

## USE OF HIV PRE-EXPOSURE PROPHYLAXIS (PREP) ASSOCIATED WITH LOWER HIV RELATED ANXIETY AMONG AUSTRALIAN GAY AND BISEXUAL MEN WHO ARE AT HIGH RISK OF HIV INFECTION.

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**Background:** Many gay and bisexual men (GBM) experience sex-related HIV anxiety, particularly around condomless anal intercourse with casual partners (CLAIC). HIV pre-exposure prophylaxis (PrEP) may reduce HIV-related anxiety among GBM. We compare PrEP use between high-risk and low-HIV-risk GBM to explore associations with HIV-related anxiety.

**Methods:** In 2018, 1574 non-HIV-positive GBM responded to a national online study of gay men's health. Participants reported PrEP use and sexual behaviours in the previous six months. GBM were classified as high-risk or low-risk in accordance with Australian PrEP guidelines. HIV anxiety was measured by a newly-developed scale about anxiety regarding HIV. Categorical variables were analysed using Pearson's chi-square tests, and t-tests were used for continuous variables. Multivariate logistic regression was used to identify factors associated with PrEP use. Results are reported as adjusted odds ratios (aOR) and corresponding 95% confidence intervals (95%CI).

**Results:** Mean age of the sample was 37.1 years (SD=13.1). Overall, one-third (37.2%) reported PrEP use. One quarter (24.5%) of low-risk men and 72.7% of high-risk men reported PrEP use.

The mean HIV anxiety score was 8.85 (SD=4.01). One in six participants (259; 16.7%) had an HIV anxiety score of 3, indicating they did not feel any anxiety about HIV. Men aged 25 years or less (mean=9.59 vs. 8.35,  $p<0.001$ ) and men who reported receptive CLAIC (mean=9.59 vs. 8.74,  $p=0.033$ ) scored higher on measures of HIV-related anxiety.

Among high-risk GBM (406 men; 26.2%), those who used PrEP had lower HIV anxiety scores (mean: 10.42 vs 8.54, aOR=0.91; 95%CI=0.85-0.97).

**Conclusion:** Among high-risk men, PrEP use was independently associated with lower levels of HIV anxiety. In addition to preventing HIV infection, PrEP use may reduce anxiety among men who were previously at risk of HIV. This feature of PrEP could be promoted as part of demand creation initiatives to increase PrEP uptake.

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