Screening in primary care settings for illicit drug use: staged systematic review for the United States Preventive Services Task Force


CRD summary
This review found insufficient evidence that drug misuse treatment improved morbidity or mortality in individuals who sought treatment. There was good evidence of reduced drug misuse and insufficient evidence of improved intermediate social and legal outcomes. Generalisability to primary care populations may be limited. The reliability of these conclusions is unclear given the possibility of language and publication bias.

Authors' objectives
To assess the efficacy of treatment for drug misuse in primary care.

Searching
MEDLINE, Cochrane Database of Systematic Reviews, DARE and PsycINFO were searched for English-language studies (1994 to 2006). Search terms were reported. References of reviews, editorials, reports and websites were searched and experts contacted.

Study selection
Several key questions were addressed in the review (numbers follow those in the report for ease of reference).

1. Was there direct evidence that screening for drug misuse reduced morbidity and/or mortality.
4. Did treatment for drug misuse among individuals identified through screening improve morbidity and/or mortality?
5. Did treatment for drug misuse among individuals identified through screening result in decreased drug misuse?
5a. Did treatment for drug misuse reduce risk behaviours or improve social and legal outcomes?
7. Was decreased use or abstinence following drug misuse reliably associated with reduced morbidity and mortality?

Included studies had to meet criteria for the key question and meet the following criteria:

Randomised controlled trials (RCTs), controlled clinical trials (CCTs) and prospective and observational studies (the last two types for key questions 1 and 7) of opiate, cocaine, marijuana and mixed drug use among adolescents/teens (12 to 17 years), young adults (18 to 25 years) and adults (over 25 years) or pregnant women were eligible for inclusion. Eligible health outcomes were morbidity (infant outcomes, injuries, medical conditions, mental health disorders, quality of life, sexually transmitted disease transmission, utilisation, violence/unintentional) and mortality. Intermediate outcomes eligible for inclusion were abstinence, decreased use, time to relapse, risk behaviours and social/legal. The studies also had to be conducted in a USA-applicable country and be primary care feasible or referable (described in the report). Studies were excluded if they did not meet US Preventative Services Task Force (USPSTF) criteria for study quality.

No evidence was found that addressed key question 1. Studies that addressed questions 4, 5 and 5a were mostly conducted in adult or young adult populations. Treatments varied according to type of drug, but included psychosocial intervention, counselling, prescription drug treatments and acupuncture. Most trials were carried out in treatment-seeking populations (rather than primary-care screened populations).

Studies were selected by two reviewers. Disagreements were resolved by consensus.

Assessment of study quality
The quality of the included studies was assessed using published USPSTF criteria, which led to the grading of studies as
good, fair or poor (quality criteria varied according to study design).

Two reviewers assessed study quality and disagreements were resolved by consensus.

**Data extraction**
Data were extracted by two reviewers. Disagreements were resolved by consensus.

**Methods of synthesis**
The studies were combined in a narrative synthesis (with emphasis on the best available evidence) grouped by key questions.

**Results of the review**
Seventeen RCTs addressed key questions 4, 5 and 5a (n=3,901). The quality of the included studies was good in three RCTs and fair in 14 RCTs.

**Key question 7 (n=5,865, 11 studies):** Nine prospective cohort studies and two retrospective cohort studies; study quality was fair in 10 studies and good in one. Follow-up ranged from two to 52 weeks. Studies included adult or young adult populations. Follow-up periods that ranged from six months to 33 years.

**Key question 4:** There was little evidence that drug misuse treatment improved health outcomes.

**Key questions 5/5a:** Overall evidence suggested that a variety of drug misuse treatments effectively reduced opiate, cocaine or marijuana misuse. The evidence for drug misuse treatment effects on social and legal outcomes was less consistent, although behavioural counselling interventions for cannabis misuse appeared to reduce cannabis-related problems.

**Key question 7:** There was fair evidence that stopping/reducing drug misuse was associated with reduced morbidity and mortality. None of the evidence was derived from individuals screened for drug misuse in primary care settings.

**Authors' conclusions**
There was insufficient evidence that drug misuse treatment improved morbidity or mortality in individuals who sought treatment. There was good evidence that drug misuse treatment in individuals who sought treatment reliably reduced drug misuse. There was insufficient evidence that drug misuse treatment in treatment-seeking individuals improved intermediate social and legal outcomes. There was fair evidence that reducing or stopping drug misuse was associated with some health outcomes in some populations. The generalisability of these findings to a primary care setting may be limited.

**CRD commentary**
The research question was supported by inclusion criteria for participants, intervention, outcomes and study design. Several relevant databases were searched; as these searches were restricted to English-language studies, language bias was possible. The authors did not report any attempts to obtain unpublished studies, so publication bias was a possibility. Study selection, data extraction and validity assessment were performed in duplicate, which reduced potential for reviewer error and bias. Study quality was assessed with appropriate criteria and taken into consideration in the analysis. Narrative synthesis appeared appropriate given the heterogeneity between studies. The authors appropriately stated that the results may not be generalisable to the general primary care population. The reliability of the authors' conclusions is unclear, given the possibility of language and publication bias.

**Implications of the review for practice and research**
The authors did not state any implications for practice or research.

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Record Status
This is a critical abstract of a systematic review that meets the criteria for inclusion on DARE. Each critical abstract contains a brief summary of the review methods, results and conclusions followed by a detailed critical assessment on the reliability of the review and the conclusions drawn.