


DRUG & ALCOHOL FINDINGS *Research analysis*

This entry is our analysis of a study added to the Effectiveness Bank. The original study was not published by Findings; click [Title](#) to order a copy. Free reprints may be available from the authors – click [prepared e-mail](#). [Links](#) to other documents. [Hover over](#) for notes. [Click to highlight](#) passage referred to. [Unfold extra text](#) . The Summary conveys the findings and views expressed in the study. Below is a commentary from Drug and Alcohol Findings.

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▶ [Randomized controlled trial of motivational interviewing for reducing injection risk behaviours among people who inject drugs.](#)

Bertrand K., Roy E., Vaillancourt E. et al.

Addiction: 2015, 110, p. 832–841.

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Injectors at risk of infection due to sharing equipment responded best to brief risk-reduction counselling based on motivational rather than educational principles, offering a way to augment the benefits of harm reduction services.

SUMMARY People who inject drugs are at risk of acquiring and transmitting infections, including HIV and hepatitis C. Needle exchange programmes are a key form of harm reduction – distributing sterile injecting equipment, and providing spaces for health services and behavioural interventions. Very few studies have looked into the potential for interventions based on motivational interviewing to further reduce risky injecting practices.

This study, based in Canada, examined the effectiveness of motivational interviewing versus education and information for reducing high-risk behaviours in people who had potentially risked infection by sharing injecting equipment or sharing drugs by squirting them from one syringe into another ([backloading](#) or [frontloading](#)) in the previous month.

Participants were recruited from community-based harm reduction programmes offering needle exchange services located in downtown Montréal, and randomly allocated to either a motivational interviewing group (112 people) or an educational intervention group (109 people).

The motivational interviewing intervention: The aim of the brief motivational interviewing session was to encourage participants to voice their desires, needs and reasons to change behaviours; boost motivation to change; and (as and when ready) support their plan to reduce risky injecting behaviours. The interventions took an average of 30 minutes. They were carried out by members of the research team, who received a minimum of 15 hours training, and additional supervision by experts in motivational interviewing and addiction. All intervention sessions were recorded, and 20% were analysed against the [Motivational Interviewing Treatment Integrity Scale](#) in order to assess the extent to which they were implemented as intended.

The educational intervention: The focus of the brief educational intervention was on providing information and training about safe injecting behaviours. The educational intervention took an average of 24 minutes. Members of the research team delivered the intervention, after receiving a three-hour training session. To assess the degree to which the intervention was delivered as intended, all were recorded and 20% were analysed against requirements.



Key points

From summary and commentary

This study tested the effectiveness of a brief intervention based on motivational interviewing (versus one based on education and information only) to reduce risky injecting behaviours.

Participants were recruited from community-based harm reduction programmes. One of the main activities at the site of recruitment was the provision of clean drug preparation and consumption equipment.

Reported risky injecting behaviours decreased in both intervention groups, but decreased more in the motivational interviewing group.

Participants were interviewed before the interventions (taking about 30 minutes), and again three months and six months later (taking about 20 minutes). The primary outcome measure was injecting risk behaviour, defined as presenting any of the following risk behaviours in the previous month: sharing syringes, containers, filters or water to inject drugs in the previous month and **backloading** or **frontloading**. Each of these behaviours were also examined separately, as secondary outcomes.

Main findings

Included in the analysis were the 72% of participants who completed interviews before the intervention *and* at the six-month follow-up. Participants averaged 38 years old and were mostly men (82%). Half had completed high school (50%) and half (53%) were homeless. Cocaine (90%), and heroin (50%) and other opioids (58%) were the main type of drugs they injected.

Overall, risk behaviours associated with injecting decreased significantly in both intervention groups. However, reductions were more pronounced in the motivational interviewing group for the primary outcome (any risk behaviour) and two secondary outcomes (sharing containers and injection equipment excluding syringes). At the six-month follow-up, compared to the educational intervention group, participants in the motivational interviewing intervention group were 50% less likely to report any risk behaviour, 50% less likely to share containers, and 53% less likely to share equipment (with the exception of syringes).

The authors' conclusions

The authors concluded that a brief motivational interviewing intervention was more effective than a brief educational intervention in reducing some high risk injecting behaviours in the six months that followed the interventions.

Although there were reductions in the sharing of injecting equipment, this did not apply to syringes. Other studies have documented that people who inject drugs perceive the risks of sharing needles to be greater than the risks of sharing other injecting equipment. So, a possibility is that motivational interviewing could have the effect of increasing awareness of the importance of reducing the sharing of *other* injecting equipment.

