary for "HIV and infant feeding".

If the results are to be analysed at the hospital, the last page (with the name and address of the mother) can be kept separate so it is seen only by the staff who will do later follow-up. The staff or researchers helping with the process can tally the results for each Step and component, using the "Summary of Results" table. The bracketed numbers in the far right column of the questionnaire indicate where the responses should be recorded. Some of the questions are for both breastfeeding and non-breastfeeding mothers and thus appear in both questionnaires. Other questions are specific for either one or the other. If a particular question is not posed for a specific respondent (for example, if she is NBF and the question is only for BF mothers), the monitors should record her response as "O" (NBF). Any response records as "O" either because the mother didn't answer or it wasn't an appropriate question for her, should not be included in the tally.

If desired, a follow-up survey can be planned, contacting the mothers several months later, to determine how they are currently feeding their babies (using the "24 hour recall") and whether they needed and were given any infant feeding support. A sample questionnaire that can be used for this purpose is included after the discharge questionnaire (see the final paragraph of the introductory section of the monitoring tool, earlier, for more discussion concerning the purpose of the follow-up survey, how to administer it, and how results can be used).

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[12] This questionnaire is based on a questionnaire developed and used by the BFHI in Norway. It has been adapted substantially to reflect the new BFHI *Global Criteria,* using questions similar to those in the revised assessment tool.

Dear mother,

We would be very grateful if you could find the time to answer these questions about the counselling and support for feeding your baby that you have received at the hospital after the birth of your child.

(Our country or our hospital) has been implementing the Baby-friendly Hospital Initiative (BFHI) in the past few years so that our mothers could receive improved help in feeding their babies. All staff members have been offered training to enable them to give consistent and correct information about how to best feed your baby.

It is important to see how the counselling is working and if mothers are getting the help that they need. We would appreciate it if you could fill out this questionnaire, so we can find out what is working well and what needs to get better. Please select either the questionnaire for “breastfeeding mothers” or for “non-breastfeeding mothers”, depending on how you are feeding your baby.

The questionnaire is very easy to fill out, as it only involves ticking on various choices. Please feel free to add your own comments. Answering the questionnaire is of course completely voluntary. All forms will be kept confidential. The maternity staff at the hospital will not know what your answers have been.

After you have completed the questionnaire, put your form in the envelope provided, seal it and hand it in at the nurses’ station (or the box provided). The unopened envelopes will be sent to the monitoring team. Later on our hospital will be told how it is doing, but in such a way that individual mothers cannot be identified.

We would nonetheless ask you to list your name on a separate page at the end of the questionnaire that will be kept confidential. The reason for this is that after several months our team would like to contact a number of the mothers who answered the questions and find out how they got on with feeding their babies. The last page of the form asks if you would agree to be contacted.

If you should forget to hand in your form or accidentally take it home with you, please send it to:

____

____

____

Thank you for your cooperation. We wish you best of luck to you and your child!

Regards,

(Team leader)

Questionnaire for Breastfeeding Mother (# ___)

	Hospital: ____________________ Date questionnaire completed: ______________	
Questions about experiences during pregnancy		
1.	How many antenatal visits did you make to this health facility for care before you gave birth? _____ visits ☐ None (*if none, go to question 4.)*	
2.	During these visits did the staff discuss any of the following issues related to your labour and birth: *(tick if yes.)* ☐ That you could have companions of your choice with you during labour and birth ☐ Alternatives for dealing with pain during labour and what is better for mothers and babies	[MF.1]
3.	During these visits did the staff give you any information on the following topics: *(tick if yes.)* ☐ The importance of spending time skin-to-skin with your baby immediately after birth? ☐ The importance of having your baby with you in your room or bed 24 hours a day? ☐ The risks of giving water, formula or other supplements to your baby in the first six months if you are breastfeeding? ☐ Whether a woman who is HIV-positive can pass the HIV infection to her baby? ☐ Why testing and counselling for HIV is important for pregnant women?	[3.1] HIV.1 HIV.2
Questions about the birth and the maternity period		
4.	Were you encouraged to walk and move about during labour? ☐ Yes ☐ No *[if "No"]* Why not: ______________________ ______________________	[MF.2]
5.	When was your child born? Date: _________ Approximate time: _________ What was your baby's weight at birth:______ grams or ______ lbs	[Gen.1]
6.	What type of delivery did you have: ☐ Normal (vaginal) ☐ Caesarean section without general anaesthesia ☐ Caesarean section with general anaesthesia ☐ Other: (describe): ______________________	[Gen.2]
7.	How are you feeding your baby? ☐ Breastfeeding exclusively ☐ Both breastfeeding and feeding breast-milk substitutes ☐ Feeding my baby breast-milk substitutes (not breastfeeding at all) ☐ Other: (please describe): ______________________ *Note: If you are breastfeeding or both breastfeeding and feeding breast-milk substitutes, please continue with this questionnaire. If you are not breastfeeding at all, please fill out the other questionnaire for "Non-Breastfeeding Mother".*	[Gen.3]
8.	How long after birth did you first hold your baby? ☐ Immediately ☐ Within five minutes ☐ Within half an hour ☐ Within an hour ☐ As soon as I was able to respond (after C-section with general anaesthesia) ☐ Other: (how long after birth?) ______ ☐ Can't remember ☐ Have not held yet *[if you haven't held your baby yet, go to Q13.]*	[4.1]

