

**Integrated Biological and
Behavioral Surveillance
(IBBS) Survey among Men
who have Sex with Men
(MSM) and Transgender (TG)
People in Kathmandu Valley,
Nepal**

Round IV – 2012



**Ministry of Health and Population
National Centre for AIDS and STD Control
Teku, Kathmandu**

**Integrated Biological and Behavioral Surveillance (IBBS) Survey
among Men who have Sex with Men (MSM) and Transgender (TG)
People in Kathmandu Valley, Nepal**

Round IV - 2012

Field work conducted by:



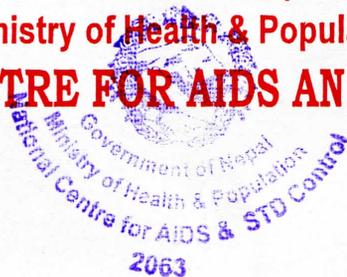
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LIST OF BBREVIATIONS

AIDS	Acquired Immuno-Deficiency Syndrome
BDS	Blue Diamond Society
CC	Counseling Center
CCST	Community Care Support and Treatment
CE	Community Educator
CHBC	Community Home Based Care
CI	Confidence Interval
CM	Community Mobilizer
CT	Chlamydia Trachomatis
DIC	Drop-in-Center
DNA	Deoxyribonucleic Acid
ELISA	Enzyme Linked Immuno Assays
EPP	Estimated Population Proportion
EQA	External Quality Assessment
FSW	Female Sex Worker
HIV	Human Immuno-Deficiency Virus
IBBS	Integrated Biological and Behavioral Surveillance Survey
IC	Information Center
ID	Identification Number
PWID	People Who Inject Drugs
IEC	Information, Education and Communication
MARP	Most-at-Risk Population
MSM	Men who have Sex with Men
MSW	Male Sex Worker
NCASC	National Center for AIDS and STD Control
NG	Neisseria Gonorrhoea
NGO	Non- Government Organization
NHRC	Nepal Health Research Council
NPHL	National Public Health Laboratory
NRL	National Reference Laboratory
OE	Outreach Educator
PE	Peer Educator
RDS	Respondent Driven Sampling
RDSAT	Respondent Driven Sampling Analysis Tools
RPR	Rapid Plasma Reagin
SACTS	STD/AIDS Counseling and Training Services
SLC	School Leaving Certificate
SPSS	Statistical Package for the Social Science
STD	Sexually Transmitted Disease
STI	Sexually Transmitted Infection
TPPA	Treponema Pallidum Particle Agglutination
USAID	United States Agency for International Development
VCT	Voluntary Counselling and Testing of HIV

EXECUTIVE SUMMARY

Under the national plan on HIV and STI surveillance, National Center for AIDS and STD Control (NCASC) has been conducting Integrated Biological and Behavioral Surveillance Surveys (IBBS) among the key population at higher risk at regular intervals. These surveillance studies are aimed at measuring the prevalence of HIV and sexually transmitted infections (STIs) among key population at higher risk and assessing their health risk behaviors as well as monitoring epidemic and behavioral trends to inform the HIV response in Nepal.

This IV round of IBBS survey recruited 400 men who have sex with men (MSM) and transgender people (TG) in Kathmandu Valley (Kathmandu, Lalitpur and Bhaktapur). The respondent-driven sampling (RDS) methodology was adopted to recruit the possible survey participants. This survey was carried out primarily to determine] among MSM in the Kathmandu Valley and to assess their HIV/STI-related risk behaviors, including their sexual practices. The survey also aimed to measure their exposure to the intervention programs targeted at MSM/TG in the valley. At the same time, it has sought to analyze trends through the comparison of data on selected variables obtained from first, second, third and fourth rounds of the IBBS.

Lab testing and structured questionnaire was used to collect both biological and behavioral information such as prevalence of HIV and STIs [syphilis, chlamydia trachomatis (CT) and Neisseria gonorrhoea (NG) including socio demographics, sexual behaviors, HIV awareness, psychosocial factors and access to prevention programs. Survey participants were enrolled in the Survey only after getting oral informed and witnessed consent. Interview using the structured questionnaire was followed by a clinical examination by a health assistant and the collection of blood, urine and anal swab samples for biological testing of HIV, syphilis, Chlamydia Trachomatis(CT) and Neisseria Gonorrhoea(NG). The survey was carried out through one centrally-located Survey center at Jamal in the Kathmandu Valley. Biological samples were collected only after a pre-test counseling session and the survey participants were provided syndromic treatment for STI- related. Handover of HIV and syphilis test results were followed by post-test counseling.

Data analysis was done using the SPSS and Respondent Driven Sampling Analysis Tools (RDSAT) software. HIV prevalence was analyzed using RDSAT. Pull-in outlier option was used in RDSAT to eliminate extremely small and large outliers in network sizes. When the program encounters an individual whose network size is outside of the specified bounds, their network size was set to the value of nearest lower or upper bound (percentage) with the help of pull-in outliers option. To be consistent with previous rounds of survey, the RDSAT analysis for this Survey used 5 percent pull-in outliers of network size.

Key Findings

HIV and STI Prevalence

- HIV prevalence among MSM/TG in the Kathmandu Valley in 2012 is 3.8 percent (N=400) [MSW/TG-SW=6.8% ; non-MSW/TG-non-SW=2.9%]
- The overall prevalence of at least one STI was 10.8 percent among MSMs in the valley. MSW (18.5%) had significantly high prevalence of at least one STI than non-MSWs (6.8%).

Moreover 0.8 percent of MSM had active syphilis, while 2.5 percent had a history of syphilis. Overall, 2.8 percent of MSM had anal NG with a relatively high prevalence among MSWs (4.4%) than non-MSWs (1.9%). The prevalence of anal CT was 3.0% percent among MSWs and non-MSWs.

Socio-demographic Characteristics

- MSM/TG in the Kathmandu Valley are mostly young. The majority of respondents were below the age of 30 years (74.8% MSWs and 71.3% non-MSWs) with nearly two in ten (17.3%) below 20 years of age (16.3% MSWs and 17.7% non-MSWs). Twenty sevenpercent of MSM were currently married. However, of those who were currently married, 20 percent MSWs and 16 percent non-MSWs were married to a male partner.
- A relatively low proportion of MSM/TG (24.5%) reported living with a regular partner. Among those living with a regular partner, most non-MSWs lived with female partners (53.8%), whereas the majority of the MSWs regular partners were male (69.7%).
- Almost 29 percent of MSM had attended School Leaving Certificate (SLC) or a higher level of studies. Three percent of MSM/TG were illiterate, while the same proportion were literate with no formal education.

Use of Alcohol and Illicit Drugs

- Eight out of ten MSM/TG (80.8%) had consumed alcohol in the last month. At the same time, 26.3 percent of MSM/TG also had used drugs in the past year. More non-MSWs (28.3%) than MSWs (22.2%) had used drugs in the year preceding the survey. The most common drugs used by them (80.0%) was marijuana, locally called *ganja*. While very few had injected drugs intravenously in the past year (2%).

Sexual Behavior, Type of Partner and Condom Use

- MSM/TG reported having their first sexual encounter at young age. Six in ten (61.0%) had sex before the age of 17. More MSM/TG (73.3%) had their first sexual experience with a male partner than with a female partner (26.8%). More MSWs than non-MSWs had their sexual debut both before the age of 17 (73.3% MSWs and 54.7% non-MSWs) and with a male partner (81.5% MSWs and 69.1% non MSWs). The average age of respondents when they sold sex for the first time was 19 years.
- The predominant sex practice among MSM was anal sex followed by oral sex. Overall, 91.3 percent had practiced anal sex in the past month. Most of the survey respondents were *meti* (who perform receptive role during anal sex).
- Overall, consistent condom use was highest with a paid female sex partner (86.7%) followed by regular paying male sex partner (86.7%) and lowest with a non-paying female sex partner (35.3%) in the month preceding the survey. The majority of the respondents (91.8%) could get condoms whenever necessary, and 35.8 percent of those who had obtained their last condom from various sources had got it free of cost.
- Almost eight in ten MSM/TG (78.8%) had used lubricants before the survey.

