What maintenance doses of methadone should be used?

GRADE evidence profile

Patient or population:

Author(s): Amato L, Minozzi S Date: 24 March 2006

Question: Should methadone maintenance (40–59 mg/day) versus methadone maintenance (1–39 mg/day) be used for opioid

> dependence? Opioid dependents

Settings: Outpatient Systematic review: Faggiano F et al. Methadone maintenance at different dosages for heroin dependence (CLIB 3, 2003)[140].

Quality	assessment					Summary of findings						
						No of patients		Effect		Quality	Imp	
No. studies	Design	Limitations	Consistency	Directness	Other considerations	Methadone maintenance medium doses (40–59 mg/day)	Methadone maintenance low doses (1–39 mg/day)	Relative risk (RR) (95% CI)	Absolute risk (AR) (95% CI)		Importance	
Retention	in treatment [108]	(objective follow	r-up: 20 weeks)									
1 ª	Randomized trial	No limitations ^b	No important inconsistency	No uncertainty	Imprecise or sparse data (–1) ^c	44/84 (52.4%)	34/82 (41.5%)	RR 1.26 ^d (0.91 to 1.75)	110/1000 more (40 less to 260 more)	⊕⊕⊕O Moderate	7	
Mortality (196) (objective follow-up: 6 years)												
1 ^e	Observational studies ^h	No limitations ^f	No important inconsistency	No uncertainty	Imprecise or sparse data (–1) ^g	1/362 (0.3%)	4/822 (0.5%)	RR 0.57 ^d (0.06 to 5.06)	2/1000 less(20 less to 5 more)	⊕○○○ Very low	9	

GRADE evidence profile

Author(s): Amato L, Minozzi S 24 March 2006 Date:

Question: Should methadone maintenance (60–120 mg/day) versus methadone maintenance (1–39 mg/day) be used for opioid

dependence?

Patient or population: Opioid dependents Settings: Outpatient

Systematic review: Faggiano F et al. Methadone maintenance at different dosages for heroin dependence (CLIB 3, 2003)[140].

Quality assessment						Summary of findings						
					No of patients			Effect		Quality	lmp	
No. studies	Design	Limitations	Consistency	Directness	Other considerations	Methadone maintenance (60–120 mg/day)	Methadone maintenance (1–39 mg/day)	Relative risk (RR) (95% CI)	Absolute risk (AR) (95% CI)		Importance	
Retention	in treatment at 7	7–26 weeks (obje	ctive follow-up: 7–2	26 weeks)								
5	Randomized trials	No limitations	No important inconsistency	No uncertainty	None	138/247 (55.9%)	102/249 (41.0%)	RR 1.36- (1.13 to 1.63)	150/1000 more (50 to 260)	⊕⊕⊕⊕ High	7	
Opioid ab	Opioid abstinence (proportion of negative urine samples over 12 weeks)											
1	Randomized trials	No limitations	No important inconsistency	No uncertainty	Very imprecise or sparse data (–2)	55	55	-	WMD -2.0 (-4.8 to -0.8)	⊕⊕OO Low	7	
Opioid ab	Opioid abstinence at 3–4 weeks (urinalysis)											
3	Randomized trials	No limitations	Inconsistent findings (–1) ^a	No uncertainty	Imprecise or sparse data (–1)	55/118	34/119	-	RR 1.59 (1.16 to 2.18)	⊕⊕○○ Low	7	
Cocaine a	bstinence at 3–4	weeks (urinalysis)										
2	Randomized trials	No limitations	No important inconsistency	No uncertainty	Imprecise or sparse data (–1)	35/83	20/85	-	RR 1.81 (1.15 to 2.85)	⊕⊕⊕O Moderate	6	

^a Significant heterogeneity.

Outpatient, conducted in the United States. Double blind, allocation concealment unclear.

Only one study.

Fixed effect model.

One CPS, outpatient, conducted in Dutch; for CPS medium doses = 55–70 mg/day, low doses = 5–55 mg/day.

One CPS of moderate quality. Large confidence interval.

GRADE evidence profile

Author(s): Amato L, Minozzi S 24 March 2006 Date:

Question: Should methadone maintenance (60-120 mg/day) versus methadone maintenance (40-59 mg/day) be used for opioid dependence?