9.	How did you hold your baby, this first time? ☐ Skin-to-skin ☐ Wrapped without much skin contact	[4.2]
10.	If it took more than five minutes after birth for you to hold your baby, what was the reason? (☐ There was not any delay.) ☐ My baby needed help/observation ☐ I had been given anaesthesia and wasn't yet awake ☐ I didn't want to hold my baby or didn't have the energy ☐ I wasn't given my baby this soon but do not know why ☐ Other: ______________________________	[4.3]
11.	For about how long did you hold your baby this first time? ☐ Less than 30 minutes ☐ 30 minutes to less than an hour ☐ An hour or more ☐ Longer: ___ hours ☐ Can't remember	[4.4]
12.	During this first time your baby was with you did anyone on the staff encourage you to look for signs your baby was ready to feed and offer you help with breastfeeding? ☐ Yes ☐ No	[4.5]
13.	Did the staff offer you any help with breastfeeding since that first time? ☐ Yes ☐ No *[if yes:]* How long after birth was this help offered? ☐ Within 6 hours of when your baby was born ☐ More than 6 hours after the birth of your baby	[5.1]
14.	Did the staff give you any help with positioning and attaching your baby for breastfeeding before discharge? ☐ Yes ☐ No ☐ The staff offered help, but I didn't need it.	[5.2]
15.	a. Did the staff show you or give you information on how you could express your milk by hand? ☐ Yes ☐ No b. Have you tried expressing your milk yourself? ☐ Yes ☐ No If yes, were you able to express your milk? ☐ Yes ☐ Partly ☐ No	[5.3] [5.4]
16.	Where was your baby while you were in the maternity services after giving birth? ☐ My baby was always with me both day and night ☐ There were times my baby was not with me If your baby was away at all, please describe where, why and for how long: ______________________________ ______________________________ *[Note: If your baby was cared for away from you during all or part of the night, please mention that in your description above]*	[7.1]
17.	What advice have you been given about how often to feed your baby? ☐ No advice given ☐ Every time my baby seems hungry (as often as he/she wants) ☐ Every hour ☐ Every 1-2 hours ☐ Every 2-3 hours ☐ Other (please tell us): ______________________________	[8.1]
18.	What advice have you been given about how long your baby should suckle? ☐ No advice given ☐ For a limited time If so, for how long? __________ ☐ For as long as my baby wants to ☐ Other (please tell us): ______________________________	[8.2]

19.	Has your baby been given anything other than breast milk since it was born? ☐ Yes ☐ No ☐ Don't know *[if "No" or "Don't know", go to Question 22]* If yes, what was given? *[tick all that apply]* ☐ Infant formula ☐ Water or sugar water ☐ Other fluids (please tell us what):________________ ☐ Don't know	[6.1]
20.	If yes, why was your baby given the supplement(s)? *[tick all that apply]* ☐ I requested it. ☐ My doctor or other staff recommended the supplements, but didn't say why. ☐ My doctor or other staff recommended the supplements because (please say why): ________________ ☐ Other (please tell us why):________________ ☐ Don't know ☐ No supplements were given	[6.1
21.	If supplement(s) were given, were they fed by:☐ Bottle with teat or nipple? ☐ Cup? ☐ Spoon? ☐ Other:________________ ☐ Don't know	[9.1]
22.	Has your baby sucked on a pacifier (dummy or soother), as far as you know, while you've been in the maternity unit? ☐ Yes ☐ No ☐ Don't know	[9.2]
23.	Have you been given any leaflets or supplies that promote breast-milk substitutes? ☐ Yes ☐ No What, if any, of the following have you received: ☐ Leaflet from formula company promoting formula feeding or related supplies? ☐ A gift or samples to take home, including formula, bottles, or other related supplies? ☐ Other (please tell us what):________________	[Code.2]
24.	Have you been given any suggestions by the staff about how or where to get help, if you have problems with feeding your baby after you return home? ☐ Yes ☐ No	[10.1]
25.	*[If "Yes":]* What suggestions have you been given? *[tick all that apply]* – ☐ Get help from the hospital ☐ Get help from a health professional – ☐ Call a helpline – ☐ Get help from a mother support group or a peer/lay counsellor ☐ Get help from another community service ☐ Other (please tell us what):________________	[10.2]

Thank you so much for answering all these questions!

If there is anything you want to know after filling in this form you can talk to one of the health care staff members about it before you go home. By answering this questionnaire you are contributing to making our maternity services better.

Questionnaire for Non-Breastfeeding Mother (#___)

	Hospital: ______________________________ Date questionnaire completed: _____________	
Questions about experiences during pregnancy		
1.	How many antenatal visits did you make to this health facility for care before you gave birth? ___________ visits ☐ None *[if none, go to question 4]*	
2.	During these visits did the staff discuss any of the following issues related to your labour and birth: *(tick if yes)* ☐ That you could have companions of your choice with you during labour and birth ☐ Alternatives for dealing with pain during labour and what is better for mothers and babies	[MF.1]
3.	During these visits did the staff give you any information on the following topics: *[tick if yes]* ☐ The importance of spending time skin-to-skin with your baby immediately after birth? ☐ The importance of having your baby with you in your room or bed 24 hours a day? ☐ The fact that a woman who is HIV-positive can pass the HIV infection to her baby? ☐ Why testing and counselling for HIV is important for pregnant women?	[3.1] [HIV.1] [HIV.2]
Questions about the birth and the maternity period		
4.	Were you encouraged to walk and move about during labour? ☐ Yes ☐ No *[if "No"]* Why not: ____ ____	[MF.2]
5.	When was your child born? Date: _________ Approximate time: _________ What was your baby's weight at birth:_____ grams or _____ lbs.	[Gen.1]
6.	What type of delivery did you have: ☐ Normal (vaginal) ☐ Caesarean section without general anaesthesia ☐ Caesarean section with general anaesthesia ☐ Other: (describe): ___________________	[Gen.2]
7.	How are you feeding your baby? ☐ Feeding my baby breast-milk substitutes (not breastfeeding at all) ☐ Both breastfeeding and feeding breast-milk substitutes ☐ Breastfeeding exclusively ☐ Other: (please describe): ____ *Note: If you are only feeding your baby breast-milk substitutes (not breastfeeding at all), please continue with this questionnaire. If you are breastfeeding at all, please fill out the other questionnaire, for "Breastfeeding Mother".*	[Gen.3]
8.	How long after birth were you able to hold your baby? ☐ Immediately ☐ Within five minutes ☐ Within half an hour ☐ Within an hour ☐ As soon as I was able to respond (after C-section with general anaesthesia) ☐ Other: (how long after birth?) ______ ☐ Can't remember ☐ Have not held yet	[4.1]

