GAY AND BISEXUAL MEN WHO USE CRYSTAL METHAMPHETAMINE ARE BETTER AT USING BIOMEDICAL HIV PREVENTION STRATEGIES

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Background: Crystal methamphetamine (crystal) use among gay and bisexual men (GBM) has been strongly associated with condomless anal intercourse with casual partners (CLAIC) and subsequent HIV infection. As biomedical HIV prevention strategies change understandings of 'safe sex,' patterns of crystal use and their associations with HIV risk may also change. We investigate the relationship between crystal use and HIV sexual risk behaviors in the context of HIV biomedical prevention.

Methods: In 2018, 1367 Australian GBM provided responded to a study on gay men's health and provided details about their use of crystal, and HIV prevention strategies, including condom use, pre-exposure prophylaxis (PrEP), and antiretroviral therapy (ART) to achieve an undetectable viral load (UVL). We estimated the proportion of men who engaged in 'protected CLAIC' (CLAIC while biomedically protected using PrEP or ART to achieve an UVL) and crystal use. Binary logistic regression analysis was used to estimate adjusted odds ratios (aOR) and 95% confidence intervals (95%CI).

Results: Median age was 39.4 years (SD: 11.9). Approximately 1 in 8 (12.3%) had used crystal in the previous six months. Crystal use was also independently associated with protected CLAIC (aOR: 1.80; 95%CI: 1.17–2.76), greater social engagement with gay men (aOR: 1.24; 95%CI: 1.10–1.39), and having more sexual partners (aOR: 1.00; 95%CI: 1.00–1.01).

Conclusion: GBM who used crystal and engaged in CLAIC tended to be more often biomedically protected to mitigate against the risk of HIV infection than were men who engaged in CLAIC but did not use crystal.

Among men who engage in CLAIC, crystal use may no longer be a reliable indicator of those at highest risk. In settings where crystal use among GBM is not uncommon, harm-reduction interventions need to be carefully nuanced to effectively guide the integration of biomedical prevention.

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