STI and HIV/AIDS Awareness

- Overall, 13.5 percent of MSM/TG could not correctly name any symptoms of STIs in men. Reportedly 20.3 percent had experienced at least one symptoms of STI in the past year. Among them 29 percent did not seek any treatment for their STI symptoms.
- Sixty percent of MSM (62.2% MSW and 58.9% non-MSWs) had knowledge of all three major HIV/AIDS preventive measures, such as abstinence from sexual contact, 'A'; being faithful to one partner, 'B'; and condom use during each incidence of sexual contact, 'C'. Meanwhile, 59.3 percent of MSM/TG were aware of 'B,C,D,E,F' (a healthy looking person can be infected with HIV, 'D'; a person cannot get the HIV virus from a mosquito bite, 'E'; and sharing meal with an HIV-infected person does not transmit the HIV virus, 'F').
- Almost 73 percent of the respondents were aware of a confidential HIV test facility. Moreover, 62.5 percent of MSM had taken an HIV test before the survey. Among them, 97.6 percent had taken the test within the year preceding the survey. A higher proportion of MSWs (78.5%) than non-MSWs (54.3%) had taken up HIV testing.

Prevalence of Distress and Depression

The prevalence of depression and distress was very high (50.2%). Five out of every 10 MSM/TG were experiencing distress and depression.

Exposure to HIV/AIDS Related Programs

- In the past year, seventy-one percent of MSM/TG had met peer/outreach educators, 60.2 percent had visited drop-in center (DIC), and 78.5 percent had participated in at least one HIV/STI awareness program/community event. VCT centers had been visited by 44.8 percent respondents. A relatively smaller proportion of them (16.3%) had visited an STI clinic in the year preceding the survey. More MSWs than non-MSWs were exposed to or had participated in interventions (outreach centre, HIV testing and counseling).

CHAPTER 1

INTRODUCTION

1.1 Background

HIV has been one of the most serious public health concerns in Nepal. Ever since the reporting of the first case of HIV in Nepal in 1988, HIV prevalence and incidence has been on the rise (Nepal was able to reduce its HIV by 25% in last 10 years, so how come it is on rise. UNAIDS estimates indicate that approximately 50,200 people [2011] in Nepal are HIV-positive. As of 15 July 2012, a cumulative total of 20,583 (13,157 male and 7,417 female and 9 TG) HIV positive cases have been reported in Nepal (NCASC, July 15, 2012). Key population at higher Risk for HIV in Nepal include sex workers (FSW, MSW) and their clients as well as their immediate sex partners, people who inject drugs (PWIDs) , migrant workers and men who have sex with men (MSM). Although overall general prevalence for HIV is around 0.3% for Nepal; among key population at higher risk groups the prevalence rate is much higher.

The IBBS surveys are conducted at regular intervals in Nepal. Latest IV round (2012) of the IBBS survey was conducted in MSM/TG population in Kathmandu. HIV prevalence among MSM/TG in the Kathmandu Valley in 2009 was 3.8 percent. Seven of the 135 MSWs (5.2%) and eight out of 265 non-MSWs (3%) had HIV. The overall prevalence of at least one STI was 21.5 percent among MSM in the valley. MSWs (31.9%) had significantly high prevalence of at least one STI than non-MSWs (16.2%) . MSM is one of the key HIV-risk groups, because of their high-risk sexual behaviors among their partners. The prevalence data drawn throughout the previous IBBS are summarized below:

Table 1: HIV and STI prevalence among MSM in Kathmandu Valley, Nepal: 2004-2009

Survey Year	General Prevalence HIV (%)		General Prevalence Syphilis (%)	
	MSW	Non MSW	MSW	Non MSW
2004	4.8	3.6	54	19
2007	3.4	2.9	19.4	16.4
2009	5.2	3	31.9	16.2

1.2 Objectives of the Survey

In line with the objectives of the previous rounds of the IBBS, the fourth round of the Survey was also undertaken primarily to determine the levels of HIV and STI prevalence and risk behavior among MSM sub-population in Kathmandu and their behavioral links with general population or other groups with high-risk behaviors. In addition, this Survey collected specific information on MSM/TG; their socio-demographic characteristics, the level of awareness about HIV/STIs, as well as their exposure to intervention programs.

The specific objectives include:

- 1) To determine the trends of HIV and STI prevalence in MSM/TG population of Kathmandu Valley.
- 2) To assess HIV and STI [syphilis, Chlamydia trachomatis (CT) and Neisseria gonorrhoea (NG)] related risk behavior among the above mentioned population.
- 3) To collect information related to socio-demographic characteristics drug using and needle sharing behaviors; sexual behavior including knowledge and use of condoms; knowledge of HIV/AIDS; knowledge and treatment of STIs; exposure of MSM/TG to available HIV/STI services in selected Survey areas.
- 4) To explore the association between the risk behaviors and HIV and other specified sexually transmitted infections among the MSM/TG population.

CHAPTER 2

METHODOLOGY

2.1 Survey Population

MSM/TG belongs to one of the most at risk population groups for the transmission of HIV/STI infection. MSM/TG from the three districts of Kathmandu valley viz., Kathmandu, Lalitpur and Bhaktapur are eligible participants for the Survey. MSM/TG Survey participants were categorized into two sub-groups: MSWs and non-MSWs.

MSWs/TG-SWs were defined as: '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 and self-identified as either trans gender or MSM'.

Non-MSWs/TG non-SWs were defined as: '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 and self-identified as TG or MSM'.

2.2 Survey Sites

As in the previous rounds a total of 400 MSM/TG (135 MSWs/TG and 265 non-MSWs/TGS) from the three districts of Kathmandu, Lalitpur and Bhaktapur were included in the Survey. Data collection site was set up in close proximity to the clusters with easy access to participating respondents. Survey center was established in Jamal, Kathmandu. The research site had 8 separate rooms with initial greeting and registration area, clinical observation area laboratory testing area, counseling and interview room. Each of these rooms had appropriate and effective Information, Education and Communication (IEC) materials to provide information on HIV and STI.

2.3 Sampling

2.3.1 Sample Design

This is the fourth round of IBBS among MSM/TG; thus, the questionnaire was developed and designed in reference to previously used questionnaire in close coordination with the NCASC. During the preliminary planning of the survey MSM/TG networking organizations and local NGO and CBO working for same were consulted to understand the diversity within their community and access their networking strength. In preview of their good networking strength within their diversity communities the respondent-driven sampling (RDS) method was adopted to recruit participants for the survey. This method is effective in accessing hard to reach populations such as MSM, injecting drug users (IDUs), male sex workers (MSWs) and female sex workers (FSWs). It is used to avoid biases arising out of masking, volunteerism, chain referrals and over representation. RDS Sampling frame was developed based on soliciting information collected during sampling process by respondent network size (including sample characteristics such as gender, race/ethnicity and age), respondent serial number and respondent's recruited serial number. Appropriate reward mechanism for recruiters and quota management was made during the process, so that recruitment is not wasted on strangers.

2.3.2 Sample Size

Baseline information available from the previous rounds a total of 400 MSM/TG from the three districts of Kathmandu Valley viz., Kathmandu, Lalitpur and Bhaktapur were included in the Survey to detect 10 to 15% changes in prevalence and risk behaviors.

