

Willingness to use PrEP among gay and bisexual men in Queensland, Australia: differences associated with HIV risk, patterns of testing and location of residence

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Introduction

- Pre-exposure prophylaxis (PrEP) use among gay and bisexual men (GBM) at high risk of HIV in Australia has increased since 2014¹.
- Studies show GBM are willing to use PrEP¹; however, there was limited understanding on how best to roll out PrEP across Queensland, where 30% of the population live in regional areas².
- The study explored GBM's awareness of, and willingness to use PrEP to gather contextualised evidence to guide implementation.

Methodology

- An anonymous on-line survey involving a convenience sample of 241 GBM ≥18 years of age was conducted in the six months leading up to the November 2016 launch of the Queensland's PrEP demonstration project (QPrEPd).
- The survey was advertised at gay and HIV community peer organisations, and via their websites and social media platforms.
- Data were described and summarised using univariate descriptive analysis. Trends and associations between PrEP awareness and willingness to use were examined using logistic and univariate multinomial logistic regression.
- The 2014 Australian STI & HIV Testing Guidelines for Asymptomatic MSM³ were used to classify respondents into HIV risk and testing pattern categories, which were used as control variables for adjusted odds ratio calculations.
- Participant locations were grouped using the ABS Accessibility/Remoteness Index of Australia (ARIA) categories (major cities, inner regional, outer regional, and remote).

Results

- The majority of participants were gay men (85%, 203) under 30 years of age (60%, 144).
- 4% (10) were Aboriginal and Torres Strait Islander peoples
- 19% (45) were born overseas.
- 56% (139) were testing sub-optimally
- 3% (31) had never previously tested for HIV.
- Over half (54%, 130) were classified as at "high risk" of contracting HIV: 37% (87) had ≥ 6 sexual partners in last 6 months.
- Compared to optimal-testers, never-testers were more likely to be bisexual, transgender or straight (OR=0.20; 95%CI 0.05-0.76, p<0.05), or born-overseas (OR=0.35, 95%CI 0.15-0.83, p<0.05).

Table 1. Demographic Characteristics n=241

Demographic information	Total Sample	n (%)
Age Group	18-29	144 (60%)
	30-49	73 (31%)
	50+	22 (9%)
Has a Medicare Card	Yes	218 (91%)
	No	23 (10%)
HIV Risk Category	Low Risk	111 (46%)
	High Risk	130 (54%)
Testing Pattern Categories	Optimal Tester	78 (31%)
	Suboptimal Tester	139 (56%)
	Never Tester	31 (13%)
ARIA+ Classification	Major City	183 (76%)
	Inner Regional	25 (10%)
	Outer Regional	29 (12%)
	Remote Australia	4 (2%)

Results cont.

- Sub-optimal testers were significantly more likely to be high-risk (OR=4.89, p<0.05) compared to optimal testers.
- Compared to optimal-testers, never-testers were four times less likely to be:
 - Aware of PrEP (OR=0.26, 95%CI 0.10-0.71, p<0.01)
 - Use PrEP (OR=0.25, 95%CI=0.11-0.58, p<0.01).
- Location of residence was not associated with awareness or willingness to use PrEP.
- Table 2 displays participants perceptions of how PrEP would influence their likelihood of having condomless anal intercourse (CAI) with casual partners and people living with HIV.
- High-risk categorised respondents were 24 times more likely to have CAI more frequently because of PrEP than low-risk categories (OR=24.85, 95%CI=3.26-187.52, p<0.01).
- Prior or current PrEP use (10%, 23) was associated with:
 - Being at high-risk (OR=11.02, 95%CI 2.52-48.21, p<0.01)
 - Being >30 years old (OR=3.11, 95%CI=1.28-7.54, p<0.05)
 - Having an increased likelihood of engaging in CAI with a person known to be HIV+ and on treatment (r=0.31, n=230, p<0.01)
 - Having an increased likelihood of engaging in CAI with casual partners (r=0.25, n=230, p<0.01).

Table 2. Likelihood of having Condomless Anal Intercourse (CAI) n=230

	Using PrEP	n (%)	Not Using PrEP	n (%)
Have CAI with casual partners				
Very Unlikely	102	(44%)	154	(67%)
Unlikely	30	(13%)	39	(17%)
Neutral	28	(12%)	22	(10%)
Likely	45	(20%)	9	(4%)
Very Likely	25	(11%)	6	(3%)
Have CAI with a HIV+ partner who is taking treatment				
Very Unlikely	132	(57%)	178	(77%)
Unlikely	28	(12%)	28	(12%)
Neutral	25	(11%)	12	(5%)
Likely	30	(13%)	9	(4%)
Very Likely	15	(7%)	3	(1%)

Conclusion

- GBM who are cognisant of their HIV risk and linked into testing services are aware of and willing to use PrEP. Targeting this group has and should remain a priority as PrEP rolls out.
- PrEP education and access for never-testers, Medicare ineligible, transgender people and others at risk of HIV must be increased.
- Prevention strategies aimed at increasing testing uptake among sub-optimal and never-testers should also promote PrEP.
- These findings were used to develop key performance criteria monitored during the implementation of QPrEPd.

Reference

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Acknowledgements

Thank-you to all the participants and partners in this research. This project was funded by an HIV Foundation Queensland Research Grant. UQHREC Approval Number 2015001063. Image: AIDSinfo @ <https://aidsinfo.nih.gov/druqs/406/truvada/0/patient>.

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