FINDINGS **Your selected document**

This entry is our account of a review or synthesis of research findings selected by Drug and Alcohol Findings as particularly relevant to improving outcomes from drug or alcohol interventions in the UK. Unless indicated otherwise, permission is given to distribute this entry or incorporate passages in other documents as long as the source is acknowledged including the web address http://findings.org.uk. The original review was not published by Findings; click on the Title to obtain copies. Links to source documents are in blue. Hover mouse over orange text for explanatory notes. The Summary is intended to convey the findings and views expressed in the review. Below are some comments from Drug and Alcohol Findings.

Open home page. Get free e-mail alerts about new studies. Search studies by topic or free text

▶ Psychosocial interventions for reducing injection and sexual risk behaviour for preventing HIV in drug users.

Meader N., Li R., Des Jarlais D.C., et al.

Cochrane Database of Systematic Reviews: 2010, 1, art. no. CD007192.

This systematic review of 35 trials found that several sessions of information and skills training were no more effective than minimal educational interventions at reducing the kind of substance use and sexual behaviour which risks HIV infection in drug users who inject and/or use cocaine.

Summary This review assesses the results of 35 trials (mainly from the USA) to assess whether 'talking' interventions help people whose primary drug use involves injecting and/or taking cocaine to change behaviour so they are at less risk of becoming infected with HIV. Sharing needles and other injecting equipment and some kinds of sexual activity (the main reason for including cocaine use) both increase the risk of infection, so the reviewers looked for studies which assessed impacts on these behaviours as well as those which actually recorded new infections. Studies had to have tested individual or group interventions spanning at least three sessions (in practice three to 16), which involved education about HIV and also trained participants in skills such as communication, assertiveness, and safer sexual and injecting practice, offering a chance to ask questions and receive feedback. To avoid bias due to the type of people allocated to the intervention, trials also had to feature a control group allocated at random or effectively at random to 'standard' education consisting of similar intervention of just one or two sessions or (if in treatment) the clinic's normal procedures, or a 'minimal' intervention not involving any counselling or education, such as handing over an HIV self-help booklet. At issue was whether the more extensive and structured interventions were better at reducing HIV infection or the risk of infection. Occasionally the following account incorporates information from the original trials as well as the featured review.

Of the 35 trials published from 1991 to 2004 which met these and other criteria, 12 recruited patients being treated for their substance use at the study site; in others, participants may or may not have been in treatment. Across all the studies, there were just shy of 12,000 participants. Some studies recruited methadone patients, some needle exchange users, others people detoxified from opioid drugs or in prison. The USA accounted for 29 of the 35 trials; the remainder were from Australia or Puerto Rico.

Main findings

Where possible results of the trials were amalgamated using meta-analytic techniques.

The great majority (28 of 35) of trials tested an intervention spanning three or more sessions against a similar intervention confined to one or two or the treatment clinic's normal procedures. Generally little added benefit was found; just two of 13 comparisons registered a statistically significant advantage for the longer interventions. More details below.

Across the 28 studies, in respect of risky injecting there was no statistically significant advantage for the evaluated interventions, and only one individual study found a significant benefit – an Australian study from the early '90s of pregnant women in methadone treatment who volunteered to be allocated to six sessions of motivational/cognitive-behavioural counselling additional to standard care, or just standard care. After the six weeks it took to deliver the intervention, both sets of women had reduced the number of times they risked becoming infected with HIV. After that, women allocated to the intervention continued to improve, while those offered just standard care reverted to more risky injecting, resulting in a statistically significant difference nine months after the study started.

Across the same set of studies, after being allocated to the longer interventions, slightly but significantly more participants had adopted *both* safer sex and safer injecting practices. No statistically significant benefit was found in respect of risky sex in itself.

Another analysis involving just six trials compared brief educational interventions against a minimal intervention such as handing over a self-help booklet. Though in respect of both sexual and injecting risk there were slight advantages for face-to-face education, none were statistically significant. Lastly, five studies compared a full multi-session intervention to a minimal intervention. Across these safer sex was significantly promoted by the longer interventions but (just two studies could be analysed) not safer injecting.

Also assessed were whether the impacts on combined sexual/injecting risk of full interventions versus standard education varied depending on setting or participants. Compared to participants not identified as being in treatment, the full intervention was found to be slightly more effective in trials which recruited patients in drug addiction treatment. There was also a slight extra advantage in trials which recruited just women compared to those which recruited men or (more often) both sexes. No such differences were found depending on whether trials tested participants for HIV or were fully randomised.

The authors' conclusions

Relatively extensive interventions (spanning at least three sessions and offering education about HIV plus structured skills training) are not significantly better than similar but briefer educational approaches at reducing the types of behaviour that risk HIV infection via unsafe sex or unsafe injecting. The implication is that these longer interventions should not be widely implemented. Cheaper, easier and briefer interventions may gain as much risk reduction for less money. Rather than interventions targeting individuals, more effective may be community-level programmes supplying not just information but materials to enable safer behaviour (sterile injection equipment and condoms) across a local injecting population, and promoting new safer-behaviour social norms. Further considerations below.

