Integrated Biological and Behavioral Surveillance (IBBS) Survey among Men Who have Sex with Men (MSM) and Transgender (TG) in Kathmandu Valley

Brief Description of the Study

This is the fifth round of the IBBS survey conducted among Men who have sex with men (MSM) and transgender (TG) population in the Kathmandu Valley of Nepal. Previously, the survey was carried out in 2004, 2007, 2009 and 2012 in the same location among the same population. In line with the objectives of the previous rounds of the IBBS, this survey was also undertaken primarily with objectives to: a) determine the prevalence and trend of HIV Syphilis, Chlamydia Trachomati (CT) and Neisseria Gonorrhea (NG) and associated risk behaviors among MSM/ Transgender (TG), b) Collect information related to socio-demographic characteristics and c) Explore the association between the risk behaviors and HIV and other specific STIs among the MSM and TG population. Fieldwork for data collection was conducted in August, 2015.

Methods

A serial cross-sectional research design and Respondent Driven Sampling (RDS) method was applied for sample selection. The total sample size was 400. The survey was started with six seeds and went up to seven waves. Respondents were interviewed after obtaining witnessed oral consent followed by pre-test counseling and blood sample, urine and anal swab sample collection. A structured questionnaire was used to collect background characteristics, knowledge on HIV and AIDs and STIs, sexual behavior, exposure and access to HIV services and stigma and discrimination.

Rapid test kits: Determine HIV 1/2 test, Uni-Gold test and Stat pack test kits were used for testing presence of antibodies against HIV in the serum. Syphilis was tested using Rapid Plasma Regain (RPR) and it was confirmed bv Treponema Pallidum Particle Agglutination (TPPA) tests. Real time PCR, using Goffin Molecular Technologies Presto Chlamydia trachomatis (CT)- Neisseria gonorrhea (NG) Assay kit was used for testing Gonorrhea and Chlamydia. Participants received test results, with post-test counseling and treatment, when required. The SPSS (18) and RDSAT (5.6) software were used for data analysis. Ethical approval for this survey was sought from Nepal Health Research Council.

For the purpose of this survey, MSM were further classified into male sex workers (MSW) and non-MSW (see the definition in the box).

Key Findings





The overall prevalence of HIV in MSM was 2.4%, decreased by a small proportion in 2015 in comparison to Round 4 (3.8 % in 2012). HIV prevalence was high among MSW group (5.6%) whereas it was 1.8% among Non-MSW groups. The trend of prevalence of HIV seems decreasing over time (Fig.2).

Figure 2: Trend of Active Syphilis (2004 - 2015)



The prevalence of active syphilis among MSM has been decreased from 0.8% in 2012 to 0.5% in 2015 while among MSW; active syphilis has decreased from 3% in 2012 to 1.1% in 2015. No cases of active syphilis were identified among Non- MSW population in 2015.





The knowledge of ABC among MSW indicates that it is in declining trend. In 2004 it was 89%, which has decreased by more than 40% and reached 48.6% in 2015. Similarly, in case of Non-MSW and MSM, the knowledge of ABC is also in decreasing trend (Fig.3).

Figure 4: Trend of Knowledge of BCDEF



The knowledge of MSM on BCDEF was highest in 2009 (64.3%), it started to decline from 2012 and has come down to 50.5% in 2015(Fig.4). In case of MSW, the knowledge of BCDEF was peak (80.7%) in 2009 then remain constant (60.7%) in 2012 and 2015. Similarly the knowledge of BCDEF among the Non-MSW was fluctuated and found approximately same in 2007 and 2015.

Figure 5: Trend of Access to Condoms



The access to condom was lowest in 2004 among MSW, Non-MSW and MSM (30%, 28% and 39.9% respectively) in comparison of succeeding round of surveys. It was in increasing trend and remained steady from 2007 to 2012 then it was found to be increased for all groups in 2015 (i.e. 99.1% in MSW, 95.4% in Non-MSW and 94% in MSM)(Fig.5).

Figure 6: Trend of consistent condom use with different sex partner in past month



The trend of consistent condom use by the MSW in the past month with the paid male anal sex partner has increased from 58.3% in 2004 to 100% in 2007 and remained same for 2009, then decreased to 76.7% in 2012 and to 62.5% in 2015. For the nonpaying regular male anal sex partner, the trend has increased from 57.4% in 2004 to 80.2% in 2015.Similarly, the trend of consistent condom use with one time paying male sex partner has increased from 68.8% in 2004 to 88.9% in 2015 except 2007 (94.6%), while, the trend with the non-paying female sex partner has increased from 40% in 2004 to 69.2% in 2007 and decreased to 38.1% in 2012 and again increased to 66.7% in 2015(Fig.6).

