

Interventions to reduce harms from cocaine: Findings from a scoping review

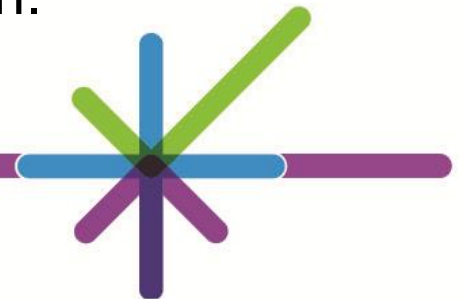
LJMU Drug Related Deaths 2026 conference

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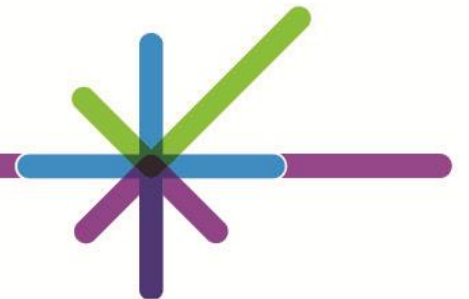
Cocaine use: an increasing public health concern

- The proportion of drug misuse deaths where cocaine was implicated has increased from 6% in 2008 to 41% in 2023.
- Scotland's early drugs warning system (RADAR) has identified cocaine as the most commonly detected substance in post-mortem and emergency department toxicology samples.
- Scottish surveillance data indicate high levels of polydrug use in Scotland and an increase in cocaine use among people who use drugs.
- In 2023-2024, 30% of people starting specialist drug treatment in Scotland reported cocaine as their main drug, compared with 28% for heroin.



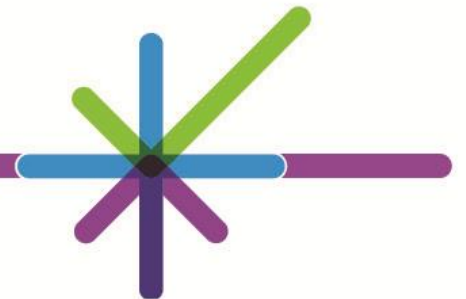
Focus of our review

- In 2024, Drugs Research Network Scotland (DRNS) published a rapid review of psychosocial and pharmacological treatments for stimulant use.
- Our report builds upon the DRNS rapid review:
 - focuses solely on cocaine
 - includes secondary preventative measures such as early intervention and harm reduction
 - Includes broader range of outcomes in terms of benefits and harms
 - includes quality appraisal of the evidence.
- Undertakes a horizon scanning exercise.



Why a scoping report?

- A foundation piece of work to inform direction on research and evidence-based practice.
- A scoping review aims to:
 - identify breadth of evidence
 - quantifies the number and types of evidence available
 - summarises high-level author findings.
- Mapping may potentially identify gaps to help inform areas for research or help join up dots in what is being undertaken.



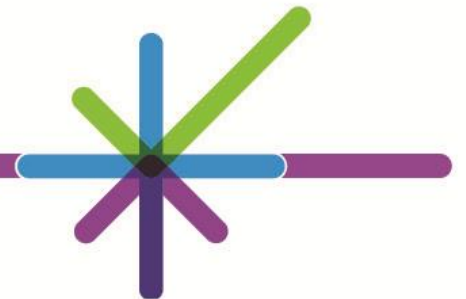
Research questions

- What is the size and quality of the review-level evidence base:
 - for harm reduction interventions for cocaine use
 - for psychosocial interventions to treat/manage cocaine use?
- What does the review-level evidence tell us about the effectiveness of these types of interventions?
- What evidence is available on in-progress research on new developments in harm reduction and psychosocial interventions?



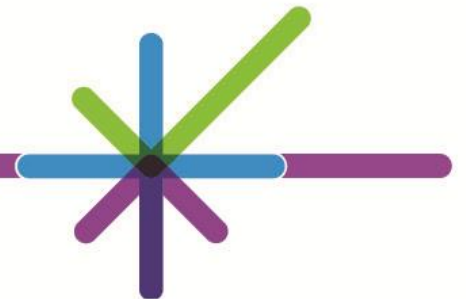
Review-level evidence for harm reduction and psychosocial interventions

- Included 33 reviews that used systematic methods:
 - harm reduction (n=6)
 - psychosocial interventions (n=29)
 - some of the reviews evaluated both harm reduction and psychosocial interventions.
- Quality of the evidence base was mixed:
 - high for 11 reviews
 - moderate for six
 - low for 16.



