

Non-fatal overdose prevalence among people who inject drugs – A multi-stage systematic review and meta-analysis of recent evidence

Authors:

Samantha Colledge¹, Amy Peacock¹, Janni Leung¹, Jason Grebely², Matthew Hickman³, Michael Farrell¹, Sarah Larney¹, Louisa Degenhardt¹

National Drug and Alcohol Research Centre, UNSW, Sydney, NSW, Australia¹

Kirby Institute, UNSW, Sydney, Australia²

Population Health Science, Bristol Medical School, University of Bristol, Bristol, UK³

Presenter's email: s.colledge@student.unsw.edu.au

Introduction: There has been a recent, dramatic increase in drug-related deaths in several countries, including North America and Australia. Risk of overdose is heightened by injection drug use, and non-fatal overdose is the leading risk factor for fatal overdose. This study aims to establish the prevalence of non-fatal overdose among PWID globally.

Method: A global systematic review on injecting drug use and related harms was conducted in accordance with PRISMA and GATHER guidelines. We included sources from peer-reviewed databases, grey literature, and data requests to international experts and agencies. Overdose history among PWID was extracted and pooled via meta-analysis to generate national estimates.

Results: Less than one-tenth of the reviewed literature included data on the proportion of PWID who reported non-fatal overdose. Globally, roughly one-quarter of PWID reported past-year non-fatal overdose. This was particularly high for the United States (28.6%; uncertainty interval (UI) 10.0-51.5) and Canada (23.5% UI 14.3-34.1), and somewhat lower for Australia (10.7% UI 8.3-13.3). Higher country-level income was a correlate of higher proportion of PWID reporting non-fatal overdose in a country.

Discussion and Conclusion: Globally, fewer than one in four PWID have experienced at least one non-fatal overdose in the past year, but there is significant variation, likely related to the types of drugs that are injected and overdose prevention interventions. To reduce risk of fatal overdose, it is necessary to introduce and mainstream services such as naloxone administration training.

Disclosure of Interest Statement:

This study received funding from The National Drug and Alcohol Research Centre at the University of New South Wales, which is supported by funding from the Australian Government under the Substance Misuse Prevention and Service Improvements grant fund.