

The efficacy of psychosocial interventions to reduce sexual and drug blood borne virus risk behaviours among people who inject drugs: A systematic review and meta-analysis

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BACKGROUND

Among people who inject drugs (PWID), the prevalence of Hepatitis C (HCV) is estimated to be 5-90%¹ and HIV <1-50%.² Opiate substitution therapy (OST) and needle exchanges are effective in reducing HIV and HCV among PWID. However, these reductions are modest and psychosocial interventions are required to further decrease infection rates.³ According to Public Health England's "Shooting Up" report, while needle and syringe sharing is lower than a decade ago, approximately one in seven PWID continue to share needles and syringes.

Several systematic reviews and meta-analyses of the efficacy of psychosocial interventions to reduce HIV and HCV risk behaviours among drug users have been conducted⁴⁻⁶, however there is a need to update the evidence. The most recent review included studies up to 2011 only. Also, some reviews included non randomised controlled trials (RCTs) and some did not discriminate between PWID and drug users who do not inject drugs.

AIMS

A systematic review was conducted and a meta-analysis performed to determine the efficacy of psychosocial interventions (e.g. CBT, contingency management, skills training) in reducing sexual and drug risk behaviours among PWID compared to control interventions.

METHODS

A search was conducted of MEDLINE, PsycINFO, CINAHL, Cochrane Collaboration and Clinical trials databases for relevant trials published until 26 May 2015.

Trials were eligible for inclusion if:

- published during 2000-2015;
- all participants were PWID or results were presented separately for PWID;
- studies were RCTs;
- outcome/s included: (a) any injecting risk behaviour including sharing of needles/syringes or other injecting paraphernalia, and frequency of injecting, (b) any sexual risk behaviour including unprotected sex or number of sexual partners;
- psychosocial interventions were compared to a control group, who received usual care or an intervention of lesser time or intensity.

The methodological quality of trials included in the review was assessed using the Cochrane Risk of Bias tool.

A meta-analysis was performed using a random effects model.

RESULTS

31 and 23 RCTs were included in the systematic review and meta-analysis respectively.

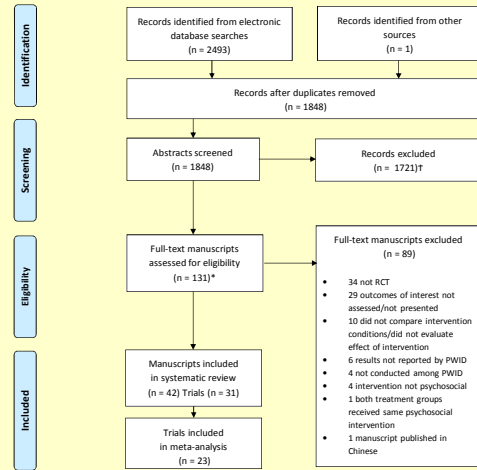
Psychosocial interventions were more efficacious in reducing:

- any injecting risk behaviour (standardized mean difference (SMD) -0.29; 95% confidence interval (CI) -0.43, -0.15);
- sharing of needle/syringes (SMD -0.44; 95% CI -0.71, -0.17);
- sharing other injecting paraphernalia (SMD -0.21; 95% CI -0.33, -0.08); and
- unprotected sex (SMD -0.30; 95% CI -0.58, -0.02).

References:

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- Sack-Davis R, et al. Behavioural interventions for preventing hepatitis C infection in people who inject drugs: A global systematic review. *Int J Drug Policy* 2012;23:176-184.
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Fig.1: Flow Chart



* Includes 6 trials listed in the clinical trials database for which no published papers could be found.
* Includes 4 related manuscripts referenced in potentially eligible manuscripts

Fig.2: Quality of Included Studies

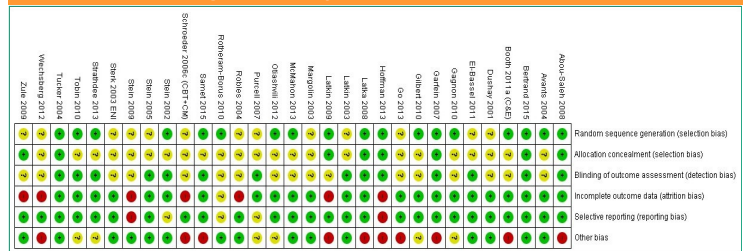


Fig.3: Efficacy of psychosocial interventions versus control interventions in reducing ANY injecting risk behaviours among people who inject drugs

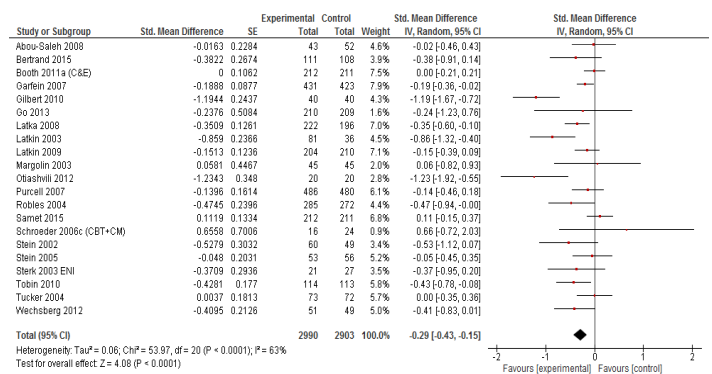
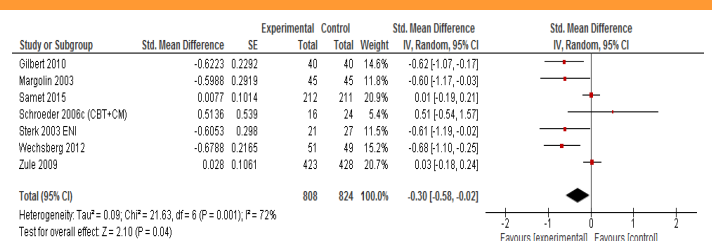


Fig.4: Efficacy of psychosocial interventions versus control interventions in reducing unprotected sex among people who inject drugs



CONCLUSIONS

- Psychosocial interventions effectively reduce needle/syringe sharing, other paraphernalia sharing, and unprotected sex among PWID.
- Psychosocial interventions should be delivered to needle exchange attenders and those engaged with drug treatment to reduce blood borne virus (BBV) transmission risk behaviours.

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