A SYSTEMATIC REVIEW OF PSYCHOSOCIAL FACTORS ASSOCIATED WITH RISK OF DRUG-RELATED OVERDOSE.

Malaguti A<sup>1,2</sup>, Byrne CJ<sup>3,4</sup>, Sani F<sup>2</sup>, Thain D<sup>4</sup>, Fletcher E<sup>4</sup>.

<sup>1</sup>Tayside Drug and Alcohol Recovery Psychology Service, NHS Tayside, Dundee, UK

<sup>2</sup>Department of Psychology, Scrymgeour Building, School of Social Sciences, University of Dundee, Dundee, UK

<sup>3</sup>Division of Molecular and Clinical Medicine, School of Medicine, Ninewells Hospital and Medical School, University of Dundee, Dundee, UK

<sup>4</sup>Directorate of Public Health, Kings Cross Hospital, NHS Tayside, Dundee, UK

#### **Background:**

Global estimates of drug-related deaths are increasing annually, with most involving opioids. Demographic risk factors have been identified in the literature, however evidence is lacking on psychosocial factors associated with overdose which could inform targeted harm reduction interventions. The aim of this systematic review was to identify psychosocial factors associated with drug-related overdose.

# Methods:

Observational studies were eligible if they included people who used drugs, focused on psychosocial factors associated with fatal or non-fatal drug overdose. Systematic reviews and papers not in English were excluded. Systematic searches were conducted in Medline, Embase, PsycINFO and Cinahl. Google Scholar was searched for grey literature. Reference lists of selected papers were searched manually. Data were extracted by two reviewers. The data were thematically analysed and results presented as a narrative synthesis.

### **Results:**

Twenty-two studies were included in the systematic review, with a total of 185,442 participants. Most studies were conducted in North America (n=17). In most studies poly-drug use was reported (4 did not report). Factors (n=92) were extracted from the studies, and thematically analysed, resulting in 13 themes grouped under 7 overarching themes. The themes explored a variety of psychosocial factors associated with increased risks of overdose: demographic factors influencing behaviour, incarceration, traumatic experiences, overdose experience and risk perception, healthcare engagement, drug use behaviour, and social network characteristics.

# **Conclusion:**

The themes identified in this review reveal a complex picture where past experiences meet present conditions and overdose risk is influenced by internal factors and external pressures. Individuals' capability to use substances safely is influenced by physical and social opportunities which, despite high levels of knowledge of drugs and perception of risk, perpetuate risk-taking by disinhibiting use of substances. Interventions to reduce risk of overdose should investigate mechanisms of individual behaviour change to respond to environmental factors.

# **Disclosure of Interest Statement**

All authors report no conflict of interest. This study was funded by the Scottish Drug Death Taskforce (Scottish Government). The funder had no involvement in collection, analysis and interpretation of data, in the writing of the report, or in the decision to submit the manuscript for publication.