9.	How did you hold your baby, this first time? ☐ Skin-to-skin ☐ Wrapped without much skin contact	[4.2]
10.	If it took more than a few minutes before you held your baby after birth, what was the reason? (☐ There was not any delay.) ☐ My baby needed help/observation ☐ I had been given anaesthesia and wasn't yet awake ☐ I didn't want to hold my baby or didn't have the energy ☐ I wasn't given my baby this soon, but do not know why ☐ Other: ___	[4.3]
11.	For about how long did you hold your baby this first time? ☐ Less than 30 minutes ☐ 30 minutes to less than an hour ☐ An hour or more ☐ Longer: ___ hours ☐ Can't remember	[4.4]
12.	During this first time your baby was with you did anyone on the staff offer you help with breastfeeding, just in case you wanted to try? ☐ Yes ☐ No ☐ Staff didn't ask, as they knew I was not planning to breastfeed	[4.5]
13.	Where was your baby while you were in the maternity services after giving birth? ☐ My baby was always with me both day and night ☐ There were times my baby was not with me If your baby was away at all, please describe where, why and for how long: ___ ___ *[Note: If your baby was cared for during all or part of the night away from you, please include that in your description above]*	[7.1]
14.	What has your baby been fed since it was born? *[tick all that apply]* ☐ Infant formula ☐ Water or sugar water ☐ Other fluids (please tell us what):___ ☐ Don't know	[6.1]
15.	What is the reason your baby is being fed infant formula, rather than being breastfed? *[tick all that apply]* ☐ It was my choice of how I wanted to feed my baby ☐ My doctor or other staff recommended I give infant formula but didn't say why ☐ My doctor or other staff recommended I give my baby infant formula because (please describe why): ___ ☐ Other reason (please tell us why):___	[6.1]
16.	Did anyone offer to show you how to prepare and give your baby's feeds while you have been at the hospital after delivery? ☐ Yes ☐ No If yes, what type of advice were you given? *[tick all that apply]* ☐ How to correctly make up my baby's feeds ☐ How to give the feeds ☐ Practice in making up my baby's feeds ☐ How to mix and give feeds safely at home ☐ Other advice: ___	[5.5]

17.	Have you been given any leaflets or supplies that promote breast-milk-substitutes? ☐ Yes ☐ No What, if any, of the following have you received *[tick all that apply]* ☐ Leaflet from formula company promoting formula feeding or related supplies ☐ A gift or samples to take home, including formula, bottles, or other related supplies ☐ Other (please tell us what):_______________	[Code.2]
18.	Have you been given any suggestions by the staff about how or where to get help, if you have problems with feeding your baby after you return home? ☐ Yes ☐ No	[10.1]
19.	*[If "Yes"]* What suggestions have you been given? *[tick all that apply]* – ☐ Get help from the hospital ☐ Get help from a health professional – ☐ Call a helpline – ☐ Get help from a mother support group or a peer/lay counsellor ☐ Get help from another community service ☐ Other (please tell us what): _______________	[10.2]

Thank you so much for answering all these questions!

If there is anything you want to know after filling in this form you can talk to one of the health care staff members about it before you go home. By answering this questionnaire you are contributing to making our maternity services better.

Separate page (to be kept confidential):

We would be very grateful if you would write your name and address below. There is a great need for more knowledge about how routines and breastfeeding advice in the maternity period affect breastfeeding later on. We are therefore planning to contact a number of mothers after a few months to ask how you got on with breastfeeding. If you feel it is all right for us to contact you, please fill out the rest of this form:

Your name: ____

Address: ____

____

Phone number: ______________________________

Date of your baby’s birth: _____________________.

Thank you again!