2.3.3 Seeds and Recruitment of MSM and TG people in the Survey

In line with the RDS methodology, the Survey team, in consultation with FSGMN/Blue Diamond Society, motivators and relevant stakeholders first recruited a total of eight MSM/TG as 'seed'. Selected seeds were heterogeneous in age, ethnicity, geographically distributed and MSM type. Those seeds were informed about Survey protocols and procedures and were encouraged to recruit other eligible individuals from their social networks randomly to participate in the Survey. These initial "seeds" were provided 3 coupons to pass on to their peers who are eligible to participate in the survey. Thus the first wave of participants recruited for the Survey was brought in by seeds.

Initially two survey sites were established at Gaushala and Jamal for 5 days which was later consolidated to one (at Jamal) upon the recommendation from NCSAC, this avoided possible sample duplication.

Each seed was briefed about the objectives and nature of the Survey. Upon completion of the interviews and clinical procedure, each seed was provided with three recruitment coupons, which they use to recruit three other network people/peers and refer them to the field office. The new respondent when arriving at the field office presents the coupon to the Survey team. These network people/peers who were eligible to take part in the Survey were further given three coupons each and were encouraged to act as a new seed. In this way, the recruitment through the RDS continued until targeted sample size for both sub-populations (total 400 MSM/TG) was reached. The coupon was uniquely coded in order to monitor the recruitment. The coupon numbers were carefully recorded in each questionnaire. Of the eight seeds, maximum and minimum completed waves were 9 and 2 respectively.

Dual incentive was provided to the respondents to encourage recruitment process. Initially each participant was provided with incentive for the participation into the Survey and additional incentive for each individual they recruited.

All respondents participated voluntarily in the survey. An inclusion criterion was developed for participation in the Survey. Those participants who failed to meet the criteria and those who were not willing to participate were not enrolled in the Survey. Out of the total respondents four refused to give anal swab but completed their interview and provided blood specimen for HIV and STI testing.

2.3.4 Control of Duplication

For a quality assurance stage of sound mechanism was in place to avoid the duplications. Firstly, entire MSM/TG survey was conducted from a single site to avoid repetition of respondent. Secondly, each recruited MSM/TG was screened by supervisor before enrolling in the survey process. Thirdly, each survey participants were provided with unique ID numbers. The ID was marked on each questionnaire, medical records, and blood specimen of the particular respondent. This was also used for distribution of the test results. Each survey participant who completed the survey was provided the uniquely coded

number to avoid duplications thus same person could not take part more than once in the survey. Each participant who completed the survey was informed before issuing the recruitment coupons that the same person could not take part more than once in the survey. Therefore, they should not recruit the same person who had already received a coupon from others and/or had already participated in this survey. In order to avoid repeated interviews with the same MSM/TG, before issuing the ID number, the participants were asked several questions relating to their experience of having undergone blood tests, the part of the body from where the blood was taken, their experience of HIV testing or testing for other diseases, previous meetings with the Intrepid staff and peer educators, and possession of an ID card with a survey number.

2.4 Survey Instruments and Administration of Tools

The IBBS consisted of two separate components:

Quantitative data were collected through face-to-face interview using structured questionnaire. Structured questionnaires was used to gather the behavioral data relating to sexual behavior, sex partner, use of condom, exposure to ongoing HIV awareness program and participations and their networking programs in such activities as well as demographic and social characteristics. The questionnaires were developed based on the “National Guidelines for Repeated Behavioral Surveys in Populations at Risk of HIV”.

Blood samples were collected from the participants for serological and DNA analysis for HIV and STI [Syphilis, Chlamydia and Gonorrhoea] screening.

2.5 Timing of Data Collection

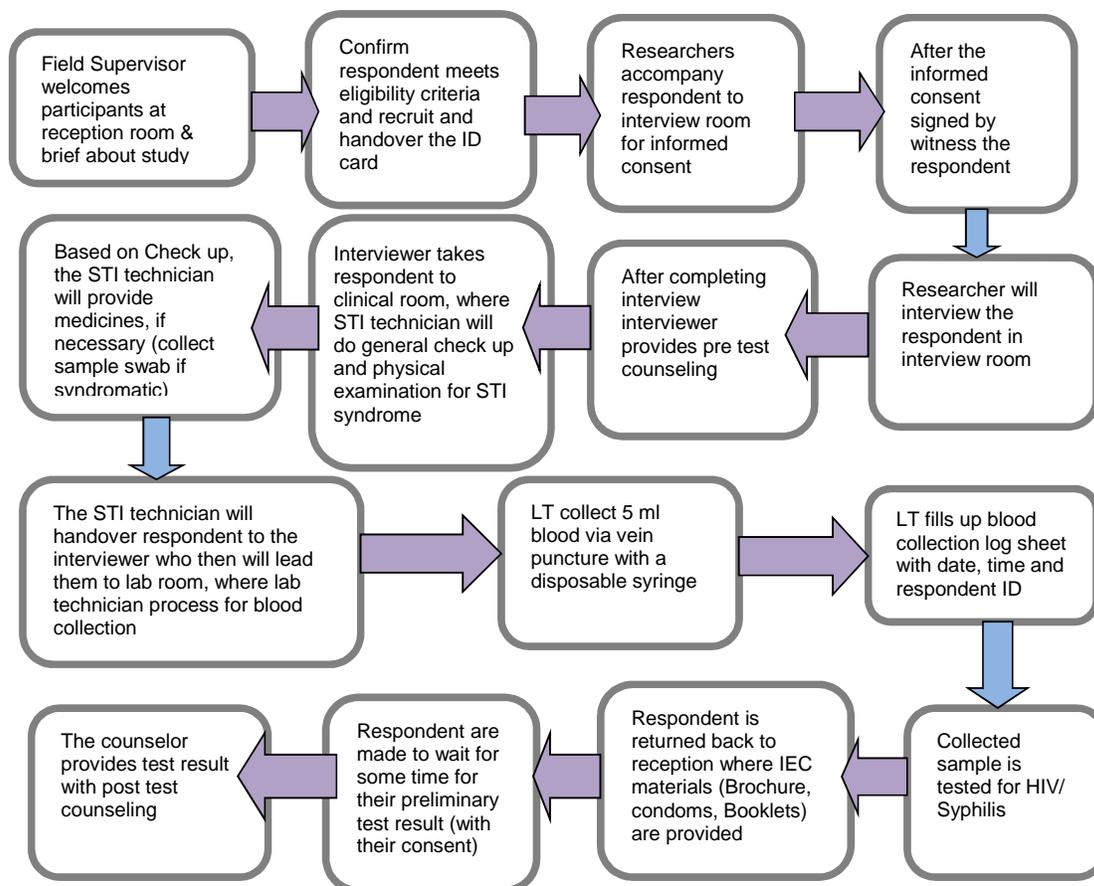
The field work was carried out from September 10 to October 16, 2012. The time was set from 8 Am to 5 PM and clinic was step up at Jamal Kathmandu.

2.6 Survey Team Composition

Project team leader was overseeing overall Survey. Apart from the team leader survey team had two coordinators, one Lab Advisor, 2 research officers, one data Analyst, one lab supervisor, two field officer and two field coordinator form stakeholders. The field team had one field supervisor, three interviewer, one health assistant, one lab technician, one counselor, local one motivator form the Blue Diamond society and support staff in each team. There were a total of **2 field teams** for the Survey.

2.7 Survey Field Procedures

Survey centers with laboratories/clinics were set up at easily accessible location. Pre-test counseling sessions were held before the clinical examination and blood sample collection. All the respondents were then examined for clinical symptoms for STI and blood samples were collected for detection of HIV, syphilis, Chlamydia trachomatis (CT) and Neisseria gonorrhoea (NG)] infections. Survey participants were provided with treatment for STI if clinical/observational diagnosis was positive. Post-test counseling was also provided prior to the distribution of test results for HIV/STI at these sites by experienced counselor. The details process post recruitment of the respondent is outline by the diagram given below.



