

What works for methamphetamine use disorder? A systematic review of reviews

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Methamphetamine use disorder (MUD) is a public health problem both in Canada and internationally. MUD is associated with multiple morbidities, including HIV infection, hepatitis, cardiac effects, family disruptions and prominent psychiatric consequences including psychosis. Several harm reduction (e.g., pipe distribution, supervised consumption, drug checking) as well as psychological (e.g., cognitive-behavioural therapy, contingency management, matrix model) and pharmacological (e.g., Modafinil, Methylphenidate) treatment options for supporting people using methamphetamine have been previously examined. Nonetheless, our understanding of the most effective and cost-effective harm reduction and treatment options remains limited.

This study aims to review international experiences in both harm reduction and treatment (psychological and pharmacological) interventions aimed at people with MUD and focus on and discuss Canadian circumstances where appropriate. The specific objectives of our proposed systematic review are to:

- i) Conduct a systematic review of existing reviews on harm reduction and psychological and pharmacological treatment options for people with MUD with a focus on their effectiveness and cost-effectiveness
- ii) Engage with knowledge users (KUs) in the planning and execution of the systematic review
- iii) Identify areas for potential intervention to reduce the harms associated with methamphetamine use in Canada
- iv) Identify the barriers to accessing treatment for MUD
- v) Undertake integrated knowledge translation activities to support widespread availability of review results and recommendations for action

This review is designed to support decision-making for knowledge users (KUs) at the national level (Canadian Centre on Substance Use and Addiction), the provincial level (B.C. Ministry of Mental Health and Addictions), the regional/municipal level (Vancouver Coastal Health), and community level (PEEP; Professionals for the Ethical Engagement of Peers). It will help KUs identify existing gaps in services tailored towards people with MUD and yield evidence about the effectiveness of existing interventions as well as identifying priority areas in the Canadian context.

This proposal will be implemented in three stages.

1. *Literature Review*: The team will refine search terms in accordance with the PICOS framework and in collaboration with KUs, iteratively searching the literature in a systematic way.
2. *Share and Revise*: Following the search and knowledge synthesis, we will share preliminary results with our KUs. The research team will revise the systematic review based on feedback.
3. *Knowledge Translation and Dissemination*: Develop a presentation and report of the findings

The investigative team and KUs will develop a wider knowledge translation plan tailored specifically to the findings of the review. The proposed study is rooted in the treatment and harm reduction pillars of the Canadian Drug and Substances Strategy and is positioned to offer evidence about interventions that help treat and/or reduce the harms associated with MUD. This systematic review of reviews has considerable potential to effectively summarize previously underutilized research evidence to drive policy and practice change in caring for people using methamphetamine in Canada.

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