“Long-tailed MSM”: Prevalence and characteristics of MSM with frequent partner change in location-based surveillance in New Zealand

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Introduction

The proportion of individuals with frequent partner change - the “long tail” in a partnering distribution - is a fundamental determinant of HIV spread in communities. It can be used as a proxy for properties of a community’s sexual network, for example how interconnected it is, and therefore how susceptible it is to spread of a sexually transmitted infection. Populations in which there is a “long tail” in the distribution of sexual partner numbers are modelled to have lower epidemic thresholds[1] in which ongoing chains of transmission are likely (hence more difficult to control). A better understanding of sexual partnering patterns would help identify effective HIV prevention responses. We aimed to describe the size of the “long tail”, whether this changed over time, and condom use and testing characteristics using of men who have sex with men (MSM) in New Zealand.

Methods

HIV behavioural surveillance in Auckland, New Zealand collected anonymous self-completed questionnaires in 2002, 2004, 2006, 2008, and 2011 at a community fair day, gay bars, and sex-on-street venues. Full methods are described in[2]. Eligibility was being male at least 16 years old and having had sex with another man in the past five years. “Sex” was defined as “any physical contact you felt was intimate”. Response options for number of male sexual partners in the six months prior to survey were 0, 1, 2-5, 6-10, 11-20, 21-50 and >50. Changes over time in the proportion reporting >10, >20 and >50 recent partners - corresponding to three alternative “long tails” - were examined, adjusting for sample age and recruitment site. Differences in behavioural characteristics were evident between respondents in the three recent partner number categories (11-20, 21-50, >50), suggesting there is no obvious trait-based break point delineating “tail” from “non-tail” respondents.

Results

Overall 5,925 MSM provided information. Fig. 1 summarises the distribution of male sex partners by respondents in the six months prior to survey across all five rounds 2002-2011 combined. Three alternative measures of LTMSM are highlighted.

For further analysis LTMSM 2 respondents (who reported >20 partners) were compared to those reporting up to 20 partners (Table 1).

LTMSM 2 respondents were:

- older and more likely to have been recruited at a sauna or sex venue
- more likely to have used alcohol or drugs before sex
- more likely to have engaged in unprotected sex with a casual partner
- more likely to have used condoms in the last six months
- more likely to have had an STI during the last year
- more likely to report unfavourable attitudes to condoms
- less likely to expect an HIV positive sex partner to disclose their status

Despite these differences, the majority of LTMSM 2 respondents in these samples agreed that “condoms are ok as part of sex” (94%), and most LTMSM 2 respondents engaging in anal sex with a casual partner used condoms “always” or “almost always” (82%) (Table 1).

Conclusions

LTMSM are strategically important prevention targets as they play a disproportionate role in facilitating (through non-condom use) or controlling (through condom use and testing) HIV spread. In location-based surveillance in New Zealand, LTMSM are becoming less common, reported protective behaviours with regular partners and high HIV and sexual health screening, but also greater potential for HIV exposure through casual sex than other MSM. HIV prevention responses must maintain a constructive engagement with LTMSM and policy makers must consider LTMSM when evaluating the effectiveness of new approaches. Prevention goals need to include raising condom use, reinforcing the importance of HIV and STI testing, and shaping attitudes, while acknowledging the protective behaviours reported by these men.

References