BFHI Monitoring: Summary of Results

Health facility name and address: ____________________

Dates of monitoring period: ____________________

Monitoring team members: ____________________

Step 1: Have a written breastfeeding policy that is routinely communicated to all health care staff.			
1.1	A review of the breastfeeding or infant feeding policy indicates that it covers the following topics adequately: ☐ The Ten Steps to Successful Breastfeeding (not only listing the Steps but also giving appropriate policy guidance) ☐ The Code of Marketing of Breast-milk Substitutes and regulations the facility and staff need to follow to comply ☐ A requirement that HIV-positive mothers receive counselling, including information about the advantages and disadvantages of various infant feeding options and specific guidance in selecting the options likely to be suitable for their situations, supporting them in their choices	Covers all topics adequately: ☐Yes ☐No	1.1
1.2	Observations indicate that the policy is displayed in all appropriate areas of the facility in appropriate languages:	☐Yes ☐No	1.2
1.3	Discussions with managers and staff indicate that staff is aware of the policy and it is being appropriately implemented:	☐Yes ☐No	1.3
Step 2: Train all health care staff in skills necessary to implement this policy.			
2.1	A review of the training curriculum, course outlines and attendance sheets indicates that: ☐ At least 80% of the clinical staff members responsible for the care of pregnant women, mothers and infants have been given training of at least 20 hours in length, and ☐ The training includes at least 3 hours of supervised clinical experience.	Complies with both 3 criteria: ☐Yes ☐No	2.1
2.2	The training curriculum or course outlines cover the following topics adequately: ☐ The Ten Steps to Successful Breastfeeding ☐ Mother-friendly care ☐ The Code of Marketing of Breast-milk Substitutes ☐ HIV and infant feeding (optional) ☐ Support for the non-breastfeeding mother	Covers all topics adequately: ☐Yes ☐No	2.2
2.3	Appropriate refresher training is provided for staff at least every two years:	☐Yes ☐No	2.3

General information on mothers responding to the discharge questionnaire			
G.1	The following mothers report that their babies weighed at least 1500 grams (or 3 lbs. 5 oz.) at birth: *[Y = yes, N = no, 0 = didn't answer]* ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 ☐ 11 ☐ 12 ☐ 13 ☐ 14 ☐ 15 ☐ 16 ☐ 17 ☐ 18 ☐ 19 ☐ 20 ☐ 21 ☐ 22 ☐23 ☐ 24 ☐ 25 ☐ 26 ☐ 27 ☐ 28 ☐ 29 ☐ 30	Total: ___ out of ___: ___**%**	Q5
G.2	The following mothers report that they gave birth vaginally, by Caesarean section without general anaesthesia, or by Caesarean section with general anaesthesia: *[V = vaginal, C-WGA = C-section without general anaesthesia, C-GA = C-section with general anaesthesia, 0 = didn't answer]* _____1 _____2 _____3 _____4 _____5 _____6 _____7 _____8 _____9 _____10 _____11 _____12 _____13 _____14 _____15 _____16 _____17 _____18 _____19 _____20 _____21 _____22 _____23 _____24 _____25 _____26 _____27 _____28 _____29 _____30	V: ___ out of ___ : ___% C-WGA: ___ out of ___: ___% C-GA: ___ out of ___: ___%	Q6
G.3	The following mothers report that they are breastfeeding exclusively, both breastfeeding and feeding breast-milk substitutes (mixed feeding) or feeding breast-milk substitutes and not breastfeeding at all: *[BF = breastfeeding exclusively, MF = mixed feeding, NBF = not breastfeeding, 0 = didn't answer]* _____1 _____2 _____3 _____4 _____5 _____6 _____7 _____8 _____9 _____10 _____11 _____12 _____13 _____14 _____15 _____16 _____17 _____18 _____19 _____20 _____21 _____22 _____23 _____24 _____25 _____26 _____27 _____28 _____29 _____30	BF: ___ out of ___ : ___% MF: ___ out of ___: ___% NBF: ___ out of ___: ___%	Q7
Step 3: Inform all pregnant women about the benefits and management of breastfeeding.			
3.1	The following mothers report that a staff member gave them information during their antenatal visits on at least two out of the following three key topics – the importance of immediate skin-to-skin contact, 24-hour rooming-in, and the risks of giving water, formula or other supplements in the first 6 months if breastfeeding: *[Y = yes, N = no, 0 = didn't answer or didn't receive antenatal care]* ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 ☐ 11 ☐ 12 ☐ 13 ☐ 14 ☐ 15 ☐ 16 ☐ 17 ☐ 18 ☐ 19 ☐ 20 ☐ 21 ☐ 22 ☐ 23 ☐ 24 ☐ 25 ☐ 26 ☐ 27 ☐ 28 ☐ 29 ☐ 30	Total: ___ out of ___: ___**%**	Q3

Step 4: Help mother initiate breastfeeding within a half-hour of birth. ***This Step is now interpreted as:*** **Place babies in skin-to-skin contact with their mothers immediately following birth for at least an hour. Encourage mothers to recognize when their babies are ready to breastfeed and offer help if needed.**			
4.1	The following mothers report that they were able to hold their babies immediately or within five minutes of birth or as soon as they were able to respond (in the case of Caesarean sections with general anaesthesia): *[Y = yes, N = no, 0 = didn't answer]* ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 ☐ 11 ☐ 12 ☐ 13 ☐ 14 ☐ 15 ☐ 16 ☐ 17 ☐ 18 ☐ 19 ☐ 20 ☐ 21 ☐ 22 ☐ 23 ☐ 24 ☐ 25 ☐ 26 ☐ 27 ☐ 28 ☐ 29 ☐ 30	Total: ___ out of ___: ___**%**	Q8
4.2	The following mothers report that they held their babies "skin-to-skin" that first time: *[Y = yes, N = no, 0 = didn't answer]* ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 ☐ 11 ☐ 12 ☐ 13 ☐ 14 ☐ 15 ☐ 16 ☐ 17 ☐ 18 ☐ 19 ☐ 20 ☐ 21 ☐ 22 ☐ 23 ☐ 24 ☐ 25 ☐ 26 ☐ 27 ☐ 28 ☐ 29 ☐ 30	Total: ___ out of ___: ___**%**	Q9
4.3	The following mothers report that there was no delay in holding their babies this first time or, if there was, it was for a justified medical reason (child needed help/observation, mother recovering from anaesthesia, or other valid reason): *[Y = yes, N = no, 0 = didn't answer]* ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 ☐ 11 ☐ 12 ☐ 13 ☐ 14 ☐ 15 ☐ 16 ☐ 17 ☐ 18 ☐ 19 ☐ 20 ☐ 21 ☐ 22 ☐ 23 ☐ 24 ☐ 25 ☐ 26 ☐ 27 ☐ 28 ☐ 29 ☐ 30	Total: ___ out of ___: ___**%**	Q10
4.4	The following mothers report that they held their babies for an hour or more: *[Y = yes, N = no, 0 = didn't answer]* ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 ☐ 11 ☐ 12 ☐ 13 ☐ 14 ☐ 15 ☐ 16 ☐ 17 ☐ 18 ☐ 19 ☐ 20 ☐ 21 ☐ 22 ☐ 23 ☐ 24 ☐ 25 ☐ 26 ☐ 27 ☐ 28 ☐ 29 ☐ 30	Total: ___ out of ___: ___**%**	Q11
4.5	The following mothers report that during the first time their babies were with them the staff encouraged them to look for signs that their babies were ready to feed and offered help with breastfeeding: *[Y = yes, N = no, 0 = didn't answer]* ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 ☐ 11 ☐ 12 ☐ 13 ☐ 14 ☐ 15 ☐ 16 ☐ 17 ☐ 18 ☐ 19 ☐ 20 ☐ 21 ☐ 22 ☐ 23 ☐ 24 ☐ 25 ☐ 26 ☐ 27 ☐ 28 ☐ 29 ☐ 30	Total: ___ out of ___: ___**%**	Q12