2.8 Ethical Issues

In order to ensure adherence to ethical aspects of the study Ethical approval was obtained from the national ethical body, Nepal Health Research Council (NHRC) prior to commencement of the Survey. The participants' rights to information, volunteerism, privacy and confidentiality and adherence to the compliance of both the ethical and human rights standards were maintained throughout the Survey, including during the fieldwork and data entry. A unique identity (ID) was provided to each of the Survey participant. No personal identifiers were collected and the ID number was marked on each questionnaire, medical records, and blood specimen of the particular respondent. This was also used for distribution of the test results. Moreover, verbal informed consent was obtained from all participants prior to interview and collection of the blood sample in presence of a witness. Respondents were informed about voluntary participation and were made aware of their right to refuse to answer any question or to withdraw from the interview at any time. A consent form describing objectives of the survey, nature of participants' involvement, benefits they would receive, as well as confidentiality policy was clearly elucidated (Annex7).

2.9 Clinical and Laboratory Procedure

Clinical Procedure

A standard medical procedure in accordance with the 'National STI Case Management Guidelines was followed for clinical examination and clinical specimen collection. A separate medical team of Intrepid stationed at the field office was involved in the execution of the clinical procedures. Survey

participants were clinically checked for any symptoms of STI by a health assistant which included history of vital signs and inspection/examination of genital area and local lymph nodes looking for local changes erythema, warts, abrasions, ulcers, swelling, and discharge (clinical checklist-Annex 5). A symptomatic treatment of STI was also provided to the participants free of cost at the research site. Few cases were referred to other health facility for further diagnosis and treatment.

Collection, Storage and Transportation of Samples

I) Blood Sample

After pre-test counseling, the lab technician briefed the respondents about the HIV/STI testing process and sought their consent to take blood. About 5ml of venous blood was drawn from each survey participant using disposable syringes and collected in sterile glass tube. After centrifuge the serum was separated and stored in a sterile disposable serum vial and kept in a refrigerator at the Survey sites at 2°C to 8°C. Each serum sample was labeled with an ID number of survey participant. The specimens were sent to the Intrepid Laboratory in Kathmandu in a cold box every day. The serum samples were stored at a temperature of -12°C to -20°C at the Intrepid Laboratory.

II) Swab Samples

For DNA amplification testing for gonorrhea and Chlamydia, 20 ml of first catch urine taken at least two hours since the last void was self-collected by participants in a sterile plastic universal urine container, a 20 ml screw cap tube. The urine container was stored at room temperature and sent to Intrepid Laboratory on the same day where it was stored in two different aliquots at minus 86°C before testing.

For detection of Gonorrhea and Chlamydia pathogens, anal swabs were also collected from the MSMs who were found with symptoms for STI in clinical observation/examination. The anal swab was collected by the medical team inserting the swab stick about 2.5 cm into the anal canal. All the swabs were rotated and moved gently from side to side for 3-5 seconds before removing them. Collected swab samples were preserved in vials containing sterile transport medium; maintained in cold chain for transport to Intrepid Pvt. Laboratory. Out of 400 MSMs 28 were found symptomatic for STI after clinical observation and 5 refused to provide anal swab.

The swab was placed in the Amplicor STM tube. The health assistant vigorously swirled the swab in the liquid for 15 seconds. The contamination from the surface of the liquid was removed by the swab tip then liquid was expressed from the swab by pressing it against the side of the tube. The swab stick was then discarded, the transport tube was recapped tightly and labeled with ID number of the respondent, collection date and time. The tube was stored at room temperature in the tube stand and sent to Intrepid in an upright position every day.

Blood samples were tested for HIV antibody and syphilis serology. The blood sample was placed in a centrifuge to separate blood cells from serum. Each sample was labeled with an ID number of survey participant. Both HIV rapid tests and syphilis RPR tests were performed using serum by a lab technician from Intrepid Pvt. Ltd. of Kathmandu. The site laboratories were designed to have confidential testing for HIV and Syphilis as per the national guidelines. Universal precautions and stringent waste management protocols were followed. Quality assurance tests were performed on all positive sample

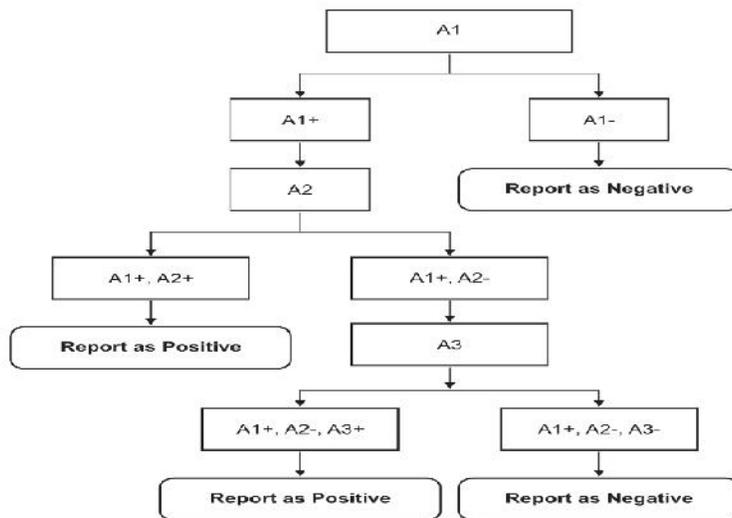
and a random 10% negative sample, EQA was done by public health laboratory (NPHL) in Kathmandu for both HIV and Syphilis testing.

Laboratory Procedures

Laboratory service entailed screening all the subjects/participants with initial and confirmatory tests (validated immune-chromatography HIV 1-2 detection device or Rapid Kits). In addition to HIV-1/2 screening, rapid screening test with rapid kits (as agreed) and confirmatory test with same kit in a different laboratory were carried out to find prevalence and status (current or historical) of Syphilis. For screening of syphilis Biotech RPR was used and confirmatory test with TPPA were carried out to find prevalence and status (current or historical) of Syphilis. RPR titration test determined the Syphilis progression.

HIV1/2

The HIV antibody screening of the serum sample was performed using rapid test kits following the HIV testing strategy II algorithm which is based on the National VCT Guidelines (NCASC). Determine HIV1/2 (Abbott, Japan), Uni-Gold HIV1/2 (Trinity Biotech, Ireland), and SD Bioline HIV1/2 (Standard Diagnostics Inc., South Korea) were used as lateral flow (rapid immuno -chromatography) kits for testing for the presence of antibodies against HIV in the serum. Serum that tested positive with the initial kit was confirmed with the second kit. Samples that were found reactive on both tests were considered HIV antibody positive. Samples that were non-reactive on the first test were considered HIV antibody negative. Any sample that was reactive on the first test but non-reactive on the second was retested with the third “tiebreaker” kit. The quality of the assay was assured by the in-built control of each kit. The interpretation of the test results was as follows:



NOTE:	
A1 (First test) :	Determine HIV 1/2
A2 (Second test) :	Uni-Gold HIV
A3 (Third test) :	SD Bioline HIV 1/2
"+" :	Reactive
"-" :	Non-reactive

- ¹ Assay A1, A2, A3 represent 3 different assays.
- ² Such a result is not adequate for diagnostic purposes; use strategies II or III. Whatever the final diagnosis, donations which were initially reactive should not be used for transfusions or transplants.
- ³ Report: result may be reported.
- ⁴ For newly diagnosed individuals, a positive result should be confirmed on a second sample.
- ⁵ Testing should be repeated on a second sample taken after 14 days.
- ⁶ Result is considered negative in the absence of any risk of HIV infection.

