

Will gay and bisexual men who use methamphetamine participate in PrEP services?

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Introduction

New Zealand launched a fully funded and targeted HIV pre-exposure prophylaxis (PrEP) programme in March 2018.¹ Methamphetamine use by gay and bisexual men (GBM) is listed as an eligibility criterion for PrEP (Box 1). However, **we don't know whether GBM who use methamphetamine will disclose their use to physicians or engage with PrEP services.**

We aimed to examine methamphetamine use among GBM in the NZPrEP demonstration project which was conducted before PrEP was publicly funded.

Methods

We used an open-label single-arm treatment evaluation study design in 2017 ("NZPrEP").

- settings were four publicly-funded sexual health clinics in Auckland
- study population was 150 GBM at elevated HIV risk
- GBM were recruited from clinics, community sources and social media
- study medication emtricitabine/tenofovir was fully funded.

We enrolled 150 GBM who satisfied high-risk inclusion criteria, had no medical contraindications and provided informed consent. Participants were tested for HIV, syphilis, chlamydia and gonorrhoea at study enrolment and offered PrEP.

At baseline, participants self-completed an online questionnaire about:

- PrEP motivations, sexual and risk behaviours
- drug use (cannabis, amyl, GHB, ecstasy, amphetamine, methamphetamine, cocaine, ketamine, LSD or mephedrone) in conjunction with sex <3mths
- alcohol use in conjunction with sex <3mths

We categorized participants into those reporting:

- **any drug use; any alcohol use; any methamphetamine use <3mths**
- **heavy use** (use "always" or "most of the time" before sex).

We compared participants using substances against non-users for:

- self-reported sexually transmitted infection (STI) <12 mths
- self-reported rectal STI <12 mths
- prevalent rectal chlamydia (CT) or gonorrhoea (GC)
- 10 or more receptive condomless anal intercourse partners <3 mths.

Box 1. Eligibility for publicly funded PrEP in NZ 1 March 2018¹

Individuals likely to engage in condomless intercourse who are either:

Criteria 1

Gay and bisexual men or transgender individuals reporting any of the following in the last 3 months:

- condomless receptive anal intercourse with casual partner/s, or
- rectal gonorrhoea or chlamydia, or syphilis, or
- **methamphetamine use**, OR

Criteria 2

Regular partners of individuals with diagnosed but unsuppressed HIV reporting:

- condomless intercourse.

