

Prep becomes most common HIV prevention strategy used by gay and bisexual men in Australia and 'net prevention coverage' increases: Results of repeated, national behavioural surveillance, 2014-19

Authors:

Holt M¹, Broady T¹, Chan C², Mao L¹, O'Donnell D^{2,3}, Rule J⁴, Ellard J³, Prestage G², Bavinton B²

¹ Centre for Social Research in Health, UNSW Sydney

² The Kirby Institute, UNSW Sydney

³ Australian Federation of AIDS Organisations, Sydney

⁴ National Association of People With HIV Australia, Sydney

Background:

The combination prevention era raises the possibility that sexual transmission of HIV can be eliminated in Australia. We analysed trends in condoms, pre-exposure prophylaxis (PrEP) and undetectable viral load (UVL) and the proportion of gay and bisexual men (GBM) protected by any of these strategies ('net prevention coverage').

Methods:

National data from the Gay Community Periodic Surveys were included. Trends and characteristics of men who were 'at risk' of HIV (HIV-negative or untested GBM not on PrEP who had condomless anal intercourse with casual partners, CAIC) were analysed using multivariate logistic regression, controlling for demographic and behavioural variables.

Results:

32,048 responses from GBM with casual sex partners were included. GBM reporting no anal intercourse decreased from 18.0% in 2014 to 14.8% in 2019 ($p < 0.001$). Consistent condom use decreased from 44.6% to 23.2% ($p < 0.001$). The other groups all reported CAIC and changed as follows: HIV-positive GBM who had a detectable viral load decreased (1.6% to 0.6%, $p < 0.001$) while GBM who were HIV-positive and had a UVL increased (4.8% to 5.8%, $p = 0.002$); GBM who were HIV-negative on PrEP increased (0.7% to 31.1%, $p < 0.001$), while the 'at risk' group decreased in size from 30.3% to 24.5% ($p < 0.001$). Net prevention coverage increased from 68.1% to 74.9% ($p < 0.001$). The 'at risk' group became more likely to identify as bisexual (7.2%-9.5%), be born overseas (24.2%-30.2%), be recently tested for HIV (61.6%-68.5%) and have CAIC with partners on PrEP (21.4%-33.9%) or UVL (9.6%-14.9%). They reported more frequent CAIC but fewer male partners over time.

Conclusion:

PrEP has replaced condoms as the most common prevention strategy used by GBM in Australia. Net prevention coverage has increased through rising PrEP use and UVL, while consistent condom use has declined. GBM not on PrEP appear to have become less at risk of HIV over time. This creates conditions conducive to falling HIV infections.

Disclosure of Interest Statement:

The Centre for Social Research in Health, Kirby Institute, Australian Federation of AIDS Organisations and National Association for People With HIV Australia receive funding from the Australian Government Department of Health. The Gay Community Periodic Surveys are supported by state and territory health departments and surveillance funding from the Australian Government Department of Health. No pharmaceutical grants were received for this study.