Figure 2.1: HIV Testing Strategy II Algorithm

Syphilis test was performed following the national guideline (National guideline on case management of sexually transmitted diseases, NCASC, Nepal). Serum was tested for non-specific and specific treponemal agents. A non-specific treponemal test, Rapid Plasma Reagin (RPR) [Biotch, company, UK] was used for both qualitative screening and quantitative titration. All RPR reactive serum was confirmed using specific *Treponema pallidum* Particle Agglutination (TPPA) test (Fujirebio Inc.) at Intrepid Laboratory. Serum sample tested RPR positive with titer value above or equal to 1:8 was reported as active syphilis; titration less than 1:8 was reported as a case with history of syphilis. The quality of reagents and test cards of the RPR test kit was assessed daily on-site using a set of strong and moderate positives and negative controls. RPR positive with greater than or, lower than or, equal to 1:8 titre with negative TPHA test is considered Syphilis negative cases. This may be due to unspecific syphilis RPR positive scenarios.

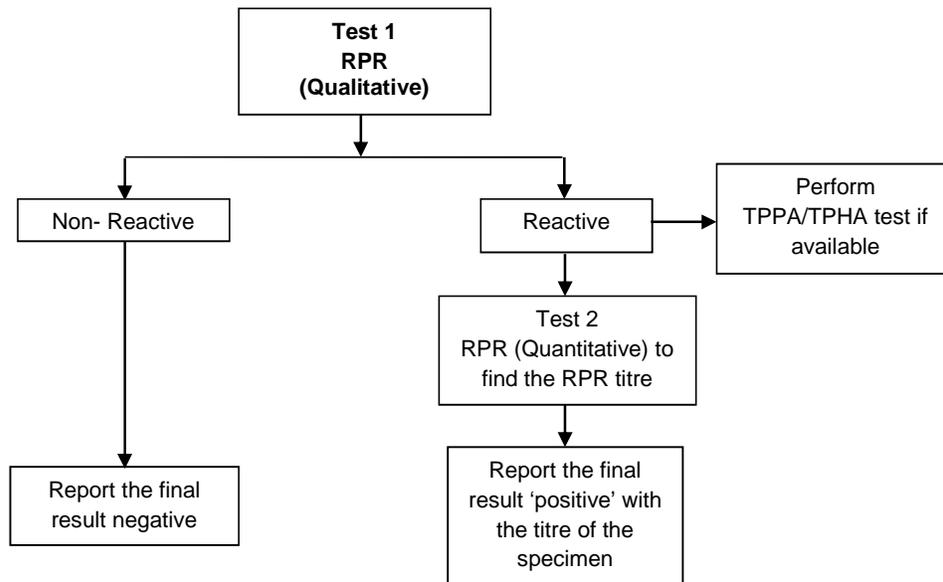


Figure 2.2: Syphilis testing algorithm

Gonorrhea and Chlamydia diagnosis

The presence of Gonorrhea and Chlamydia pathogens (*N. gonorrhoeae* and *C. trachomatis*) were determined by multiplex PCR based pathogen detection assay (Seegene, Korea) on syndromic cases confirmed under clinical observation. DNA extraction followed by PCR was carried out at Intrepid Laboratory.

Swab Collections

For detection of Gonorrhoea and Chlamydia pathogens, anal swabs were collected from the cases found to be symptomatic for STI by clinical observation. Collected swab samples were preserved in vials containing sterile transport medium; maintained in cold chain for transport to Intrepid Nepal Pvt Ltd laboratory. Out of n=400 samples after clinical observations n=28 found symptomatic and n=5 refused to provide anal swab.

