SEXUAL ACTIVITY COMBINATIONS PER SEX ACT WITH CASUAL MALE PARTNERS AND GONORRHOEA POSITIVITY AMONG MEN WHO HAVE SEX WITH MEN

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Background:
Multisite gonorrhoea infections are common in men who have sex with men (MSM). Therefore, we examined combinations of nine different sexual activities among MSM to understand the importance of the overlap of these activities during their most recent sex act with a casual male partner.

Methods:
This is a secondary analysis of a survey among MSM attending the Melbourne Sexual Health Centre in 2017. The survey collected data on the most recent casual male partner whom they engaged in the following sexual activities: 1) tongue-kissing, 2) docking (penises touching), 3) mutual masturbation using saliva, 4) performed rimming, 5) received rimming, 6) performed fellatio, 7) received fellatio, 8) insertive anal sex, and 9) receptive anal sex. We created UpSet plots for combinations of nine sexual activities per act. Site-specific gonorrhoea positivity was calculated for each single activity.

Results:
Of 1542 men who had a casual partner, most engaged in all nine activities per act. Rimming and anal sex always occurred together (i.e., performing rimming with insertive anal sex; or receiving rimming along with receptive anal sex). Oropharyngeal gonorrhoea among men who only kissed was 5.3\% [7/132], followed by men who only performed fellatio (3.6\% [2/56]). Urethral gonorrhoea was the highest among men who had insertive anal sex only (9.7\% [3/31]), followed by docking only (3.7\% [1/27]) and receiving fellatio only (1.3\% [1/80]). Men did not test positive for urethral gonorrhoea if they only had mutual masturbation using saliva. Anorectal gonorrhoea was similar among men who had receptive anal sex only (6.5\% [14/214]) versus those who had received rimming only (7.2\% [12/167]).

Conclusion:
Our findings provide further insight and evidence on gonorrhoea transmission in MSM when restricting to one exposure at each anatomical site. This data also further support that gonorrhoea can be transmitted through kissing.
Disclosure of Interest Statement:
EPFC are JJO are supported by an Australian National Health and Medical Research Council (NHMRC) Emerging Leadership Investigator Grant (GNT1172873 for EPFC and GNT1193955 for JJO). CKF is supported by an Australian NHMRC Leadership Investigator Grant (GNT1172900). ETA is supported by Australian Government Research Training Program (RTP) scholarship from Monash University and Research Entry Scholarship from the Chapter of Sexual Health Medicine, Royal Australasian College of Physician. JT is supported by Australian Government Research Training Program (RTP) Scholarship from Monash University.