Figure 7: Trend of Discrimination in Jobs and daily life



The level of discrimination in jobs and daily lives among MSW has been an increase and peaked in 2009, which then plunged and again increased in 2015 (42.3%) . In case of Non-MSW, it was increased from 2004 to 2012 then declined from 13.6% to 3.4% in 2015. Overall, among the MSM, it was increased from 2004 to 2009 then started to decline from 2012 till 2015 (9.3%).

Program Implications

- Targeted interventions and strategies are necessary for MSWs, as they tend to be engaged in risky sexual behaviors that lead to HIV transmission.
- It is necessary to spread the message of consistent condom use with regular, non-paying and paid sex partners while having sex, whether oral or anal sex.
- Information about available HIV and STI services, including condoms should be disseminated widely through mass media as well as interpersonal communication.
- Comprehensive knowledge of HIV prevention seems decreasing in the recent IBBS surveys; a qualitative study should be conducted to find out the reason of declining it and its association with HIV and STI infections.
- Access to structured HIV programs (Peer education, DIC, HCT/STI clinics) should be improved.
- Special advocacy and awareness programs should be implemented in order to reduce the existing stigma and discrimination at the potential work place of the MSM/TG populations.

Definitions

MSWs: 'Those males aged 16 years or above who have had sexual relations, (either oral or anal) with another male in the 12 months preceding the survey in exchange for money or other commodities.'

Non MSWs: 'Those males aged 16 years or above who have had sexual relations (either oral or anal) with another male in the 12 months preceding the survey without receiving cash payment or other commodities.'

Transgender Sex Worker (TGSW): Those aged 16 years and above reporting have been paid in cash or kind for sex with males within 12 months and who identified themselves in a different gender than that assigned to them at birth or identified themselves belonging to transgender community.

Key National M&E Indcators

S.N.	Key Indicators(N=400)	Calculation	MSW	Non-	TG	MSM	<25	25 +
1	Percentage of men who have sex with men and transgender who are HIV-infected	Unadjusted	9.2	2.2	9.3	5.2	yrs 2.3	yrs 7.
		Adjusted with CI	5.6 (1.5- 10)	1.8 (0.2- 6.4)	NA	2.4 (1.1- 4.5)	1.0 (0.7- 3.9)	3.7 (0.7- 9.2)
2	Percentage of men reporting the use of condom the last time they had anal sex with a male partner	Unadjusted	93.1	80.5	88.4	86.0	84.8	86.8
		Adjusted with CI	93.7 (84- 97.9)	81.1 (72.1- 90.5)	83.1 (74.6- 91.9)	80.9 (75.2- 86.4)	81.1 (71.8- 90.3)	81.2 (72- 89.6)
3	Number (and Percentage) of men who have sex with men (MSM) and transgender people who received an HIV test in the past 12 months and know their results	Unadjusted	67.8	25.2	59.5	43.8	37.7	48.2
		Adjusted with CI	55.1 (46.1- 73.7)	14.0 (6.9- 22.4)	43.1 (31.5- 55)	23.2 (17.8- 29)	19.6 (11.7- 32.9)	23.1 (14.3- 33.6)
4	Percentage of key populations MSM reached with HIV prevention programs	Unadjusted	78.2	42.9	74.4	58.3	48.8	65.3
		Adjusted with CI	67.1 (54.8- 80.6)	27.5 (18.8- 40.4)	62.5 (50.7- 75.8)	35.5 (29.3- 42.8)	27.6 (17.7- 43)	36.4 (28.4- 52.2)
5	Percentage of men having sex with men who both correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV transmission	Unadjusted	64.9	50.4	61.9	43.3	52.9	59.6
		Adjusted with CI	60.7 (54.8- 77.3)	44.8 (33.8- 58.8)	59.9 (52.7- 74.5)	50.5 (44-57)	54.9 (38.8- 66.6)	47.5 (34.3- 56.7)
6	Percentage of MSM who reported that a condom was used the last time they had anal sex in the last six month	Unadjusted	94.6	100	93.8	94.7	93.8	95.2
6.1	Number of MSM who reported that a condom was used the last time they had anal sex in the last six month	Unadjusted	160	2	138	162	61	101
6.2	Number of MSM who reported having had aal sex with a male partner in the last six months	Unadjusted	169	2	147	171	65	106

For more information, please contact-National Center for AIDS and STD Control Teku, Kathmandu Tel: +977 1 4258219, 4261653 Fax: +977 14215149