Generally the trials found risky behaviour reduced after both full interventions and brief comparison interventions, suggesting both may have been effective. This could only be established through a trial which allocated people at risk of HIV to absolutely no HIV advice or information. Such a trial would be unethical, so even the most minimal control interventions feature 'usual' advice and/or an advice and information leaflet.

Another reason why the longer interventions did not prove preferable could have been that their recipients passed on some of the information and advice or otherwise influenced their fellow injectors in the control groups, reducing their risky behaviour – to be expected given the social nature of much injecting drug use; people who use drugs may already be sharing information about who to buy drugs from and buying and using them together.

Most studies did not assess which drug users could benefit most from the intervention – those whose injecting and sexual behaviour meant they were running the greatest risks. Among these, extensive interventions may have been more effective. Such a procedure would however entail the unethical allocation of some people known to be at high risk of HIV infection to nothing more than a minimal intervention.

FINDINGS The analysts stressed that more extensive interventions have not been shown more effective than briefer individual or group education, and suggest the latter might be the more cost-effective option. However, they also found that brief face-to-face education could not be shown to be more effective than simply giving written information on HIV. From this review, we cannot know whether any of these interventions are better than doing nothing, but the clear implication is that extending intervention to

incorporate more information and skills training does not improve results. It could be that interventions of whatever intensity and duration are ineffective, or that nearly all the potential benefits can be gleaned even with a very minimal intervention.

Searches for reports to review were conducted in 2006 and all the retrieved studies were published between 1991 and 2004. Later studies may alter the conclusions, as the lead analyst has warned. The reviewed studies seem rarely if ever to have directly tested whether the interventions prevented new HIV infections, and this was not assessed by the review. However, the risk practices which were assessed have been found to be related to the incidence of new infections.

An earlier similar review and meta-analysis did find injecting risk was reduced by education and skills training interventions, but only in respect of reducing the number of injections, an outcome not specifically assessed by the featured review which focused on overall risk. This finding was heavily influenced by a trial in Puerto Rico, which provided one of just four findings of significant reductions in injecting across the 30 comparisons. Two other studies found significant impacts in the 'wrong' direction. This review also found significant sexual risk reduction but no significant impact on the sharing of needles and syringes, the main risk from continued injecting. It included studies of interventions (a third each of the total) which aimed to encourage drug users to enter treatment (overall these did have the intended effect) and offered bleach to help clean injecting equipment and condoms to aid safer sex – more than just the psychosocial elements assessed in the featured review.

Another review has focused on the impact of psychosocial interventions on hepatitis C. As the featured review found for HIV risk, it concluded that used on their own, the types of behavioural interventions trialled in the reviewed studies have not been shown to help protect injectors from infection.

Other ways to prevent infection

While psychosocial interventions have a poor research record in preventing blood-borne infections, more tangible aids have been found effective. The European Union's drug misuse and disease control agencies and the UK's National Institute for Health and Clinical Excellence (NICE) are clear that prevention strategies should feature needle and syringe programmes offering widespread access to clean injecting equipment and readily accessible opiate substitution therapy to help more people reduce the number of times they inject. Though psychosocial interventions on their own may be ineffective, NICE recommended these should be offered by specialist services supplying injecting equipment, as well as advice on safer injecting and help to stop injecting.

Thanks for their comments on this entry in draft to Dr Nicholas Meader of the University of York. Commentators bear no responsibility for the text including the interpretations and any remaining errors.

Last revised 17 December 2013. First uploaded 16 December 2013

- Comment on this entry
- Give us your feedback on the site (one-minute survey)
- Open Effectiveness Bank home page and enter e-mail address to be alerted to new studies

Top 10 most closely related documents on this site. For more try a subject or free text search

Brief counseling for reducing sexual risk and bacterial STIs among drug users. Results from project RESPECT STUDY 2010

Female crack smokers respond well to standard HIV risk-reduction sessions STUDY 2004

Behavioural interventions for preventing hepatitis C infection in people who inject drugs: a global systematic review REVIEW 2012

HIV infection during limited versus combined HIV prevention programs for IDUs in New York City: the importance of transmission behaviors STUDY 2010

Reducing sex under the influence of drugs or alcohol for patients in substance abuse treatment STUDY 2010

Gender differences in client-provider relationship as active ingredient in substance abuse treatment STUDY 2010

Cognitive-behavioral treatment with adult alcohol and illicit drug users: a meta-analysis of randomized controlled trials REVIEW 2009

A meta-analysis of motivational interviewing: twenty-five years of empirical studies REVIEW 2010

Effect of motivational interviewing on reduction of alcohol use STUDY 2010

Drug Matrix cell D1: Organisational functioning; Reducing harm MATRIX CELL 2013