Effective methods to change sex-risk among drug users: a review of psychosocial interventions

CRD summary
This review evaluated psychosocial HIV prevention interventions with respect to sexual behaviour in drug users. The authors concluded that a limited number of interventions were effective in changing sexual risk behaviour. The authors' cautious conclusions reflect the limited evidence from a small number of studies.

Authors' objectives
To evaluate the effectiveness of psychosocial human immunodeficiency virus (HIV) prevention interventions with respect to sexual behaviour in drug users.

Searching
MEDLINE, PsycINFO, ERIC and Online Current Contents were searched; neither the search terms nor the dates of the searches were reported.

Study selection
Study designs of evaluations included in the review
Studies comparing the intervention with a control or active comparator were eligible for inclusion.

Specific interventions included in the review
Studies of psychosocial or behavioural interventions were eligible for inclusion. The interventions evaluated in the included studies were information-, education- or psychotherapy-based, conducted either alone or in addition to standard care, on an individual, group or community level. Standard care was used as the comparator for all studies.

Participants included in the review
Studies of injecting drug users or non-injecting substance dependent users, either in or out of treatment, were eligible for inclusion. Where stated, the participants were using either heroin or crack cocaine, or were on methadone maintenance. Four studies were restricted to women.

Outcomes assessed in the review
Studies that assessed changes in sexual behaviour were eligible for inclusion. The outcomes measured in the included studies were changes in sexual risk, frequency of unprotected sex, condom use, number of partners, changes in coping skills and social support, drug use during sex, abstinence and knowledge of acquired immune deficiency syndrome (AIDS).

How were decisions on the relevance of primary studies made?
More than one reviewer selected the studies, as the authors stated that disagreements were resolved by consensus. However, it was not reported how many reviewers performed the selection, or if this was carried out independently.

Assessment of study quality
The studies were assessed for study design, description of methods, sample size, retention rate and intervention based on underlying theory. The authors did not state who performed the validity assessment.

Data extraction
The authors did not state how the data were extracted for the review, or how many reviewers performed the data
Methods of synthesis
How were the studies combined?
The studies were combined in a narrative, with individual, group and community level interventions discussed separately.

How were differences between studies investigated?
Each study was discussed individually in the text, and study details and results were tabulated.

Results of the review
Fifteen studies (17 comparisons) were included in the review (n>9,016 participants, as one study did not report the number of participants). Nine studies were randomised controlled trials (RCTs, n=3,173), two were randomised multiple controlled trials (n=662), one was a non-randomised controlled trial (n=103), and three were non-randomised repeat cross-sectional trials (n>5,078). The duration of follow-up ranged from 1 to 12 months. The retention rate varied between 59 and 94%.

Methodological limitations included implicit or lack of use of a theoretical framework, lack of clear description of methods, short intervention period, generally small sample sizes (both at baseline and for analysis), and retention rates of approximately 70 to 80% for group intervention.

Individual interventions (5 studies, 6 evaluations).
Four evaluations showed no difference in sexual-risk behaviour between the intervention group and standard care group. Two evaluations reported an overall reduction in sexual-risk behaviour in the intervention group (P<0.001), with one reporting no difference in condom use.

Group interventions (7 studies, 8 evaluations).
Four of five evaluations reported a decrease in sexual-risk behaviour, two of three evaluations reported a decrease in the number of sexual partners, two of four evaluations reported an increase in condom use, two evaluations reported an increase in knowledge of risk reducing practices, one evaluation reported an increase in abstinence, and one reported an increase in coping skills and social support in the intervention group.

Community level interventions (3 studies, 3 evaluations).
All three evaluations reported an increase in condom use in the intervention group, and no difference in steady partners.

Authors' conclusions
A limited number of interventions were effective in changing sexual-risk behaviour, with results for community level interventions being sustained. The more successful programmes included the use of multiple theories and methods, the use of peers and rehearsal of skills.

CRD commentary
The inclusion criteria were broad, but were clear in terms of the intervention, participants, outcomes and study design. Relevant databases were searched, although it was unclear whether any language or date restrictions were applied. The study selection process seems to have been carried out in duplicate, but it was unclear whether any methods were used to minimise error and bias in the data extraction process and assessment of validity. Some aspects of validity were assessed. The decision to combine the studies in a narrative was appropriate. The authors' cautious conclusions reflect the limited evidence from a small number of studies.
Implications of the review for practice and research

Practice: Whilst there is no cure for HIV/AIDS, the authors advised that safe sexual practices should be promoted.

Research: The authors stated that there is a need for further research into the effectiveness of behavioural interventions. They stated that future studies should preferably be RCTs, be based on theory, assess specified standardised outcomes that include psychosocial outcomes and assess long-term outcomes. They also stated that programme users should be involved in the development of the programme.

Bibliographic details

PubMedID
12948569

Indexing Status
Subject indexing assigned by NLM

MeSH
Community Health Services; HIV Infections /complications /prevention & control /psychology; Health Knowledge, Attitudes, Practice; Humans; Psychotherapy, Group; Risk Reduction Behavior; Risk-Taking; Safe Sex /psychology; Substance-Related Disorders /complications /prevention & control /psychology

AccessionNumber
12003004179

Date bibliographic record published
31/12/2005

Date abstract record published
31/12/2005

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.