Step 5: Show mothers how to breastfeed, and how to maintain lactation even if they should be separated from their infants			
5.1	The following breastfeeding mothers report that the staff helped them with breastfeeding again within 6 hours of delivery: *[Y = yes, N = no, 0 = didn't answer or was NBF]* ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 ☐ 11 ☐ 12 ☐ 13 ☐ 14 ☐ 15 ☐ 16 ☐ 17 ☐ 18 ☐ 19 ☐ 20 ☐ 21 ☐ 22 ☐ 23 ☐ 24 ☐ 25 ☐ 26 ☐ 27 ☐ 28 ☐ 29 ☐ 30	Total: ___ out of ___: ___**%**	Q13 (BF)
5.2	The following breastfeeding mothers report that the staff gave them help with positioning and attachment before discharge: *[Y = yes, N = no, 0 = didn't answer or was NBF]* ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 ☐ 11 ☐ 12 ☐ 13 ☐ 14 ☐ 15 ☐ 16 ☐ 17 ☐ 18 ☐ 19 ☐ 20 ☐ 21 ☐ 22 ☐ 23 ☐ 24 ☐ 25 ☐ 26 ☐ 27 ☐ 28 ☐ 29 ☐ 30	Total: ___ out of ___: ___**%**	Q14 (BF)
5.3	The following breastfeeding mothers report that the staff showed or gave them information on how to express milk by hand: *[Y = yes, N = no, 0 = didn't answer or was NBF]* ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 ☐ 11 ☐ 12 ☐ 13 ☐ 14 ☐ 15 ☐ 16 ☐ 17 ☐ 18 ☐ 19 ☐ 20 ☐ 21 ☐ 22 ☐ 23 ☐ 24 ☐ 25 ☐ 26 ☐ 27 ☐ 28 ☐ 29 ☐ 30	Total: ___ out of ___: ___**%**	Q15a (BF)
5.4	The following breastfeeding mothers report that they had tried expressing milk themselves and were at least partially successful: *[Y = yes, N = no, 0 = didn't answer or was NBF]* ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 ☐ 11 ☐ 12 ☐ 13 ☐ 14 ☐ 15 ☐ 16 ☐ 17 ☐ 18 ☐ 19 ☐ 20 ☐ 21 ☐ 22 ☐ 23 ☐ 24 ☐ 25 ☐ 26 ☐ 27 ☐ 28 ☐ 29 ☐ 30	Total: ___ out of ___: ___**%**	Q15b (BF)
5.5	The following non-breastfeeding mothers report that someone had offered to how them how to prepare and give their baby's feeds and that they were given at least two types of useful advice: *[Y = yes, N = no, 0 = didn't answer or was BF]* ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 ☐ 11 ☐ 12 ☐ 13 ☐ 14 ☐ 15 ☐ 16 ☐ 17 ☐ 18 ☐ 19 ☐ 20 ☐ 21 ☐ 22 ☐ 23 ☐ 24 ☐ 25 ☐ 26 ☐ 27 ☐ 28 ☐ 29 ☐ 30	Total: ___ out of ___: ___**%**	Q16 (NBF)