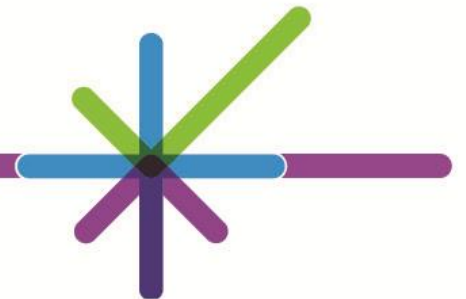
Overview and key messages from harm reduction evidence

- Limited evidence for harm reduction strategies from six reviews.
- Three were of high quality and three were of low quality.
- We found reviews on early intervention strategies (n=1), equipment provision (n=4), environments/settings (n=1) and community outreach (n=1).
- There was some evidence of benefit for community outreach programmes and for syringe provision programmes.
- We found gaps in the review-level evidence for harm reduction and these included safer drug consumption facilities.



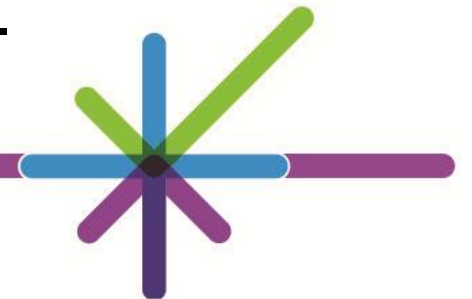
Overview of psychosocial intervention evidence

- The quality of the 29 reviews on psychosocial interventions was mostly low (n=16) studies, but eight studies were rated as high and five as moderate.
- Evidence was heterogeneous in terms of quality and effectiveness. Several reviews focused on specific populations.
- Psychosocial interventions are often implemented as part of a multicomponent intervention.
- A broad range of interventions were identified including:
 - contingency management
 - psychotherapy
 - cognitive behavioural therapy
 - motivational interviewing
 - relapse prevention
 - mindfulness-based interventions.



Key messages from psychosocial evidence

- Contingency management was the most studied psychosocial intervention (n=14, mixed quality) and is effective in addressing a range of cocaine-related outcomes.
- There is also evidence of additional benefit of adding contingency management to other treatments.
- Evidence from mostly low-quality reviews suggest:
 - some short-term benefit neurostimulation techniques.
 - some improvement to abstinence rates, mental wellbeing and quality of life with yogic breathing/meditation techniques.
 - limited or no benefit from acupuncture and exercise.
 - relapse prevention interventions may offer some benefit.



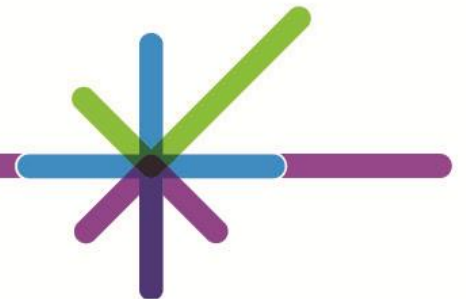
Key messages from psychosocial evidence

- Evidence for other types of psychosocial interventions was limited.
- Inconsistent or inconclusive findings were noted for:
 - cognitive behavioural therapy
 - psychotherapy
 - psychodynamic therapy
 - systematic family therapy
 - motivational interviewing
 - mindfulness-based interventions
 - drug counselling and 12-step programmes.
- Within one low-quality review on cyber health psychology interventions, no cocaine-related evidence was identified.



Horizon scanning for new developments from clinical trial registries

- Identified 13 citations, with new developments in:
 - harm reduction (n=7)
 - psychosocial interventions (n=6).
- New developments from clinical trial registries included:
 - safe inhalation pipes
 - interventions that manage risk behaviours
 - UK-based community drug checking services
 - contingency management (alone or combined with other interventions)
 - psychosocial approaches delivered using technology.



Challenges

- Large volume of studies identified and timescales for publication
- Originally included pharmacological interventions but refocused aim.
- Heterogeneous studies due to broad eligibility criteria
- Categorisation of interventions using Lead Psychologists in Addiction Services Scotland approach
- Review-level evidence can be difficult to work with.



Implications of the review

- Evidence base is sizeable but mixed in quality, and is more heavily weighted towards research on psychosocial interventions.
- Highlighted areas where there are review-level evidence gaps including early intervention, safer drug consumption facilities and tools that involve technology.
- This scoping review is a starting point for more specific evidence work on responses to reduce cocaine harms.



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