

GETTING TO THE BOTTOM OF IT: SEXUAL POSITIONING AND OTHER ASSOCIATIONS WITH STAGE OF SYPHILIS AT DIAGNOSIS AMONG MEN WHO HAVE SEX WITH MEN

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Introduction:

Stages of early syphilis include primary (localised lesion/chancere), secondary (systemic illness), and early latent (asymptomatic). Primary and secondary syphilis are highly transmissible during sex, whereas early latent syphilis is relatively non-contagious. Earlier syphilis diagnosis, before development of secondary syphilis, may reduce syphilis transmission. This strategy necessitates a more precise characterization of patient factors associated with secondary syphilis, to guide frequent screening.

Methods:

We conducted a retrospective analysis of syphilis diagnoses at Melbourne Sexual Health Centre (MSHC) between 2008 and 2017 among men who have sex with men (MSM) aged 16+ years.

All MSM who presented for sexual health screening were routinely offered syphilis serology. In addition, patients who presented with a possible chancre had that lesion swabbed and tested for *T.pallidum*.

All patients who attend MSHC are routinely asked to complete a computer-assisted self-interview (CASI). For MSM, CASI asks about insertive and receptive anal sex. We performed multivariable logistic regression to assess associations between stage of syphilis at diagnosis and sexual practices including receptive vs insertive anal sex, and condom use.

Results:

During the study period, 2021 diagnoses of early syphilis were made among MSM, staged as 657 (31%) primary syphilis, 518 (24%) secondary syphilis, and 946 (45%) early latent syphilis. MSM were more likely to be diagnosed with secondary syphilis if they reported receptive condomless anal sex (aOR 3.4, 95%CI 1.8-6.1; $p<0.001$) or even receptive anal sex with consistent condom use (aOR 2.6, 95%CI 1.4-5.0; $p<0.005$), compared with men who reported no receptive anal sex, after adjusting for age, HIV status and number of sexual partners. Insertive anal sex had no association with secondary syphilis.

Conclusion:

Secondary syphilis was strongly associated with receptive anal sex, regardless of condom use, suggesting that MSM who practice receptive anal sex may need more frequent syphilis screening than MSM who don't.

Disclosure of Interest Statement:

The authors have no relevant conflicts of interest to declare.