Step 6: Give newborn infants no food or drink other than breast milk, unless *medically* indicated.			
6.1	The following mothers report that their babies had been given nothing other than breast milk since they were born or, if so, it was for a medically justified reason: *[Y = yes, N = no, 0 = didn't answer]* ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 ☐ 11 ☐ 12 ☐ 13 ☐ 14 ☐ 15 ☐ 16 ☐ 17 ☐ 18 ☐ 19 ☐ 20 ☐ 21 ☐ 22 ☐ 23 ☐ 24 ☐ 25 ☐ 26 ☐ 27 ☐ 28 ☐ 29 ☐ 30	Total: ___ out of ___: ___%	Q19 & 20 (BF) & Q14 & 15 (NBF)
Step 7: Practice rooming-in – allow mothers and infants to remain together – 24 hours a day			
7.1	The following mothers report that their babies were always with them both day and night or, if not, it was for a justified reason: *[Y = yes, N = no, 0 = didn't answer]* ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 ☐ 11 ☐ 12 ☐ 13 ☐ 14 ☐ 15 ☐ 16 ☐ 17 ☐ 18 ☐ 19 ☐ 20 ☐ 21 ☐ 22 ☐ 23 ☐ 24 ☐ 25 ☐ 26 ☐ 27 ☐ 28 ☐ 29 ☐ 30	Total: ___ out of ___: ___%	Q16 (BF) and Q13 (NBF)
Step 8: Encourage breastfeeding on demand			
8.1	The following breastfeeding mothers report that they had been told to feed their babies whenever they seemed hungry: *[Y = yes, N = no, 0 = didn't answer or NBF]* ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 ☐ 11 ☐ 12 ☐ 13 ☐ 14 ☐ 15 ☐ 16 ☐ 17 ☐ 18 ☐ 19 ☐ 20 ☐ 21 ☐ 22 ☐ 23 ☐ 24 ☐ 25 ☐ 26 ☐ 27 ☐ 28 ☐ 29 ☐ 30	Total: ___ out of ___: ___%	Q17 (BF)
8.2	The following breastfeeding mothers report that they had been told that their babies should suckle for as long as they wanted to: *[Y = yes, N = no, 0 = didn't answer or NBF]* ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 ☐ 11 ☐ 12 ☐ 13 ☐ 14 ☐ 15 ☐ 16 ☐ 17 ☐ 18 ☐ 19 ☐ 20 ☐ 21 ☐ 22 ☐ 23 ☐ 24 ☐ 25 ☐ 26 ☐ 27 ☐ 28 ☐ 29 ☐ 30	Total: ___ out of ___: ___%	Q18 (BF)
Step 9: Give no artificial teats or pacifiers (also called dummies or soothers) to breastfeeding infants.			
9.1	The following breastfeeding mothers report that their babies were not fed any fluids in bottles with teats, as far as they knew: *[Y = yes (not fed with bottles and teats), N = no, 0 = didn't answer or NBF]* ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 ☐ 11 ☐ 12 ☐ 13 ☐ 14 ☐ 15 ☐ 16 ☐ 17 ☐ 18 ☐ 19 ☐ 20 ☐ 21 ☐ 22 ☐ 23 ☐ 24 ☐ 25 ☐ 26 ☐ 27 ☐ 28 ☐ 29 ☐ 30	Total: ___ out of ___: ___%	Q21 (BF)

9.2	The following <u>breastfeeding</u> mothers report that their babies had <u>not</u> sucked on a pacifier, as far as they knew: *[Y = yes (had <u>not</u> sucked on a pacifiers, N = no, 0 = didn't answer or NBF]* ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 ☐ 11 ☐ 12 ☐ 13 ☐ 14 ☐ 15 ☐ 16 ☐ 17 ☐ 18 ☐ 19 ☐ 20 ☐ 21 ☐ 22 ☐ 23 ☐ 24 ☐ 25 ☐ 26 ☐ 27 ☐ 28 ☐ 29 ☐ 30	Total: ___ out of ___: ___**%**	Q22 (BF)
Step 10: Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or clinic.			
10.1	The following mothers report that they had been given suggestions about where to get help, if they had problems with feeding their babies after returning home: *[Y = yes, N = no, 0 = didn't answer]* ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 ☐ 11 ☐ 12 ☐ 13 ☐ 14 ☐ 15 ☐ 16 ☐ 17 ☐ 18 ☐ 19 ☐ 20 ☐ 21 ☐ 22 ☐23 ☐ 24 ☐ 25 ☐ 26 ☐ 27 ☐ 28 ☐ 29 ☐ 30	Total: ___ out of ___: ___**%**	Q24 (BF) and Q18 (NBF)
10.2	The following mothers are able to describe at least one useful appropriate suggestion for getting help with feeding problems on return home that they have been given by the staff: *[Y = yes, N = no, 0 = didn't answer]* ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 ☐ 11 ☐ 12 ☐ 13 ☐ 14 ☐ 15 ☐ 16 ☐ 17 ☐ 18 ☐ 19 ☐ 20 ☐ 21 ☐ 22 ☐23 ☐ 24 ☐ 25 ☐ 26 ☐ 27 ☐ 28 ☐ 29 ☐ 30	Total: ___ out of ___: ___**%**	Q25 (BF) and Q19 (NBF)
Code compliance			
C.1	A review of records and receipts indicates that any breast-milk substitutes, including special formulas and other feeding supplies, are purchased by the health care facility for the wholesale price or more: ☐Yes ☐No ☐ No BMS used	Complies with Code: ☐Yes ☐No	C.1
C.2	The following mothers report that they have <u>never</u> received leaflets from formula companies promoting formula feeding or gifts or samples that include formula, bottles or other related supplies: *[Y = yes (<u>never</u> received), N = no, 0 = didn't answer]* ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 ☐ 11 ☐ 12 ☐ 13 ☐ 14 ☐ 15 ☐ 16 ☐ 17 ☐ 18 ☐ 19 ☐ 20 ☐ 21 ☐ 22 ☐ 23 ☐ 24 ☐ 25 ☐ 26 ☐ 27 ☐ 28 ☐ 29 ☐ 30	Total: ___ out of ___: ___**%**	Q23 (BF) and Q17 (NBF)

