

Factors associated with willingness to use daily antibiotics as STI prophylaxis among HIV-PrEP-experienced gay and bisexual men in Australia

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Background: Gay and bisexual men (GBM) who use HIV pre-exposure prophylaxis (HIV-PrEP) have high rates of bacterial sexually transmitted infections (STIs). The use of daily antibiotics as STI pre-exposure prophylaxis (STI-PrEP) may be appealing to HIV-PrEP-experienced GBM for the prevention of bacterial STIs.

Method: We examined willingness to use daily STI-PrEP among a cross-sectional sample of HIV-PrEP-experienced GBM in Australia who participated in an online cohort study from August 2018–March 2020. Factors associated with willingness to use daily STI-PrEP were determined using multivariate logistic regression; we report adjusted odds ratios (aOR) and 95% confidence intervals (CI).

Results: Of 1347 participants, 54.3% were willing to use daily STI-PrEP. Factors independently associated with willingness to use daily STI-PrEP included being more likely to: have >10 sexual partners in the last 6 months (aOR=1.33, 95%CI=1.03-1.70), have used methamphetamine in the last 6 months (aOR=1.48, 95%CI=1.10-1.99), be more conscious about avoiding acquiring STIs (aOR=1.22, 95%CI=1.11-1.35), report an increase in STIs since commencing HIV-PrEP (aOR=1.07, 95%CI=1.01-1.14), be willing to take HIV-PrEP for as long as they are at risk of acquiring HIV (aOR=1.22, 95%CI=1.04-1.44), and have a preference for using condoms only at the request of their sexual partner (aOR=1.15, 95%CI=1.07-1.23). Conversely, factors associated with less willingness to use daily STI-PrEP included: being university-educated (aOR=0.65, 95%CI=0.51-0.83), using non-daily dosing regimens of HIV-PrEP (aOR=0.56, 95%CI=0.38-0.82), preferring event-driven HIV-PrEP dosing regimens (aOR=0.69, 95%CI=0.48-0.99), and being concerned about long-term HIV-PrEP side-effects (aOR=0.90, 95%CI=0.83-0.97).

Conclusion: If found to be safe and effective, STI-PrEP is likely to be appealing to many HIV-PrEP-experienced GBM. However, GBM are less likely to be willing to use STI-PrEP unless it aligns with their HIV-PrEP dosing regimen, suggesting that

research into the safety and efficacy of alternative STI prophylaxis dosing options should be prioritised.

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