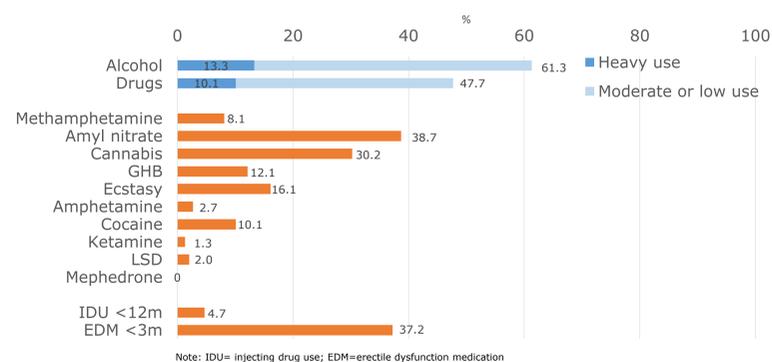


Fig.1. Prevalence of alcohol and drug use in conjunction with sex <3 mths

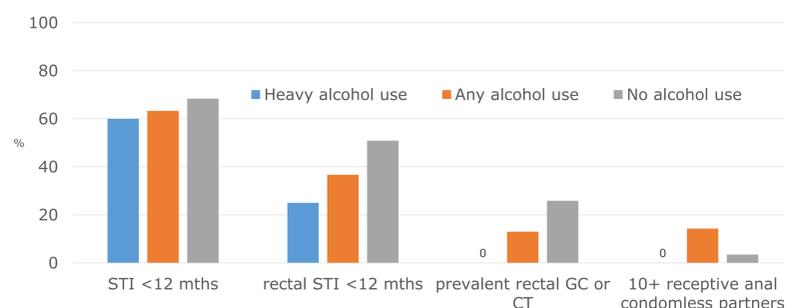


Fig.2. Frequency of alcohol use and STI exposure, condomless sex <3 mths

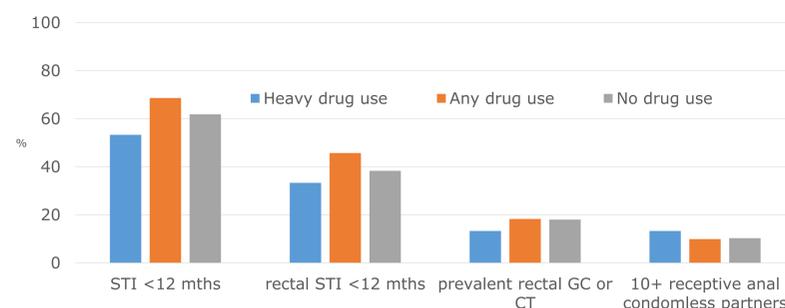


Fig.3. Frequency of drug use and STI exposure, condomless sex <3 mths

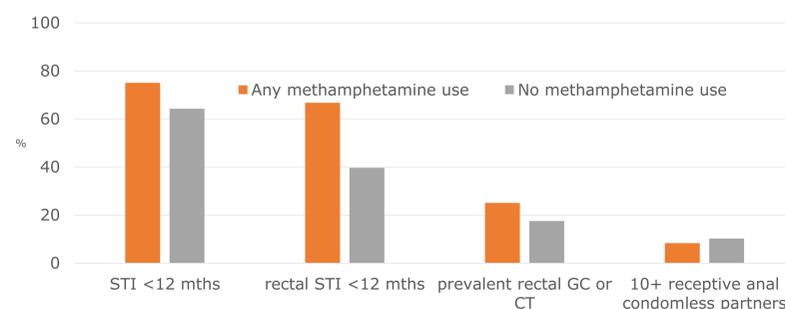


Fig.4. Methamphetamine use and STI exposure, condomless sex <3 mths

Results

Our sample was predominantly gay identified (92%) and lived in central Auckland (58.7%). Half (52%) were non-European ethnicity, including 21.3% indigenous Māori and 19.3% Asian.

Overall 65.3% reported an STI <12 mths, 42.2% a rectal STI, 18% had prevalent rectal gonorrhoea or chlamydia at baseline and 10% reported 10 or more receptive condomless anal intercourse male partners <3 mths.

Alcohol and drug use in conjunction with sex <3 mths (Fig. 1):

- 61.3% any alcohol; 13.3% heavy use
- 47.7% any drug use; 10.1% heavy use
- **8.1% methamphetamine use**

At baseline:

- participants reporting **any alcohol before sex** were less likely to have a prevalent rectal STI ($p=0.047$) but more likely to report 10+ receptive condomless anal intercourse partners ($p=0.034$). **Heavy alcohol users** were not diagnosed with any prevalent rectal STIs (Fig.2)
- participants reporting **any drugs before sex** were not more or less likely to report STIs or condomless sex than other participants (Fig.3)
- participants reporting **methamphetamine** were proportionately but not statistically more likely to report STIs at baseline (e.g. rectal STI <12 mths $p=0.068$) (Fig.4).

Conclusions

Around 1 in 12 participants in our PrEP demonstration project reported methamphetamine use, similar to previous community-based NZ research.²

Methamphetamine users reported similar sexual risk practices to other participants, but **the risk profile of all participants was already high.**³

Public funding of PrEP in NZ and the methamphetamine eligibility criterion **creates an opportunity for addiction and sexual health services to collaborate** by offering PrEP to methamphetamine users.

References

- https://www.pharmac.govt.nz/news/notification-2018-02-07-prep/
- Saxton P, Newcombe D, Ahmed A, Dickson N, Hughes A. Illicit drug use among New Zealand gay and bisexual men: prevalence and association with sexual health behaviours. *Drug and Alcohol Review*. 2018;37:180-7.
- Saxton P, Azariah S, Franklin R, Forster R, Werder S, Jenkins R, Myers J, Rich J, Te Wake W, Fisher M. Baseline characteristics of gay and bisexual men in an HIV pre-exposure prophylaxis demonstration project with equity quotas in Auckland, New Zealand. *Sexual Health paper accepted for publication*.