Mother-friendly care			
MF.1	The following mothers report that during their antenatal visits staff told them that they could have companions during labour and birth and what alternatives there were for dealing with pain and what was better for mothers and babies: *[Y = yes, N = no, 0 = didn't answer]* ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 ☐ 11 ☐ 12 ☐ 13 ☐ 14 ☐ 15 ☐ 16 ☐ 17 ☐ 18 ☐ 19 ☐ 20 ☐ 21 ☐ 22 ☐ 23 ☐ 24 ☐ 25 ☐ 26 ☐ 27 ☐ 28 ☐ 29 ☐ 30	Total: ___ out of ___: ___%	Q2
MF.2	The following mothers report that they were encouraged to walk and move about during labour or that, if not, there was a medical reason: *[Y = yes, N = no, 0 = didn't answer]* ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 ☐ 11 ☐ 12 ☐ 13 ☐ 14 ☐ 15 ☐ 16 ☐ 17 ☐ 18 ☐ 19 ☐ 20 ☐ 21 ☐ 22 ☐ 23 ☐ 24 ☐ 25 ☐ 26 ☐ 27 ☐ 28 ☐ 29 ☐ 30	Total: ___ out of ___: ___%	Q4
HIV and infant feeding *[option3wal, to include if covered by the Initiative]*			
HIV.1	The following mothers report that during their antenatal visits the staff gave them information on the fact that a woman who is HIV positive can pass the HIV infection to her baby: *[Y = yes, N = no, 0 = didn't answer]* ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 ☐ 11 ☐ 12 ☐ 13 ☐ 14 ☐ 15 ☐ 16 ☐ 17 ☐ 18 ☐ 19 ☐ 20 ☐ 21 ☐ 22 ☐ 23 ☐ 24 ☐ 25 ☐ 26 ☐ 27 ☐ 28 ☐ 29 ☐ 30	Total: ___ out of ___: ___%	Q3
HIV.2	The following mothers report that during their antenatal visits the staff gave them information on why testing and counselling for HIV is important for pregnant women: *[Y = yes, N = no, 0 = didn't answer]* ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 ☐ 11 ☐ 12 ☐ 13 ☐ 14 ☐ 15 ☐ 16 ☐ 17 ☐ 18 ☐ 19 ☐ 20 ☐ 21 ☐ 22 ☐ 23 ☐ 24 ☐ 25 ☐ 26 ☐ 27 ☐ 28 ☐ 29 ☐ 30	Total: ___ out of ___: ___%	Q3

Scoring	
For continued compliance with the Ten Steps and other BFHI components, the following responses are the minimum required:	
☐ **Step 1:** "Yes" for all items	☐ **Step 8:** 80% for both items
☐ **Step 2:** "Yes" for all items	☐ **Step 9:** 80% for both items
☐ **Step 3:** 70%	☐ **Step 10:** 80% for both items
☐ **Step 4:** At least 80% on 3 items and 70% on 2	☐ **Code compliance:** "Yes" and 80%
☐ **Step 5:** At least 80% on 3 items and 50% on 2	☐ **Mother-friendly care:** 70% for 1 item and 50% for the other
☐ **Step 6:** 80%	☐ **HIV and infant feeding:** 70% for 1 item and 50% for the other
☐ **Step 7:** 80%	

Review of Monitoring Results and Recommendations	
The health facility continues to fully comply with all Ten Steps and other BFHI components:	☐ **Yes** ☐ **No**
Achievements:	
Improvements required:	
Improvements suggested:	

Follow-up Questionnaire for Mother (# ___)

Introduction: We would appreciate it very much if you would complete this brief follow-up questionnaire about how you have been feeding your baby and what support you have received. Your name will be kept confidential. Your responses will help the maternity staff give the best services possible to mothers and babies in the future.

1.	How old is your baby today? ____ months old What date was your baby born? _______/______/_______ Day Month Year	F.1
2.	Since this time yesterday, has your baby been breastfed? ☐ Yes No ☐	F.2
3.	Since this time yesterday, did your baby receive any of the following: *[please tick all that apply]* ☐ Plain water ☐ Sweetened or flavoured water ☐ Fruit juice ☐ Tea or an infusion ☐ Infant formula ☐ Tinned, powdered or fresh milk (cow, goat, etc.) ☐ Other liquid ☐ Solid or semi-solid food ☐ Oral rehydration salts (ORS) solution ☐ Vitamins, mineral supplements, medicine ☐ Other (please tell us what):______________________ ______________________ ☐ Don't know	F.3
4.	*[If you are breastfeeding]* Since this time yesterday, did your baby drink anything from a bottle with a nipple/teat? ☐ Yes ☐ No ☐ Not breastfeeding *[if "Yes"]* Please describe what: ______________________ ______________________	F.4
5.	Have you had any problems with feeding your baby for which help from the hospital, clinic or a support group would have been useful? ☐ Yes ☐ No *[if "Yes"]* Please describe what problems you had: ______________________ Did you get the help that you needed? ☐ Yes ☐ No *[if "Yes"]* Please describe what help you received: ______________________ Who provided you with this help? ______________________	F.6
Thank you very much for taking the time to answer these questions.		