Patient or population: Opioid dependents Settings: Outpatient

Systematic review: Faggiano F et al. Methadone maintenance at different dosages for heroin dependence (CLIB 3, 2003)^[140]

Quality	assessment					Summary of findings					
							No of patients		Effect		重
No. studies	Design	Limitations	Consistency	Directness	Other considerations	Methadone maintenance (60–120 mg/day)	Methadone maintenance (40-59 mg/day)	Relative risk (RR) (95% CI)	Absolute risk (AR) (95% CI)		Importance
Retention	in treatment at 7	-13 weeks [211, 212	Objective follow	/-up: 7–13 week	s)						
2 ª	Randomized trials	No limitations ^{2b}	No important inconsistency	No uncertainty	Imprecise or sparse data (-1)	138/173 (79,8%)	137/174 (78,7%)	RR 1.01 ^c (0.91 to 1.12)	10 more/1 000 (80 less to 90 more)	⊕⊕⊕O Moderate	7
Retention	in treatment at 2	7- 40 weeks ^{[213, 2}	11, 214] (Objective fo	ollow-up: 27–40	weeks)						
3 ^d	Randomized trials	No limitations ^e	No important inconsistency	No uncertainty	None	157/277 (56,7%)	130/283 (45,9%)	RR 1.23 ^c (1.05 to 1.45)	100/1 000 more (30 more to 190 more)	⊕⊕⊕⊕ High	7
Opioid abs	stinence ^[212] (Object	tive ^{7,} follow-up: 3-	–4 weeks ⁱ)								
1 ^f	Randomized trials	No limitations ^h	No important inconsistency	No uncertainty	Very imprecise or sparse data (-2) ⁱ	10/31 (32,3%)	6/28 (21,4%)	RR 1.51 ^c (0.63 to 3.61)	110/1 000 more (120 less to 330 more)	⊕⊕OO Low	7
Criminal a	ctivity ^[212] (Objectiv	e and subjective	Range: to . Better	indicated by: lo	wer scores)						
1 ^k	Randomized trials	No limitations ^h	No important inconsistency	No uncertainty	Very imprecise or sparse data (-2) ⁱ	31	28	-	WMD 0.05 (-0.03 to 0.13)	⊕⊕OO Low	6
Mortality ^{[1}	96] (Objective follow	-up: 6 years)									
1 ^m	Observational studies ⁿ	No limitations ⁿ	No important inconsistency	No uncertainty	Very imprecise or sparse data (-2)°	0/316 (0%)	1/362 (0,3%)	RR 0.38 ^c (0.02 to 9.34)	0/1 000 (10 less to 10 more)	⊕○○○ Very low	9

- Both outpatient and both conducted in USA
- Both double blind, allocation concealment unclear
- Fixed effect model
- All outpatient and all conducted in USA adequate allocation concealment, 2 unclear; 2 double blind, 1 single blind
- Outpatient, conducted in USA
- Based on urinalysis Double blind, allocation concealment unclear
- only 1 study, few participants During the treatment

- Outpatient, conducted in USA Medium number/week of criminal activities
- 1 CPS, outpatient, conducted in Dutch. For CPS high doses = >75 mg/day, medium dose = 55-70 mg/day 1 CPS of moderate quality

GRADE evidence profile

Author(s): Amato, Minozzi Date: 24/03/2006

Question: Should Methadone maintenance very high doses (>120 mg/day) versus Methadone maintenance high doses (60-120 mg/day)

be used for Opioid dependence?

Patient or population: Opioid-dependent patients Settings: Outpatient

Faggiano F et al. Methadone maintenance at different dosages for heroin dependence (CLIB 3, 2003)[140] Systematic review:

Quality assessment						Summary of findings						
					No of patients		Effect	Quality	3			
No. studies	Design	Limitations	Consistency	Directness	Other considerations	Methadone maintenance very high doses (>109 mg/day)	Methadone maintenance high doses (60-109 mg/day)	Relative risk (RR) (95% CI)	Absolute risk (AR) (95% CI)		Importance	
Retention in treatment[213] (Objective follow-up: 27 weeks)												
1ª	Randomized trials	No limitations ^b	No important inconsistency	No uncertainty	Imprecise or sparse data (-2) ^c	25/40 (62,5%)	26/40 (65%)	RR 0.96 ^d (0.69 to 1.34)	30/1 000 less (240 less to 190 more)	⊕⊕OO Low	1	

- Outpatient, conducted in USA Single blind, adequate allocation concealment
- 1 study, few participants Fixed effect model

Annexes