

Project Title:
HIV/STI Risk Reduction: Serosurveillance of Genital Herpes among MSM in Hong Kong (Project Code: MSS 206R)

Executive Summary:

Objectives

Herpes simplex virus type 2 (HSV-2) infection is primarily asymptomatic and as serological screening is not routinely performed, local seroepidemiology data on the true burden of HSV-2 in MSM in Hong Kong remains unknown. This study aimed to 1) examine the prevalence of HIV, HSV-2, and risk behaviours among local MSM, 2) promote the uptake of blood screening for HIV and HSV-2 infections, 3) increase awareness of the strong association between HSV-2 and HIV acquisition and transmission, and 4) promote safer sex practice among MSM in Hong Kong

Design

A serosurveillance survey and seroprevalence of HIV and HSV-2 infections in MSM. Each participant completed a questionnaire survey that explored demographics, history of STI, HIV/HSV-2-related knowledge and risk perception, and sexual risk behaviours. Blood samples were collected for HIV and HSV-2 serological screening.

Setting

Voluntary Counseling and HIV/STI Testing (VCT) Centre in Hong Kong.

Participants

Men who have sex with men.

Main outcome measures

Prevalence of 1) HIV infection, 2) HSV-2 infection, and 3) sexual risk behaviours in MSM

Results

Four hundred and forty seven MSM were recruited between September 2012 and August 2013. All participants completed a structured questionnaire survey and blood specimens were collected from 443 MSM for HIV and HSV-2 testing. Overall, the seroprevalence of HIV and HSV-2 were 1.6% (7/443) and 3.8% (17/443), respectively. Co-infection of both HIV and HSV-2 infections were found in three MSM participants. There was significant difference in seropositivity for HIV infection between HSV-positive and HSV-negative MSM (17.6% vs 0.9%, $P<0.001$). Among all participants, 71.8% were aged below 30; the majority (97.5%) were of Chinese ethnicity and with high level of education (73.1%). Of 443 participants, 13.3% self-reported having ever contracted STI, and 16.7% had STI symptoms in the past 6 months. Knowledge of HSV-2 infection was low, only 36.0% of the participants correctly identified the risk for HIV infection is higher among HSV-2-infected individuals. Age of first oral and anal sex were prevalent among young MSM, with nearly 64% and 52% of the respondents reported having first oral and anal sex at age below 20, respectively. Consistent condom use rates were lower in MSM with oral sex than anal sex. Among 385 MSM participants who self-reported having oral sex in the past 6 months, consistent condom use was only 1.8%. Of 346 MSM with anal sex, 47.4% reported consistent condom use in the past 6 months.

Conclusions

Findings of this study provide a better measure of the true burden of HIV and HSV-2 infections in MSM in Hong Kong. Our serosurveillance data indicates a relatively low prevalence of HIV and HSV-2 infections among MSM attendants of VCT Centre. Given the limited understanding of HSV-2 transmission and sexual risk behaviors are still prevalent, offering serological screening, early detection, prevention and intervention measures of HSV-2 would enhance the control of HSV-2 infection and the subsequent reduction on HSV-2 and HIV transmission among MSM in Hong Kong.

List of Publication

Chan DPC. Seroepidemiology of HIV and HSV-2 infections among men who have sex in men. *J AIDS Clin Res* 2013;4(9):67.