BFHI Monitoring: Summary of Results from Follow-up Questionnaires

Health facility and address: ______________________________

Dates of follow-up: ______________________________

Follow-up team members: ______________________________

F.1.	The mothers reported that their babies were the following ages (in months) _____1 _____.2 _____3 _____4 _____5 _____6 _____7 _____8 _____9 _____10 _____11 _____12 _____13 _____14 _____15 _____16 _____17 _____18 _____19 _____20 _____21 _____22 _____23 _____24 _____25 _____26 _____27 _____28 _____29 _____30	Average age of babies: _____months	1.
F.2.	The following mothers reported that their babies had been breastfed in the last 24 hours: *[Y = yes, N = no, 0 = didn't answer]* ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 ☐ 11 ☐ 12 ☐ 13 ☐ 14 ☐ 15 ☐ 16 ☐ 17 ☐ 18 ☐ 19 ☐ 20 ☐ 21 ☐ 22 ☐23 ☐ 24 ☐ 25 ☐ 26 ☐ 27 ☐ 28 ☐ 29 ☐ 30	Total: ___ out of ___: ___%	2.
F.3.	The following mothers reported that their babies had received nothing other than breast milk or vitamins, mineral supplements or medicine in the last 24 hours: *[Y = yes, received only breast milk, N = no, had received something other than breast milk, 0 = didn't answer]* ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 ☐ 11 ☐ 12 ☐ 13 ☐ 14 ☐ 15 ☐ 16 ☐ 17 ☐ 18 ☐ 19 ☐ 20 ☐ 21 ☐ 22 ☐23 ☐ 24 ☐ 25 ☐ 26 ☐ 27 ☐ 28 ☐ 29 ☐ 30	Total: ___ out of ___: ___%	3.
F.4.	The following <u>breastfeeding</u> mothers reported that their babies had not drunk anything from a bottle with a nipple or teat in the last 24 hours: *[Y = yes, if breastfeeding, had not drunk anything from a bottle with nipple, N = no, if breastfeeding, had drunk something from a bottle with a nipple, 0 = didn't answer or not breastfed in the last 24 hours]* ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 ☐ 11 ☐ 12 ☐ 13 ☐ 14 ☐ 15 ☐ 16 ☐ 17 ☐ 18 ☐ 19 ☐ 20 ☐ 21 ☐ 22 ☐23 ☐ 24 ☐ 25 ☐ 26 ☐ 27 ☐ 28 ☐ 29 ☐ 30	Total: ___ out of ___: ___%	4.

F.5	The following mothers reported that they had had problems with feeding their babies for which help from the hospital, a clinic or support group would have been useful, and they got the help they needed from one of these sources. *[Y = they had problems and got the help needed from the hospital, a clinic or support group, N = they had problems but didn't get the help they needed 0 = they didn't have problems or didn't answer]* ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 ☐ 11 ☐ 12 ☐ 13 ☐ 14 ☐ 15 ☐ 16 ☐ 17 ☐ 18 ☐ 19 ☐ 20 ☐ 21 ☐ 22 ☐23 ☐ 24 ☐ 25 ☐ 26 ☐ 27 ☐ 28 ☐ 29 ☐ 30	Total: ___ out of ___: ___%	6.5

Scoring

Note: The follow-up questionnaire is provided to give health facilities a tool for determining how well the mothers who have delivered in their facilities are doing in feeding their babies on return home. BFHI does not have any criteria that need to be met once mothers and babies are discharged. However, the information gathered can be very useful in helping the facility determine whether improvements are needed in infant feeding practices and the support provided to mothers. If so, the facility should consider how it can strengthen its "Step 10" strategies and/or collaborate with others to provide additional breastfeeding support at community level.

The following responses are optimal:

- ☐ **Q.1:** The facility sent follow-up questionnaires to babies all approximately the same ages
- ☐ **Q.2:** At least 80% "Yes"
- ☐ **Q.3:** At least 80% received nothing other than breast milk besides vitamins, mineral supplements or medicines
- ☐ **Q.4:** At least 80% of babies who are breastfed have not drunk anything from a bottle with a nipple/teat
- ☐ **Q.5:** At least 80% of mothers who had problems with feeding got the help needed from the facility, a community clinic or a support group.

Review of Follow-up Results and Recommendations

Achievements:

Improvements recommended and possible strategies:

Annex 4: The BFHI Reassessment Tool and its possible use for monitoring

In some countries a decision may be taken to focus on an internal monitoring system as the sole means for keeping track of the current status of facilities designated baby-friendly. External reassessment is usually a more costly process than internal monitoring, as it involves the displacement and time of external assessors. Internal monitoring, on the other hand, can be conducted by staff within the health facility itself. While external assessment is the best strategy for assuring lack of bias, internal monitoring can provide useful results, if the staff is motivated to give honest feedback. It is helpful if internal monitors can be identified from departments within the facility un-related to those being assessed, to help insure impartiality.

Section 5.3 of the BFHI documents discusses various strategies for reassessment and the key steps in the reassessment process. It then presents the "BFHI Hospital Reassessment Tool", which is a condensed version of the BFHI Hospital External Monitoring Tool.

This tool could also be used for monitoring purposes. It is usually only available to UNICEF officers, the national authorities responsible for BFHI, and assessors who will be involved in reassessment. However, if internal monitoring will be the sole strategy, the UNICEF officer or national authority may decide to make the reassessment tool available for use in the monitoring process.

The Baby-friendly Hospital Initiative (BFHI) is a global effort launched by WHO and UNICEF to implement practices that protect, promote and support breastfeeding. It was launched in 1991 in response to the Innocenti Declaration. The global BFHI materials have been revised, updated and expanded for integrated care. The materials reflect new research and experience, reinforce the International Code of Marketing of Breast-milk Substitutes, support mothers who are not breastfeeding, provide modules on HIV and infant feeding and mother-friendly care, and give more guidance for monitoring and reassessment.

The revised package of BFHI materials includes five sections: 1. Background and Implementation, 2. Strengthening and Sustaining the BFHI: A course for decision-makers, 3. Breastfeeding Promotion and Support in a Baby-friendly Hospital: a 20-hour course for maternity staff, 4. Hospital Self-Appraisal and Monitoring, and 5. External Assessment and Reassessment. Sections 1 to 4 are widely available while section 5 is for limited distribution.

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