

## Multiple Sexual Partnerships and Elevated Risk for HIV among Men Who Have Sex with Men in Southwest China

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Abstracts: (*Words count 247*)

**Background:** Male-to-male sexual transmission of HIV in China has increased ten-fold over the past decade. Overlapping sexual partnerships and unprotected sex are driving forces. We examine pattern of sexual partnerships and its association with HIV risks among men who have sex with men (MSM), using data from a 2013 behavioral survey in China.

**Methods:** We used respondent-driven sampling (RDS) to recruit 780 males aged  $\geq 18$  who reported having anal sex with a male in the past 3 months in Kunming and Nanning. Interviews were conducted face-to-face using a structured questionnaire. Data analyses used RDS Analysis Tool and STATA-13.

**Results:** In the past three months, 28% of MSM also had sex with females, 63% had more than one male partners, and 19% had  $\geq 6$  male partners. Levels of consistent condom use were lowest for sex with female partners (32%), followed by regular male partners (66%), casual male partners (78%), and male commercial partners (87%). 12% reported ever experiencing sexually transmitted infection (STI) symptoms.

Bisexual partnership was associated with decreased consistent condom use with male regular partners (OR=0.32;  $P < 0.01$ ). Having more than one male partner was associated with decreased consistent condom use with female partners (OR=0.21;  $P < 0.05$ ) and male casual partners (OR=0.23,  $P < 0.05$ ). Having  $\geq 6$  male partners is associated with increased likelihood of experiencing STI symptoms (OR=5.84,  $P < 0.05$ ).

**Conclusions:** High rates of multiple sexual partnerships, having sex with both males and females, and limited condom use highlight the need for targeted interventions addressing HIV risks for MSM.