

# TRENDS AND DISPARITIES IN SEXUAL PRACTICES AND STI POSITIVITY AMONG LESBIAN, BISEXUAL AND HETEROSEXUAL WOMEN; FINDINGS FROM A SEXUAL HEALTH CLINIC IN MELBOURNE, AUSTRALIA, 2011-2019

Engel JL<sup>1,2</sup>, Fairley CK<sup>1,2</sup>, Greaves KE<sup>1,2</sup>, Vodstrcil LA<sup>1,2,3</sup>, Ong JJ<sup>1,2</sup>, Bradshaw CS<sup>1,2,3</sup>, Chen MY<sup>1,2</sup>, Phillips TR<sup>1,2</sup>, Chow EPF<sup>1,2,3</sup>

1. Melbourne Sexual Health Centre, Alfred Health, Melbourne, Victoria, Australia
2. Central Clinical School, Monash University, Melbourne, Victoria, Australia
3. Centre for Epidemiology and Biostatistics, Melbourne School of Population and Global Health, The University of Melbourne, Melbourne, Victoria, Australia

## Background:

Despite rises in sexually transmitted infection (STI) notifications among Australian women in the previous decade, limited STI surveillance data exists for women by sexual orientation. This study aimed to compare differences in sexual practices and STI positivity among women by sexual orientation, and whether these changed over time.

## Methods:

In this retrospective repeated cross-sectional study, women attending the Melbourne Sexual Health Centre for the first time between 2011-2019 were categorised as 'bisexual', 'lesbian' or 'heterosexual' according to sexual practices in the previous 12 months. Demographic information, sexual practices and STI positivity were compared between the three groups and over time.

## Results:

36,147 women (2,618 bisexual, 534 lesbian and 32,995 heterosexual) were included. Bisexual women reported more sexual partners (median=6; IQR=4-10), than heterosexual (median=3; IQR=2-5) and lesbian (median=2; IQR=1-4) women ( $p<0.001$ ). A higher proportion of bisexual women always used condoms with casual male partners compared to heterosexual women (20.4% vs 15.9%;  $p<0.001$ ). Consistent condom use with casual male partners decreased over time in heterosexual women, (19.9% in 2011 to 15.2% in 2019,  $P_{\text{trend}}<0.001$ ) but not in bisexual women. Bacterial vaginosis was more common in lesbian women (14.8%) than in bisexual (11.8%) and heterosexual women (7.7%) ( $p<0.001$ ). Chlamydia was more common in heterosexual women (9.3%) than in bisexual (6.6%) and lesbian women (1.2%) ( $p<0.001$ ). Syphilis was more common in heterosexual women (1.0%) than in bisexual (0.3%) and lesbian women (0.0%) ( $p=0.004$ ). Over time, chlamydia positivity in lesbian women increased (from 0.0% to 2.7%,  $P_{\text{trend}}=0.014$ ) and syphilis positivity in bisexual women increased (from 0.0% to 0.7%,  $P_{\text{trend}}=0.028$ ), but positivity of these STIs did not change in other groups.

## Conclusion:

Sexual practices and STI positivity differed according to the sexual orientation of women. Knowledge of these differences is important to account for future changes in STI trends that may occur in these subpopulations.

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