

# SEXUALISED DRUG USE AND CO-OCCURRING HIGH RISK BEHAVIOURS AMONG GAY AND BISEXUAL MEN LIVING WITH HIV/HEPATITIS C CO-INFECTION IN MELBOURNE, AUSTRALIA

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## Background:

Sexualised drug use among gay and bisexual men (GBM) is associated with HCV-related risk behaviours including injection drug use (IDU), fisting, group sex and sharing sex toys. We aimed to examine associations between recent sexualised drug use and these behaviours among a cohort of GBM living with HIV and receiving HCV treatment at high caseload clinics in Melbourne, Australia.

## Methods:

Data were collected through co-EC, a prospective study aiming to treat and eliminate HCV among people living with HCV/HIV co-infection. Analyses were limited to males reporting  $\geq 1$  male sex partner in the six months prior to enrolment. Prevalence ratios (PR) were estimated using modified Poisson regression with robust variance to examine associations between sexualised drug use (including amyl nitrate, crystal methamphetamine, ecstasy and gamma-hydroxybutyrate before or during sex) and high risk behaviours including IDU, group sex, fisting and sharing sex toys in the six months prior to enrolment.

## Results:

Among 98 participants, 41% (95% confidence interval [95%CI]=31%-51%) reported sexualised drug use and 66% (95%CI=56%-75%) reported one or more high risk behaviours. Of participants who reported sexualised drug use, 85% (95%CI=70%-93%) reported one or more high risk behaviours. Sexualised drug use was associated with IDU (PR=1.9, 95%CI=1.1-3.3), fisting (PR=3.1, 95%CI=2.2-4.4) and sharing sex toys (PR=2.9, 95%CI=2.0-4.1). Adjusting for each high risk behaviour including group sex, sexualised drug use was associated with fisting (adjusted prevalence ratio=2.3, 95%CI=1.4-3.9).

## Conclusions:

Among this cohort of GBM living with HIV and receiving treatment for HCV, recent sexualised drug use and high risk behaviours were common. The prevalence of high risk behaviours was two-three times higher among participants reporting sexualised drug use. Continuation of these behaviours post-treatment may lead to HCV

reinfection. Interventions to reduce HCV reinfection risk among GBM living with HIV need to take into account the context in which risk occurs including co-occurring sexualised drug use.**Disclosure of Interest Statement:** *Investigator initiated funding was received from Bristol-Myers Squibb. The funders had no role in data analyses or decision to submit.*