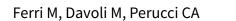


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Heroin maintenance for chronic heroin-dependent individuals (Review)



Ferri M, Davoli M, Perucci CA. Heroin maintenance for chronic heroin-dependent individuals. *Cochrane Database of Systematic Reviews* 2011, Issue 12. Art. No.: CD003410. DOI: 10.1002/14651858.CD003410.pub4.

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[Intervention Review]

Heroin maintenance for chronic heroin-dependent individuals

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Editorial group: Cochrane Drugs and Alcohol Group.

Publication status and date: Edited (no change to conclusions), published in Issue 5, 2012.

Citation: Ferri M, Davoli M, Perucci CA. Heroin maintenance for chronic heroin-dependent individuals. *Cochrane Database of Systematic Reviews* 2011, Issue 12. Art. No.: CD003410. DOI: 10.1002/14651858.CD003410.pub4.

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ABSTRACT

Background

Several types of medications have been used for stabilizing heroin users: Methadone, Buprenorphine and levo-alpha-acetyl-methadol (LAAM.) The present review focuses on the prescription of heroin to heroin-dependent individuals.

Objectives

To compare heroin maintenance to methadone or other substitution treatments for opioid dependence regarding: efficacy and acceptability, retaining patients in treatment, reducing the use of illicit substances, and improving health and social functioning.

Search methods

A review of the Cochrane Central Register of Trials (*The Cochrane Library* Issue 1, 2005), MEDLINE (1966 to november 2009), EMBASE (1980 to 2005) and CINAHL until 2005 (on OVID) was conducted. Personal communications with researchers in the field of heroin prescription identified ongoing trials.

Selection criteria

Randomised controlled trials of heroin maintenance treatment (alone or combined with methadone) compared with any other pharmacological treatment for heroin-dependent individuals.

Data collection and analysis

Two reviewers independently assessed trial quality and extracted data.

Main results

Eight studies involving 2007 patients met the inclusion criteria. Five studies compared supervised injected heroin plus flexible dosages of methadone treatment to oral methadone only and showed that heroin helps patients to remain in treatment (valid data from 4 studies, N=1388 Risk Ratio 1.44 (95%CI 1.19-1.75) heterogeneity P=0.03), and to reduce use of illicit drugs. Maintenance with supervised injected heroin has a not statistically significant protective effect on mortality (4 studies, N=1477 Risk Ratio 0.65 (95% CI 0.25-1.69) heterogeneity P=0.89), but it exposes at a greater risk of adverse events related to study medication (3 studies N=373 Risk Ratio 13.50 (95% CI 2.55-71.53) heterogeneity P=0.52). Results on criminal activity and incarceration were not possible to be pooled but where the outcome were measured results of single studies do provide evidence that heroin provision can reduce criminal activity and incarceration/imprisonment. Social functioning improved in all the intervention groups with heroin groups having slightly better results. If all the studies comparing heroin provision in any conditions vs any other treatment are pooled the direction of effect remain in favour of heroin.



Authors' conclusions

The available evidence suggests an added value of heroin prescribed alongside flexible doses of methadone for long-term, treatment refractory, opioid users, to reach a decrease in the use of illicit substances, involvement in criminal activity and incarceration, a possible reduction in mortaliity; and an increase in retention in treatment. Due to the higher rate of serious adverse events, heroin prescription should remain a treatment for people who are currently or have in the past failed maintenance treatment, and it should be provided in clinical settings where proper follow-up is ensured.

PLAIN LANGUAGE SUMMARY

Pharmaceutical heroin for heroin maintenance in chronic heroin dependents

Drug dependent heroin users are preoccupied with the desire to obtain and take heroin and so have persistent drug-seeking behaviours. Those with a long history of treatment attempts and failures may benefit from the provision of heroin and flexible doses of methadone in a maintenance program. When accepted, this treatment may help them to remain in treatment, limit the use of street drugs, reduce illegal activities and possibly reduce mortality. The authors of the review identified eight randomised studies involving 2007 adult patients with a history of previous treatment failures in outpatient settings. The heroin users on the programs were requested to attend the clinic to receive and inject prescribed heroin from two to three times a day. Adverse events were consistently more frequent in the heroin groups. The trialists recommend that the treatment should be properly established so that necessary intensive care can be provided in an emergency. According with the current evidence, heroin prescription should be indicated to people who is currently or have previously failed maintenance treatment, and it should be provided in clinical settings where proper follow-up is ensured.