



Gay and bisexual men who use crystal methamphetamine are better at using biomedical HIV prevention strategies

Hammoud MA, Jin F, Maher L, Bourne A, Haire B, Saxton P, Vaccher S, Lea T, Degenhardt L, Prestage G.

Australasian HIV&AIDS Conference | 19 September 2019

Acknowledgments: Thanks to the study participants; researchers, community organisations, government employees and other partners involved in Flux; and the funders.

Disclosures: This work was funded by the Australian Research Council (DP140102483) and a Gilead Australia Fellowship. Funders had no input in the data collection, analysis, interpretation, or presentation of any findings.

Background

- Crystal methamphetamine use among gay and bisexual men (GBM) has been strongly associated with condomless anal intercourse with casual partners (CLAIC) and subsequent HIV infection
- Biomedical HIV prevention strategies (PrEP and TasP) are changing understandings of 'safe sex' ('protected CLAIC')?

Study objective

- To investigate factors associated with recent crystal methamphetamine use
 - Specifically, if 'protected CLAIC' was more common among crystal users

Methods

- *Flux* is a national, prospective, observational online cohort study of licit and illicit drug use among Australian gay and bisexual men
- In 2018, 1,367 men completed a *Flux* survey and answered questions about crystal use and biomedical HIV prevention strategies
 - Men enrolled in PrEP implementation trials were excluded (n=276)
- Multivariable logistic regression was used to estimate adjusted odds ratios and 95% confidence intervals

- 12% of men (n=169) reported crystal use in the previous six months
- Similar to other samples of Australian GBM
 - Median age 35 years (range 16-81)
 - 78% Anglo-Celtic background, 69% university-educated
 - 91% gay, 49% had a regular male partner
 - 8% HIV-positive (94% undetectable viral load)
 - 35% reported current PrEP use

Factors associated with recent crystal use

Variable	Adjusted odds ratio	95% confidence interval
Greater social engagement with gay men	1.24	1.10 – 1.39
Number of sexual partners	1.00	1.00 – 1.01
Protected CLAIC		
HIV-positive men	14.10	7.50 – 26.54
HIV-negative men	1.80	1.17 – 2.76

- Crystal was predominately used to enhance sexual pleasure; even among recent users, use was fairly infrequent
- Gay and bisexual men who used crystal and engaged in CLAIC were more likely to be biomedically protected against HIV than men who engaged in CLAIC and did not crystal
- Harm reduction interventions need to be carefully nuanced to guide the integration of biomedical prevention strategies into drug-using behaviours
- Gay community networks may provide a unique opportunity to promote the uptake of biomedical prevention, particularly within chemsex subcultures
- Among men who engage in CLAIC, recent crystal use may not be a reliable indicator of those at high risk of HIV
 - Key implication for assessing behavioural eligibility for PrEP