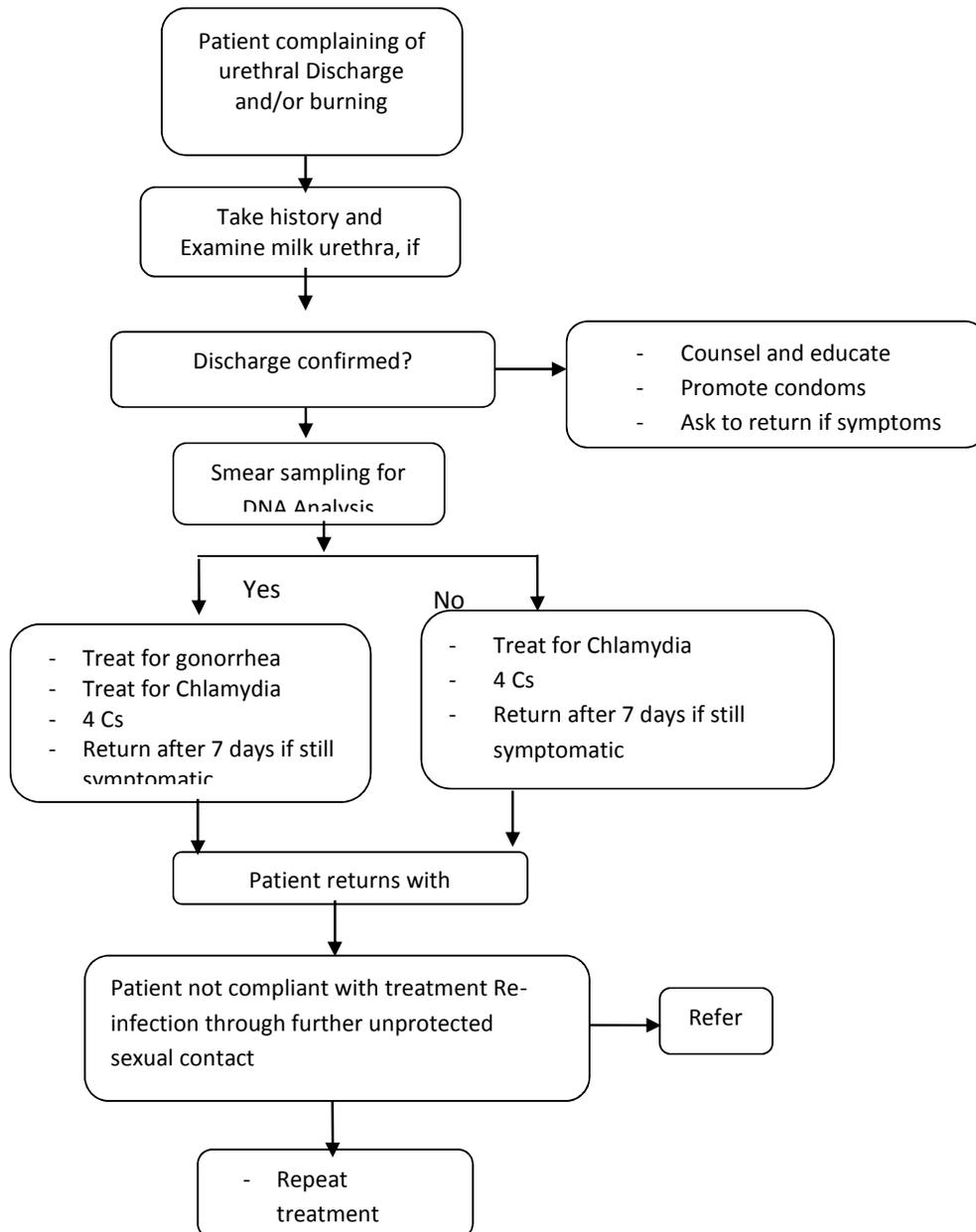


Figure 2.3: Gonorrhoea and Chlamydia screening strategy

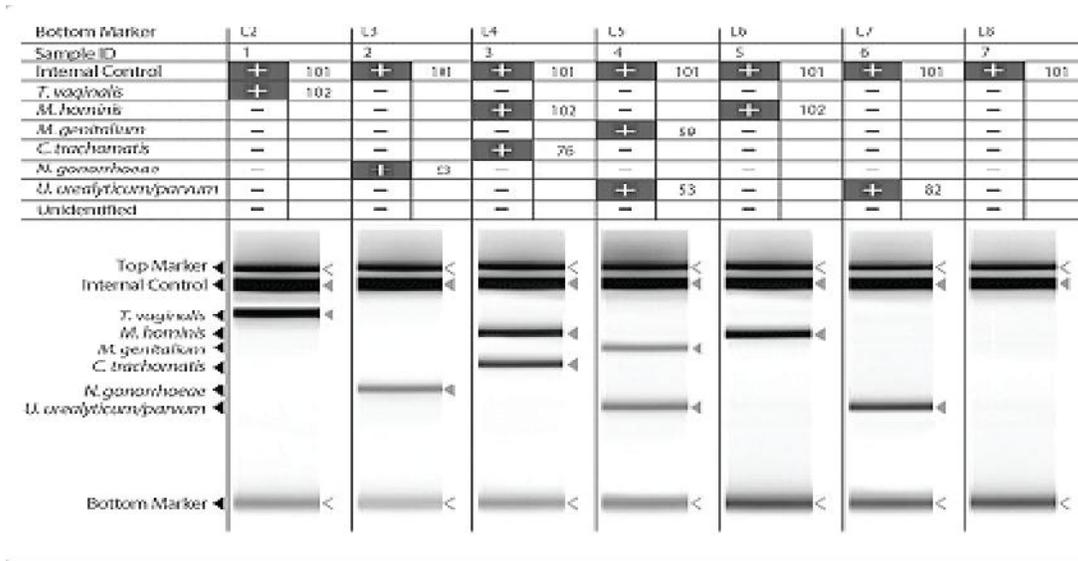


Figure 2.4: Multiplex PCR based detection of Gonorrhoea and Chlamydia

2.10 Precautions, Disposal mechanism and Post exposure Management

The universal precaution and post exposure management was followed as per recommendation of CDC and Nepal's national guidelines where applicable. In order to minimize possible spread of infection to clinical personnel and to the local community, the proper disposal mechanism was implemented. The color coded disposable plastic bags inserted in a thick, leak-proof container with tight seal was used. All materials were decontaminated (by disinfecting or incinerating) before disposal. Contaminated materials including specimens of body fluids, cotton gauze and broken glassware and used needles were decontaminated in 0.5% Sodium Hypochlorite each day. The plastic material, papers, cotton were incinerated. The used Sodium hypochlorite was poured down the drain or in a flushable toilet when available.

2.11 Quality Control of Laboratory Tests

On-site and external quality assurance of the samples was maintained while testing. The on-site audit includes quality control of test kits, record-keeping, and observation of staff performance. The on-site quality control of the kit was assessed by in-built control mechanism provided by the kit. While the trained laboratory personnel was responsible for the record-keeping on daily basis along with the quality control test that was performed. The staff performance was supervised by the supervisor who was stationed on the field.

External Quality Control

The External Quality Control or Blind Rechecking was performed by retesting samples in the Intrepid's Laboratory in Kathmandu. All positives and 10% negative samples were sent to the national public health laboratory (NPHL).

2.12 Survey Management and Coordination

The survey was overall managed by Intrepid Nepal under the supervision of NCASC coordination with NCASC. The survey protocol was developed in close coordination with NCASC which was strictly followed during the entire survey period. The core team member of the Intrepid Nepal were responsible for the management of the entire survey process that includes development and finalization of the research tools in Nepali Language, Laboratory SOP, training of the field teams, field planning, field monitoring matrix, data management, data analysis and report preparation.

2.13 Implementation of the Survey

Before implement the survey field team was provided with 4 days intensive training (September 2-5, 2012). The training session covered Survey objectives, characteristics of the MSM population, rapport-building techniques, content and scope of questionnaire and Survey protocol. The training session include practical as well as theory class. The training session was facilitated by the resources person form NCASC, Blue Diamond Society, and Intrepid Nepal. The practical session of lab and STI session was conducted at Intrepid laboratory. The technical expert have had conducted HIV pre-test post-test counseling.

2.14 Monitoring of the Survey Field work and Quality Assurance

Monitoring and follow-up mechanisms were in place to ensure quality throughout the survey period. INPL ensured that the desk review and reference materials were being adequately referred to develop relevant and useful Survey tools and that the field researchers were well trained to develop their skills to use the tools effectively to gather data in coordination with NCASC. Similarly, the field monitoring and follow-up was done by the INPL and NCASC staff and other stakeholders in a regular basis throughout the entire field work.

Every day Field supervisor reviewed all the completed questionnaires and inconsistencies in them were discussed with team members. The field supervisor monitored and managed the required cold chain for EQS and kits. The key research team members monitored and supervised the field activities. The field officer ensured that this survey protocol was strictly followed. Intrepid Nepal submitted field progress update to NCASC on weekly basis. The observations and suggestions from monitoring team were shared with field team at the end of the monitoring visit and were also communicated to Intrepid and NCASC.

2.15 Post-Test Counseling and Test Result Distribution

All the Survey participants were provided HIV and Syphilis test results with post-test counseling by a trained counselor in a confidential setting. Counseling session was also focused on raising awareness on high-risk behavior pertaining to STI and HIV.

2.16 Data Management and Analysis

All the completed questionnaires were thoroughly checked by field supervisor for any inconsistencies before the data was entered into a computer using CSPro software package. All the completed questionnaires were transported to Intrepid Nepal Pvt. Ltd. (INPL) office for coding and entry. Double entry was adopted to minimize errors during the data entry and ensure quality of data. Furthermore batch edit programming was developed to check the inconsistencies. Compiled data file was

transferred to SPSS/RDSAT for further analysis. Respondent-Driven Sampling Analysis Tool (RDSAT) software was used for analysis.

Raw data was prepared using SPSS. This included generating new variables and re-coding missing values. Datasets were then converted to Microsoft Excel files and then to RDS files (Tab Delimited Text). Prevalence estimates of key-indicators were performed in RDSAT. With RDSAT the pull-in outlier option was used to eliminate extremely small and large outliers in reported network sizes. When the program encounters an individual whose network size is outside of the specified bounds, their network size is set to the value of the nearest lower or upper bound (percentage) with the help of the pull-in outliers option. RDSAT analysis for this Survey used 5% pull-in outliers of network size.

Simple statistical tools such as frequency distribution, percentages, range, proportion, mean and median were used to analyze the results of the survey. Clinical and behavioral data were merged in order to examine the relationship between the participants' HIV status, socio-demographic characteristics, and sexual behaviors.

2.17 Dissemination of IBBS Survey Findings

As per the planed, IBBS survey result was disseminated at four levels: First, the key programmatic findings were shared with major stakeholder of the INGO, NGO and NCASC program person and their related comments were incorporated to the report. Secondly with the PWIDs community and local stakeholders at the survey districts and their suggestions were incorporated to finalized the report as well as for ownership among the communities' Thirdly, it was shared at the national level in Kathmandu among a wider group of government, non-government organizations, donor agencies and stakeholders working in the field of HIV and AIDS in Nepal. This was done primarily as an update on the status and the trends of the HIV infections among MSM/TG Populations to draw possible policy and program implications. Lastly, dissemination meetings were organized at the regional level for all local government and non-government local stakeholders to share the survey findings so they can be used to improve the local response to the HIV epidemic.

2.18 Intended use of IBBS Survey Results

The survey results are primarily intended to use (in reference to the MSM/TG population) for:

- Tracking the trends in HIV and STI prevalence
- Tracking the trend in high risk behaviors
- Estimating and projecting HIV infection
- Evaluating the progress of HIV prevention interventions

2.19 Methodological Limitations of the Survey

As MSM/TG is the hidden populations, the samples size may not be adequate. Calculated sample size is adequate to detect proposed 10 to 15 %Changes in estimate. The initial seed were purposively selected which could be one of the limitations of the survey but the waves were adequate to exclude any bias introduced by the selection of seeds purposively.

