A1.2   Does opioid agonist maintenance treatment reduce the spread of HIV?

GRADE evidence profile

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Question: Should agonist maintenance treatment be used for the prevention of HIV infection or reduction of high-risk behaviours?
Patient or population: injecting opioid dependent
Settings: Outpatient
Systematic review: Gowing L et al. (2004) *Substitution treatment of injecting opioid users for prevention of HIV infection* (CLIB 4, 2004)[203].

Quality assessment						Summary of findings				Quality	Importance
						No of patients		Effect			
No. studies	Design	Limitations	Consistency	Directness	Other considerations	Agonist maintenance treatment	No treatment	Relative risk (RR) (95% CI)	Absolute risk (AR) (95% CI)		
Injecting behaviour: prevalence of injecting, cohort study[198] (subjective follow-up: 18 months)											
1[a]	Observational studies[b]	No limitations	No important inconsistency	No uncertainty	None	125/152 (82.2%)	97/103 (94.2%)	RR 0.87[3] (0.80 to 0.95)	AR 120/1000 less (200 less to 40 less)	⊕⊕○○ Low	6
Injecting behaviour: prevalence of injecting[199] (subjective follow-up: 4 months)											
1[d]	Randomized trials[e]	No limitations	No important inconsistency	Some uncertainty (–1)[f]	None	44/129 (34.1%)	93/124 (75.0%)	RR 0.45[3] (0.35 to 0.59)	AR 410/1000 less (520 less to 300 less)	⊕⊕⊕○ Moderate	6
Injecting behaviour: proportion of patients sharing injecting equipment, observational studies[198, 200, 201] (subjective follow-up: 0–18 months)											
3[g]	Observational studies[h]	No limitations	No important inconsistency	No uncertainty	None	83/301 (27.6%)	424/1020 (41.6%)	RR 0.54[c] (0.37 to 0.79)	AR 230/1000 less (400 less to 60 less)	⊕⊕○○ Low	7
Sexual behaviour: commercial sex [198] (follow-up: 18 months)											
1[a]	Observational studies[i]	No limitations	No important inconsistency	No uncertainty	None	43/152 (28.3%)	47/103 (45.6%)	RR 0.62[c] (0.45 to 0.86)	AR 170/1000 less (290 less to 50 less)	⊕⊕○○ Low	7
Sexual behaviour: unprotected sex[198, 200] (follow-up: 3–6 months)											
2[j]	Observational studies[k]	No limitations	No important inconsistency	No uncertainty	None	174/213 (81.7%)	554/654 (84.7%)	RR 0.94[d] (0.87 to 1.02)	AR 60/1000 less (130 less to 10 more)	⊕⊕○○ Low	6
Seroconversion to HIV [198, 200] (variable follow-up: up to 5 years)											
2[l]	Observational studies	No limitations	No important inconsistency	No uncertainty	None	16/579 (2.8%)	24/297 (8.1%)	RR 0.36[c] (0.19 to 0.66)	AR 50/1000 less	⊕⊕○○ Low	8

[a]   One study in an outpatient setting, conducted in the United States (Metzger, 1993)[198].
[b]   One descriptive study in which the author rated the quality of the study on the basis of six items (description of the population, description of eligibility criteria, adjustment for confounding, less than 20% loss to follow-up, presence of co-intervention, inconsistency in data collection between groups) rated from 0 to 1 where 0 = no bias. On the basis of this rating system the study was rated 1.
[c]   Random effect model.
[d]   One study conducted in Australia, in an inpatient setting (in prison).
[e]   The study was rated 1 (see footnote 2).
[f]   Opioid-dependent prisoners.
[g]   All three studies were conducted in an outpatient setting, two in the United States and one in Germany.
[h]   Three cohort studies, two rated 1 and one 2 (see footnote 2).
[i]   One cohort study rated 1 (see footnote 2).
[j]   Both outpatient, one conducted in the United States and one in Germany.
[k]   Both rated 1 (see footnote 2).
[l]   Two cohort studies: Metzger (1993)[198] a non-treatment control group selected by methadone group, and Moss (1994)[202] a control group selected from contemporaneous entry to opioid withdrawal programme.