Methadone maintenance at different dosages for opiod dependence (Cochrane Review)

Faggiano F, Vigna-Taglianti F, Versino E, Lemma P. ABSTRACT

A substantive amendment to this systematic review was last made on 28 May 2003. Cochrane reviews are regularly checked and updated if necessary.

Background: Methadone maintenance treatment (MMT) is a long term opiod replacement therapy, recognised as effective in the management of opiod dependence. Even if MMT at high dosage is recommended as therapy for reducing illicit opioid use and promoting longer retention in treatment, at present day "the organisation and regulation of the methadone maintenance treatment varies widely".

Objectives: To evaluate the efficacy of different dosages of MMT for opioid dependence in modifying health and social outcomes and in promoting patients' familial, occupational and relational functioning.

Search strategy: The following sources were scanned: - MEDLINE (OVID 1966-2001)- EMBASE (1988-2001)- ERIC (1988-2001)- Psychinfo (1947-2001)- Cochrane Controlled Trials Register (CCTR) (1947-2001)- Register of the Cochrane Drug and Alcohol Group (CDAG) (1947-2001)The CDAG search strategy was applied together with a specific MESH strategy. Further studies were searched through: letters to the authors of selected trials or to experts in order to obtain unpublished data check of references of relevant reviews.

Selection criteria: Randomised Controlled Trials (RCT) and Controlled Prospective Studies (CPS) evaluating methadone maintenance at different dosages in the management of opioid dependence were included in the review. Non-randomised trials were included when proper adjustment for confounding factors was performed at the analysis stage.

Data collection and analysis: Extraction of data was performed separately by two reviewers. Discrepancies were resolved by a third reviewer. RevMan software was used for analysis. Quality assessments of the methodology of studies were carried out using CDAG checklist.

Main results: 22 studies were excluded from the review. 21 studies were included; of them, 11 were RCTs with 2279 people randomised and 10 were CPSs with 3715 people followed-up.Outcomes: Retention rate - RCTs: High vs low doses at shorter follow-ups: RR=1.36 [1.13,1.63], and at longer ones: RR=1.62 [0.95,2.77]. Opioid use (self reported), times/w - RCTs: high vs low doses WMD= -2.00 [-4.77,0.77] high vs middle doses WMD= -1.89[-3.43, -0.35] Opioid abstinence, (urine based) at >3-4 w - RCTs: high vs low ones: RR=1.59 [1.16,2.18] high vs middle doses RR=1.51[0.63,3.61] Cocaine abstinence (urine based) at >3-4 w - RCTs: high vs low doses RR=1.81 [1.15,2.85]Overdose mortality - CPSs: high dose vs low dose at 6 years follow

up: RR=0.29 [0.02-5.34] high dose vs middle dose at 6 years follow up: RR=0.38 [0.02-9.34] middle dose vs low dose at 6 years follow up: RR=0.57 [0.06-5.06]

Reviewers' conclusions: Methadone dosages ranging from 60 to 100 mg/day are more effective than lower dosages in retaining patients and in reducing use of heroin and cocaine during treatment. To find the optimal dose is a clinical ability, but clinician must consider these conclusions in treatment strategies.

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This is an abstract of a regularly updated, systematic review prepared and maintained by the Cochrane Collaboration. The full text of the review is available in *The Cochrane Library* (ISSN 1464-780X).

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