CHAPTER 3

FINDING OF THE SURVEY

3.1 Response Status of the Survey Participants

Table 3.0: Response status of the survey participants

Districts	Total MSM/TG Sample	Total interview	Refuse
Kathmandu, Lalitpur and Bhaktapur	400	404	4

3.2 Socio Demographic Characteristics

This chapter provides basic information on socio-demographic characteristics of the MSM/TG in Kathmandu Valley. It also provides information on self-categorized preferred identity on the basis of sexual orientation as well as gender identity of the MSM. Furthermore, this chapter describes about income and income sources of the MSM in Kathmandu valley as well.

3.2.1 Demographic Characteristics

Self-Categorization of sexual identity

Table 3.1 shows more than 9 self-categorization of MSM/TG on the basis of their perceived sexual roles. *Meta/Meti*, *Ta*, and *Pinky-ta* *Pinky-meta* are some of the terms used to define such different roles. In May 2007 the Government of Nepal officially recognized 'third gender' in addition to the conventional gender categories of male and female.

The study participants in this survey were also asked how they would like to be identified on the basis of their sexual orientation/behavior. In response, 31.8 percent of the MSM preferred to be identified themselves as men followed by 19.0 percent as meta/medi. Similarly, 17.3 percent of MSM would like to be identified as homosexual, 11 percent as *ta*, 9.3 percent as Gay, 5.3 percent as Dohori and 4.3 percent as woman. Less than 2 percent of them preferred to be referred to as Pinky *meta* and pinky *ta*.

The Study participants were asked how they would identify themselves from gender perspective. Majority of study participants (70.5%) considered themselves as male while over a quarter (28.8%) of them would like to identify themselves as third gender. Only three study participants considered themselves as female.

Table 3.1: Self-categorization of sexual orientation

Self-reported sexual identity	N=400	%
Man/mard	127	31.8
Meta/medi	76	19.0
Homosexual	69	17.3
Ta	44	11.0
Gay	37	9.3
Dohori	21	5.3
Woman	17	4.3

Pinky meta	4	1.0
Pinky ta	1	0.3
Others	4	1.0
Self-reported gender identity		
Male	282	70.5
Third gender	115	28.8
Female	3	0.7

Table 3.2 shows, almost eight out of ten (78.8%) respondents were living in rented apartment/room. While comparing to Non-MSW/TG non-sex worker, it reveals that MSW/TG sex worker are more likely to live in rented apartment/room than own home.

Table 3.2: Current living situation

	MSW/TG-SW		Non-MSW/TG Non-SW		MSM/TG	
	N	%	N	%	N	%
Living in own home	22	16.3	53	20.0	75	18.8
Living in a residential hotel	1	.7	1	.4	2	0.5
Rented apartment/room	111	82.2	204	77.0	315	78.8
Others*	1	.7	7	2.6	8	2.0
Total	135	100.0	265	100.0	400	100.0

The MSM/TG who participated in this survey were quite young with their median age being 25 years. 72 percent were less than the age 30 years. Not much difference was noticed in the age characteristic between MSW and non-MSW groups. The percentage of the adolescents (under 20 years of age) comprise approximately one sixth in both the categories of the respondents. Very few MSW (less than 4%) and non-MSW (8.3%) represent the elder age group (40 years and over).

Table 3.3: Demographic Characteristics

Demographic Characteristics	MSW/TG-SW		Non-MSW/Non TG SW		Total	
	N	%	N	%	N	%
Age						
16-19	22	16.3	47	17.7	69	17.3
20-24	43	31.9	86	32.5	129	32.3
25-29	36	26.7	56	21.1	92	23.0
30-34	20	14.8	31	11.7	51	12.8
35-39	9	6.7	23	8.7	32	8.0
40+	5	3.7	22	8.3	27	6.8
Total	135	100.0	265	100.0	400	100.0
Median age	25		24		25	
Mean/Std. dev	26.09/6.69		26.72/8.67		26.51/8.05	
Currently married						
Yes	30	22.2	81	30.6	111	27.8
No	105	77.8	184	69.4	289	72.3
Total	135	100.0	265	100.0	400	100.0
Sex of married partner *						
Male	6	20.0	13	16.0	19	17.1
Female	27	90.0	69	85.2	96	86.5

Demographic Characteristics	MSW/TG-SW		Non-MSW/Non TG SW		Total	
	N	%	N	%	N	%
Total	30	100.0	81	*	111	*
currently living with a regular sexual partner						
Yes	33	24.4	65	24.5	98	24.5
No	102	75.6	200	75.5	302	75.5
Total	135	100.0	265	100.0	400	100.0
currently living with						
Male/meti	23	69.7	29	44.6	52	53.1
Wife	9	27.3	35	53.8	44	44.9
Other women	1	3.0			1	1.0
TG			1	1.5	1	1.0
Total	33	100.0	65	100.0	98	100.0

* Multiple responses allowed

It is evident from the above table that the majority of the MSW (77.8%) and the non-MSW (69.4%) are unmarried. Only 22.2 percent of the MSW and 30.6 percent of non-MSW said that they are married. 86 percent of them were married to a female partner. On the other hand, 20 percent MSWs and 16 percent non-MSWs were married to male partners.

Among those who lived with a regular partner, 53.1 percent of the MSM lived with a male regular partner while 44.9 percent lived with their wife. More MSWs had a male regular partner (69.7%) than non-MSWs (44.6%).

Over two-fifths of the MSM (44.8%) had passed the secondary level of education and more than a quarter had the SLC or a higher level of studies (29%). Little difference was noticed between MSWs and non-MSWs with regard to their literacy status. However, 5.9 percent of MSWs had never been to a formal school while nearly half than that percentage of non-MSWs reported that they had never been to a formal school. Four in ten of the MSM (42.5%) belonged to the upper cast group known as Brahmin, Chhetri or Thakuri, while around three in ten (36.5%) were from the disadvantaged janajatis groups (Rai/Limbu/ Gurung/Tamang/Magar). While not much difference was noticed in the caste/ethnicity composition between MSWs and non-MSWs, a higher proportion of MSWs (14.8%) represented relatively advantaged janajatis compared to non-MSWs (10.2%).

Table 3.4: Socio-demographical Characteristics

Socio-demographical Characteristics	MSW/TG SW		Non-MSW/TG SW		Total	
	N	%	N	%	N	%
Level of education						
Illiterate	8	5.9	5	1.9	13	3.3
Literate with no formal education	6	4.4	6	2.3	12	3.0
Primary	31	23.0	49	18.5	80	20.0
Secondary	61	45.2	118	44.5	179	44.8
SLC and above	29	21.5	87	32.8	116	29.0
Total	135	100.0	265	100.0	400	100.0
Caste/ethnicity						
Dalit	2	1.5	7	2.6	9	2.3
Disadvantaged Janajatis	52	38.5	94	35.5	146	36.5
Disadvantaged non-dalit	4	3.0	12	4.5	16	4.0

Socio-demographical Characteristics	MSW/TG SW		Non-MSW/TG SW		Total	
	N	%	N	%	N	%
Terai caste groups						
Muslim	1	.7	11	4.2	12	3.0
Relatively advantaged Janajatis	20	14.8	27	10.2	47	11.8
Upper caste groups	56	41.5	114	43.0	170	42.5
Total	135	100.0	265	100.0	400	100.0
Types of religion						
Hindu	108	80.0	209	78.9	317	79.3
Buddhist	18	13.3	42	15.8	60	15.0
Muslim			1	.4	1	.3
Christian	9	6.7	13	4.9	22	5.5
Total	135	100.0	265	100.0	400	100.0
please use short name for variable, not the whole questions						
Yes	32	23.7	51	19.2	83	20.8
No	103	76.3	214	80.8	317	79.3
Total	135	100.0	265	100.0	400	100.0

About 80 percent of the MSM were Hindus, 15 percent were Buddhists while 5.5 percent were Christians.