FINDINGS COMMENTARY It is important to note that in countries such as the UK, psychosocial interventions (such as those featured in this study) form a small part of efforts to reduce the significant harms associated with injecting drugs. Blood-borne viruses (such as HIV and hepatitis) are easily **spread among drug users** who share injecting equipment, a practice most common amongst those who have been injecting for under three years. In the UK, nearly half (46%) of this group **reported** that they had shared equipment in 2013. The European Centre for Disease Prevention and Control and European Monitoring Centre for Drugs and Drug Addiction **recommend** a comprehensive approach to reducing harm caused by the spread of infectious diseases among people who inject drugs – to include provision of a sufficient supply of free, sterile injecting equipment; vaccinations; opioid substitution treatment and other effective forms of drug dependence treatment; testing and treatment for infections; health promotion; and targeted delivery of services (including through outreach to meet local client needs).

The present study offers some evidence that a brief motivational interviewing intervention is more effective at reducing harm than a brief educational intervention. However, without a control group to compare to (ie, a group receiving no intervention at all), it is not possible to say that any reductions observed were caused by the motivational or educational interventions, but only that the interventions were associated with the reductions. However, it seems likely that motivational interviewing did cause some of the reductions. One **systematic review** cited in the paper, and reviewed in the following **Effectiveness Bank** entry, suggests that motivational interviewing is better than no treatment at all for improving substance use outcomes (including those relating to drug use, retention in treatment, readiness to change, and number of repeat convictions), though further research would be needed to confirm (or refute) this as the evidence base was reportedly of low quality.

Participants in the present study were recruited from a community harm prevention programme, where one of the main activities was needle exchange. This suggests that the impact of the intervention(s) would likely be additional to any impact from needle exchange services. The rates of syringe sharing could have been unaffected because the needle exchange programme had already reduced syringe sharing as much as possible. Brief interventions such as motivational interviewing and education are not a substitute for needle exchange programmes, but can be delivered (and complement other services delivered) in needle exchange programmes. The National Institute for Health and Care Excellence (NICE), the UK's health advisory body, **advocates** high coverage needle exchange (over 100% coverage, or more than one sterile needle and

syringe available for every injection), and for needle exchange programmes to aim to offer other services, which address wider health needs, and encourage people to stop using drugs or to switch to non-injecting methods. One of these services could be motivational interviewing, and could be useful for people who go to needle exchange programmes regularly and present continuing risky injection behaviours. However, as the paper reviewed here says, more research is needed “in a natural environment to examine the feasibility of applying this intervention model in the community”.

Educational interventions are easier to implement than motivational interviewing – requiring less training and supervision. However, where clients have a long history of injecting (for example in this study, it was around 16 years), and have already been engaging in (or been exposed to) harm reduction activities through attending needle exchange programmes, it seems unlikely that they would have much to learn from a single educational session. Another systematic review sought to [find out](#) whether more extensive educational interventions (spanning at least three sessions and offering education plus structured skills training) would be more effective than a brief educational session at reducing the kind of substance use and sexual behaviour which risks infection. They did not find evidence to support this, and concluded that cheaper, easier and briefer interventions may gain as much risk reduction for less money. They argue a more effective strategy might be to supply information and materials to enable safer behaviour *across* a local injecting population (rather than at an individual level), promoting new safer-behaviour social norms.

Over half (53%) of participants in this Canadian study were homeless, which is higher than the proportion of homeless people accessing treatment in the UK. Data from 2009–2010, [reported](#) by the National Treatment Agency for Substance Misuse, suggests that closer to a third of clients entering treatment in the UK are homeless or have housing problems. The study sample is therefore not representative of the UK context, but does serve to highlight how commonplace homelessness is among people who inject drugs (bearing in mind a figure of how many people are *entering* treatment will be a conservative estimate of the total number of people *in need of* treatment), and underscores the importance of harm reduction programmes recognising and responding to the specific needs of homeless clients ([for example](#), difficulties in maintaining hygienic injecting environments). The UK Public Health Interventions Advisory Committee [recommends](#) more research being conducted to understand how needle and syringe programmes can encourage people who are homeless to use their services effectively; as well as research with other high risk sub-populations including people who have recently started injecting, women, sex workers, ex-prisoners, people who occasionally inject drugs, and people who inject novel psychoactive drugs.

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STUDY 2008 ["I inject less as I have easier access to pipes": injecting, and sharing of crack-smoking materials, decline as safer crack-smoking resources are distributed](#)

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