

Population standardised rates of HIV, syphilis and gonorrhoea diagnoses by sexual orientation in New Zealand

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Background:

It is difficult to quantify inequities in sexually transmitted infections (STIs) by the number of new diagnoses alone. Standardised rates that account for population size enable policymakers to understand risk ratios and compare STI diagnosis rates both within and between countries. HIV, gonorrhoea and syphilis are notifiable diseases in New Zealand (NZ), however denominator and numerator data required for gay and bisexual men (GBM) are often missing. We calculate STI diagnosis rates for GBM and non-GBM male and female populations in NZ for the first time.

Methods:

We used sexual orientation data from the 2015/16 NZ Health Survey and 2019 population estimates of male and female adults aged 15-64 to calculate three GBM denominators: gay or bisexual identifying men (IDENTITY); same-sex partner within 5 years (5 YEARS); any lifetime same-sex partner (LIFETIME). Cases were those reported through enhanced surveillance in 2019 of any syphilis or gonorrhoea, or of locally-acquired ("in NZ") HIV. We calculated the rate per 100,000 and risk ratio of GBM versus non-GBM males and females combined using each denominator.

Results:

GBM denominators were IDENTITY: (2.3% males; n=36,439), 5 YEARS: (2.6% males; n=41,192), LIFETIME (4.2%; n=66,541). The fraction of diagnoses in 2019 attributable to GBM for HIV, syphilis, gonorrhoea was 91%, 67% and 36% respectively. Using IDENTITY, diagnosis rates were HIV: GBM 165/100,000, non-GBM 0.19/100,000; syphilis: GBM 1111/100,000, non-GBM 6/100,000; gonorrhoea: GBM 5921/100,000, non-GBM 174/100,000. GBM were 873 times more likely to be diagnosed with locally-acquired HIV, 179 times more likely to be diagnosed with infectious syphilis, and 34 times more likely to be diagnosed with gonorrhoea than non-GBM males and females, respectively.

Conclusion:

GBM in NZ experience profound inequities in new cases of HIV, syphilis and gonorrhoea. Policymakers must ensure that Action Plans, health workforce training and service provision reflect this need. Findings relate to diagnoses and will underestimate incidence.

Disclosure of Interest Statement:

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