PRiSM - HIV Prevalence and Risk behavioural Survey of Transgender women in Hong Kong 2017

Background

Male-to-female transgender or transgender women (TGW) has been a neglected and hard-to-reach community, yet various overseas studies have shown that their HIV prevalence can be high. To better study the situation in Hong Kong, Special Preventive Programme of the Department of Health (DH) has included TGW as one distinct at-risk population to be covered in the HIV/AIDS Response Indicator Survey (HARiS, a venue-base survey) since 2014. It is the first time DH included TGW in PRiSM (HIV prevention and risk behavioural survey of men who have sex with men in Hong Kong). As PRiSM is a community-based survey and the participants only need to complete a self-administered online questionnaire, it was hoped that more TGW could be reached. The study aims to update on the HIV prevalence among TGW in Hong Kong, and inform on HIV/STIs preventive interventions and the profile of risk behaviours of local TGW.

Methods

In early April 2017, a pilot study was conducted to evaluate and refine the survey questionnaire, together with a trial run of urine sample collection procedures. The study period was from 26 April to 30 September 2017, during which time participants were invited to access a designated website and self-administer an online bilingual questionnaire. Concurrently, the website was publicised in various platforms such as gay apps and local gay/transgender websites. Posters were also sent to lesbian, gay, bisexual, and transgender (LGBT) venues and NGOs to enhance publicity. An eligible participant would receive a unique code upon completion of the survey, with which she could submit a urine sample to one of 48 Community Collection Points in different districts of Hong Kong. They included 24 private clinics, 14 government clinics, 8 community organizations, the DH AIDS Counselling and Testing Service and the Red Ribbon Centre. Collected urine specimens were sent to DH’s Public Health Laboratory Services Branch for HIV antibody testing. The participants would be informed of the test result when they called a designated hotline. Those who tested positive would be referred to DH HIV clinic for further management.

Results

During the captioned period, a total of 104 TGW respondents (54 recruited from internet, 17 from LGBT venue, 15 from NGOs, 7 from friends and 11 from others. 93.3% of the respondents were Chinese. The median age was 30 years (range 16 to 77). In terms of age distribution, about 5.8% were below the age of 20, 41.3% aged 20-29, 34.6% aged 30-39 and 18.3% aged 40 or above.

HIV prevalence

Overall, 54.8% of subjects had submitted urine specimen and 56 urine specimens were sent for HIV antibody testing. There were 3 subjects who reported to be HIV-positive; among them, 2 subjects were sexually active (i.e. reported to have anal or vaginal sex with men in the past 6 months). After excluding subjects who were known positive, 2.4% of the urine samples of sexually active TGW showed a positive result. The overall HIV prevalence for sexually active TGW was estimated to be 5.11%.
Among the respondents who reported to be HIV-positive, all reported having been followed up for HIV treatment. 66.7% were receiving highly active antiretroviral therapy (HAART, cocktail therapy).

Sexual behaviour

Overall, 69.4% of the respondents were sexually active. 63.5% of the respondents had anal sex with men in the past 6 months, 21.2% had vaginal or anal sex with women in the past 6 months, and 17.6% had vaginal or anal sex with TGW in the past 6 months. Condom use rate in last sex with men, women and TGW was 64.8%, 44.4% and 60.0% respectively.

Consistent condom use (defined as always using a condom for anal/vaginal sex in the preceding 6 months) with men reported by respondents was 30.8% for receptive sex and 23.3% for insertive sex. For different types of male sex partner, the percentage of condom use in last sex were as follows:

- Emotional sex partner – 55.6%
- Regular sex partner – 58.5%
- Non-regular sex partner – 68.3%
- Commercial sex worker – 60.0%
- Commercial sex client – 73.3%

Recreational drug/substance use

Recreational drug/substance use during or before sex ("chemsex") was reported in 16.8% of the respondents. The commonest drug used was Poppers (56.3%), followed by cocaine (31.3%), methamphetamine (31.3%), GHB (31.3%) and marijuana (31.3%).

Exposure to HIV prevention message

A majority (83.7%) of the respondents had received HIV prevention information in the previous year. 46.2% had received a free condom in Hong Kong in the previous year. Overall, 89 out of 104 (85.6%) of the respondent had receive HIV prevention message and/or condom in the previous year.

HIV testing behaviour

72.1% of the respondents had ever had HIV testing and 41.3% of the respondents had their recent tests performed in the past one year. 10.7% of the ever-testers had HIV self-testing before and 54.2% of the ever-testers not known to be HIV-positive would like to perform HIV self-testing in the future.

The factors which favour their HIV testing were also explored: 30.6% of respondents considered “instant test result” and “privacy” were the most important, followed by “testing services open at night” (27.8%).

Sexually transmitted illness (STI)

Overall, 12.5% of respondents reported at least one diagnosed STI within past 12 months. 4.8% of the respondents reported syphilis, 4.8% reported Chlamydia, and 3.8% gonorrhoea.

HIV Pre-exposure prophylaxis (PrEP) use
2 respondents (1.9%) reported taking or having taken PrEP before. One obtained from local private clinic (under HKD$500 per month) and one from online purchase (HKD$3001-5000 per month).

Given the condition that “Studies have shown that PrEP could offer 86% protection and must be prescribed by a doctor, and regular (at least every 3 months) follow-up and blood tests are required.”, 56.9% of those never taken PrEP before expressed willingness to use PrEP if offered free.

Discussion

1. The crude HIV prevalence rate for sexually active TGW in PRiSM 2017 was estimated to be 5.11%, which was much lower than the 18.6% in HARiS 2014. In HARiS 2014, only 70% of the subjects recruited were Chinese, while 93% of the subjects were Chinese in PRiSM 2017. Of note, the rates could not be directly compared because of differences in sampling size and recruitment strategies of the surveys.

2. HIV testing rates in the past 12 months among TGW was 41.3% which was lower than the finding from HARiS 2016 (57.5%). It suggested that TGW subjects not reached by NGOs might have a lower awareness of the need of regular HIV testing. HIV self-testing was also not common practice among the ever-testers (10.7%) but more than 50% of ever-testers would like to try HIV self-test in the future. As an additional approach to HIV testing services, HIV self-testing should be promoted.

3. Consistent condom use rate with men among TGW was unsatisfactory, ranging from 23 to 30% for insertive and receptive sex. Education on safer sex practices, including persistent and proper use of condom, should be reinforced.

4. The percentage of TGW practising chemsex in the past 6 months was higher in PRiSM 2017 than HARiS 2016 (16.8% vs 10.3%). The increase was likely due to difference in sampling frame (community subjects vs subjects recruited via NGOs). The prevalence was the same as that of MSM (16.2%) and the phenomenon of the growing popularity of chemsex among the two populations should be closely monitored.