

Associations between Sexual Partner Number and HIV Risk Behaviours: Implications for HIV Prevention Efforts in a Treatment as Prevention® Environment

Is the number of sexual partners still an important measure of sexual risk among gay, bisexual and other men who have sex with men in Metro Vancouver, Canada?

What is the importance of this study?

- Historically, having a high number of sexual partners and engaging in condomless anal sex have been classified as high-risk behaviours associated with HIV transmission among gay, bisexual and other men who have sex with men (gbMSM).
- Given new treatment and prevention strategies such as Treatment as Prevention® (TasP®), it is unclear if these remain high-risk behaviours.
- On sustained and consistent HIV treatment, an individual can achieve a level of HIV that is undetectable by standard blood tests. At this point, their chances of transmitting the virus to others drop to zero.

FACT BOX

High number of sexual partners continues to be associated with numerous HIV risk behaviours, despite new HIV prevention tools, techniques and strategies such as antiretroviral therapy, Treatment as Prevention®, serosorting and viral load sorting.

How was this study conducted?

- While completing a computer-assisted questionnaire, participants were asked, “During the past six months, how many guys have you had sex with?”
- Responses were analyzed in relation to other known HIV risk factors including psychosocial factors, substance use and sexual behaviour.

What are the key study findings?

- A total of 719 gbMSM participated in this study. The mean number of sexual partners in the past six months was five.
- A higher number of sexual partners was shown to be associated with condomless anal intercourse with a partner whose HIV status was unknown or different than their own, attending a group sex event, using sex toys, receiving money in exchange for sex and preferring either top or versatile anal sex roles.
- Those who reported more sexual partners were also more likely to report using crystal meth, poppers and/or ecstasy.
- Men who self-identified as bisexual or other (compared those who identified as being gay), who lived in Vancouver outside of the downtown area and who reported having condomless anal sex only with same-HIV-status partners in the past six months were more



likely to report fewer sexual partners. Serosorting is defined as using HIV status as a decision-making factor in choosing sexual behaviour.

What do these findings mean?

- Sexual partner number remains an important indicator of risk for gbMSM, particularly with respect to HIV transmission and acquisition.
- However, because of new and better HIV treatments and prevention technologies, partner number should still be considered within the context of other risk-mitigating factors, like TasP® and seroadaptive behaviours (meaning adjusting sexual behaviours according to the HIV status of sexual partners).

What is the BC-CfE Momentum Health Study?

Evidence from British Columbia and elsewhere has demonstrated the expansion of access to antiretroviral HIV treatment (ART) can result in population-level reductions in HIV incidence. This is the concept behind the made-in-BC Treatment as Prevention® strategy, or TasP®, which aims to expand early HIV testing and treatment to improve patients' health and curb the spread of HIV. Gay, bisexual and other men who have sex with men (gbMSM) represent the most affected HIV risk group, both in BC and Canada. The BC-CfE Momentum Health Study is designed to measure changes in HIV risk behaviour, attitudes toward TasP® and the proportion of HIV-positive gbMSM with unsuppressed viral load over time in the Vancouver region. The study uses respondent-driven sampling (RDS) to obtain a more representative sample reflecting the diversity of the gbMSM population in Vancouver.

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