

FACTORS ASSOCIATED WITH GROUP SEX IN HETEROSEXUAL MALES AND FEMALES ATTENDING A SEXUAL HEALTH CLINIC IN MELBOURNE, AUSTRALIA

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Background:

There have been limited studies of group sex among heterosexuals. This study aimed to explore the factors associated with group sex among heterosexuals to improve risk assessment guidelines and inform STI screening requirements.

Methods:

A cross-sectional survey was conducted amongst heterosexual males and females aged ≥ 16 years attending Melbourne Sexual Health Centre, Australia, between March and April 2019. The survey asked about group sex participation, methods used to meet sexual partners, number of casual and/or regular partners, and intravenous drug use (IVDU) in the previous 3 months. HIV and STI (chlamydia, gonorrhoea, syphilis) diagnoses were extracted. A multivariable logistic regression was conducted to identify the factors associated with group sex participation.

Results:

A total of 698 participants (325 males, 373 females) were included and 4.7% (33/698) had participated in group sex in the previous 3 months. The proportion who participated in group sex increased with age (2.1% in 16-24 years, 5.5% in 25-34 years, 7.8% in ≥ 35 years, $p_{\text{trend}}=0.010$). Meeting partners at sex-venues (e.g. brothels) was associated with the highest odds of participating in group sex (AOR=5.74, 95%CI: 1.20-27.44), followed by dating-apps (AOR=2.99, 95%CI: 1.36-6.58), friends/family (AOR=2.99, 95%CI: 1.34-6.69) and social-venues (e.g. bar) (AOR=2.73, 95%CI: 1.18-6.30). Group sex was strongly associated with STI positivity (AOR=6.24, 95%CI: 2.41- 16.13). There was no association between group sex and sex, casual and/or regular partners, HIV positivity or IVDU.

Conclusion:

Heterosexuals participating in group sex had a six-fold risk of testing positive for STIs. Including group sex in a sexual history is useful to determine STI risk and inform testing practices. Safe sex messages on group sex that are delivered through multiple methods (e.g. at sex-venues, social-venues and dating-apps simultaneously) would be beneficial.

Disclosure of Interest Statement:

Funding: EPFC is supported by an Australian National Health and Medical Research Council (NHMRC) Emerging Leadership Investigator Grant (GNT1172873). CKF is supported by an Australian NHMRC Leadership Investigator Grant (GNT1172900).

Conflict of interest: None