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Cochrane Database of Systematic Reviews 2004, Issue 4. Art. No.: CD004145.
DOI: [10.1002/14651858.CD004145.pub2](https://doi.org/10.1002/14651858.CD004145.pub2).

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[Intervention Review]

Substitution treatment of injecting opioid users for prevention of HIV infection

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Editorial group: Cochrane Drugs and Alcohol Group.

Publication status and date: Unchanged, published in Issue 1, 2008.

Citation: Gowing L, Farrell M, Bornemann R, Ali R. Substitution treatment of injecting opioid users for prevention of HIV infection. *Cochrane Database of Systematic Reviews* 2004, Issue 4. Art. No.: CD004145. DOI: [10.1002/14651858.CD004145.pub2](https://doi.org/10.1002/14651858.CD004145.pub2).

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ABSTRACT

Background

Injecting drug users are vulnerable to infection with HIV and other blood borne viruses as a result of collective use of injecting equipment as well as sexual behaviour.

Objectives

To assess the effect of oral substitution treatment for opioid dependent injecting drug users on rates of HIV infections, and high risk behaviours.

Search methods

We searched the Cochrane Drugs and Alcohol Group trials register, Cochrane Central Register of Controlled Trials, MEDLINE, EMBASE, PsycINFO, CINAHL, NLM Gateway from their date of commencement to July 2003. We also searched reference lists of articles, reviews and conference abstracts

Selection criteria

Studies were required to consider the incidence of risk behaviours, or the incidence of HIV infection related to substitution treatment of opioid dependence. All types of original studies were considered. Two reviewers independently assessed studies for inclusion.

Data collection and analysis

One reviewer extracted data from included studies, assessed quality and confirmed decisions by consulting with all other reviewers.

Main results

Twenty-eight studies, involving 7900 participants, were included. The majority were not randomised controlled studies and there were problems of confounding and bias. The studies varied in several aspects limiting the extent of quantitative analysis. However, oral substitution treatment for opioid-dependent injecting drug users is associated with statistically significant reductions in illicit opioid use, injecting use and sharing of injecting equipment. It is also associated with reductions in the proportion of injecting drug users reporting multiple sex partners or exchanges of sex for drugs or money, but has little effect on condom use. It appears that the reductions in risk behaviours related to drug use do translate into reductions in cases of HIV infection.

Authors' conclusions

Oral substitution treatment for injecting opioid users reduces drug-related behaviours with a high risk of HIV transmission, but has little effect on sex-related risk behaviours. The lack of data from randomised controlled studies limits the strength of the evidence presented in this review, but findings concur with previous systematic reviews.

PLAIN LANGUAGE SUMMARY

Oral substitution treatment for injecting opioid users reduces drug-related behaviours with a high risk of HIV transmission, but has little effect on sex-related risk behaviours.

Injecting drug users are vulnerable to infection with HIV and other blood borne viruses as a result of collective use of injecting equipment as well as sexual behaviour. This review looks at original studies that reported the frequency or prevalence of risk behaviours, or the prevalence of HIV infection related to substitution treatment of opioid dependence to assess the extent to which oral substitution treatment prevents the transmission of HIV infection. It was not possible to accurately estimate the extent of reduction, but it is clear that oral substitution treatment reduces risk behaviours and also actual cases of HIV infection amongst injecting drug users in substitution treatment.