Overall, 20.8 percent of the MSM (23.7% MSWs and 19.2 percent non-MSWs) had lived away from home for one month or longer in the past year.

3.3 Occupation and Monthly Income of the MSM/TG

Respondents came from a variety of occupational backgrounds, ranging from farmers to civil servants. In total, a quarter of the MSM relied on wage labor as their main source of income (23%). More non-MSWs (27.2%) than MSWs (14.8%) were wage laborers. Likewise, 20.4 percent of non-MSWs were students compared to 11.9 percent of MSWs who were students. One in six of the MSM were employed in private companies (15.3%). Notably, 31.1 percent of MSWs cited sex work as their main source of income, while 9.1 percent of non-MSWs were businessmen compared to just three percent of the same occupational background amongst MSWs (3.7%).

Table 3.5: Occupational Background

Occupational Background	MSW/SW-TG		Non-MSW/Non SW-TG		Total	
	N	%	N	%	N	%
Student	16	11.9	54	20.4	70	17.5
Driver	4	3.0	11	4.2	15	3.8
Military			1	.4	1	.3
Other civil servant	2	1.5	2	.8	4	1.0
Businessman	5	3.7	24	9.1	29	7.3
Private company staff	19	14.1	42	15.8	61	15.3
Unemployed	5	3.7	17	6.4	22	5.5
Laborer/wage labor	20	14.8	72	27.2	92	23.0
Sex worker	42	31.1			42	10.5
Others	22	16.3	42	15.8	64	16.0
Total	135	100.0	265	100.0	400	100.0

The income of the respondents in the month preceding the survey ranged from less than 3000 to more than 10,000. However, the median income of MSWs in the month preceding the survey was higher (NRs 10,000) than non-MSWs (NRs. 8,000). About 6 percent of MSM made less than NRs. 3,000 and 35 percent of MSM had made more than 10,000; more MSWs (44.4%) than non-MSWs (30.2%) reported of earning more than 10,000.

Table 3.6: Sources of Income and Number of Dependents

Sources of Income and Number of Dependents	MSW/SW-TG		Non-MSW/Non SW-TG		Total	
	N	%	N	%	N	%
Last month's income in NRs.**						
None	5	3.7	61	23.0	66	16.5
<=3000	13	9.6	10	3.8	23	5.8
3001-6000	23	17.0	43	16.2	66	16.5
6001-10000	34	25.2	71	26.8	105	26.3
>10000	60	44.4	80	30.2	140	35.0
Median income	10,000		8,000.00		8,000.00	
Mean	11726.12		9292.77		10105.4	
Total	135	100.0	265	100.0	400	100.0
Income source of this money						
Sex work	113	86.9			113	33.8
Money from family	1	.8	6	2.9	7	2.1
Salaried job	35	26.9	83	40.7	118	35.3
Own business	7	5.4	27	13.2	34	10.2
Wage labor	27	20.8	97	47.5	124	37.1
Others			17	8.3	17	5.1
Total	130	100.0	204	100.0	334	100.0
Total no of dependents						
None	48	36.9	61	29.9	109	32.6
1-2	37	28.5	51	25.0	88	26.3
3-4	34	26.2	63	30.9	97	29.0
5-6	10	7.7	20	9.8	30	9.0
7+	1	.8	9	4.4	10	3.0
Total	130	100.0	204	100.0	334	100.0
Amount paid by last client (in NRs.)						
50-100	40	29.6	NA	NA	40	29.6
101-400	23	17.0	NA	NA	23	17.0
401-1000	50	37.0	NA	NA	50	37.0
1001-9000	22	16.3	NA	NA	22	16.3
Total	135	100.0	NA	NA	135	100.0

*Note: Multiple responses allowed. NA- Not applicable for non-MSWs

Most of the MSWs mentioned that their last month's income was from sex work (86.9%). In addition they had also received salary from their jobs (26.9% MSWs and 40.7% non-MSWs) and had been paid for working as wage laborers (47.5% MSWs and 20.8% non-MSWs). Very few MSM received money from their families in the month preceding the survey (2.1%).

One third of MSM did not have any dependents to look after (32.6%). 26 percent of the MSM had 1-2 dependents, while 41 percent of them had to take care of more than two dependents. The prices charged by MSWs to their clients varied from NRs. 50 to NRs. 9,000. More than one third of them had been paid between NRs. 401 to NRs. 1000 (37%), while more than a quarter (29.6%) had received between NRs. 50 and NRs. 100 from their last clients. Those MSWs who charged NRs. 1,001 to 9,000 to their clients were 16.3 percent.

MSWs/TG SWs' paying partners were from different professional backgrounds. Almost 15 percent of MSWs reported that their clients were mostly police/military men, while equal 11.1 percent said that their clients were mostly laborer and businessmen. Furthermore, 9.6 percent of the respondent reported their client were student and 7.4 and 2.2 percent of them had reported their client were civil servant and private office staff respectively. In addition, nearly four out of ten (42.2%) of MSWs/TG SWs were unknown about their clients' professional background as well (Annex - 7).

3.4 Prevalence of HIV and STIs

This chapter describes about the prevalence of HIV/STI among MSM in the Kathmandu Valley. Furthermore, it also shows the relationship between HIV and STI prevalence with selected variables.

3.4.1 Prevalence of HIV/STIs

Out of the total of 400 MSM/TG, 25 were HIV positive. MSW/TG-SW had found higher prevalence of HIV than non-MSW/TG Non-SW —16 out of 135 MSW/TG-SW and 9 out of 265 non-MSW/TG Non-SW were tested HIV positive.

Estimated Population Proportion was calculated using Respondent Driven Sampling Analysis Tool (RDSAT). Overall Estimated Proportion among MSM/TG was 3.8 and found higher in MSW/TG-SW (6.8) than Non-MSW/TG Non-SW (2.9). The percentage of respondents who had at least one of the following infections: HIV, active syphilis, anal and urethral Neisseria Gonorrhoea (NG) or anal and urethral Chlamydia Trachomatis (CT) in the Kathmandu Valley was 10.8, with a significantly high percentage among MSWs (18.5%) than non-MSWs (6.8%).

Table 3.7: HIV and STI Prevalence among MSM

STI infection	MSW/TG-SW		Non-MSW/TG Non-SW		MSM	
	N=135	%	N=265	%	N=400	%
HIV**	16	6.8 CI (1.6 – 1.8)	9	2.9 CI (1.2 – 5.0)	25	3.8 CI (2.0 – 6.0)
Active syphilis	3	2.2	-	-	3	0.8
Syphilis history	7	5.2	3	1.1	10	2.5
Chlamydia Trachomatis	4	3.0	8	3.0	12	3.0
NG	6	4.4	5	1.9	11	2.8
Any one STI*	25	18.5	18	6.8	43	10.8

* Any one STI include HIV, Current Syphilis, Anal CT and Anal NG

** Estimated Population Proportion may vary than Sample Population Proportion.

[Note: Sample Population Proportion calculates simple arithmetic calculation whereas Estimated Population Proportion calculates mainly on the basis of self-reported network size and sample recruitment]

The prevalence of active syphilis was 2.2 percent among MSWs and 0 percent among non-MSWs. Likewise, more MSWs had a history of syphilis (5.2%) compared to non-MSWs (1.1%). Both the MSW and non MSW had equal proportion of anal CT (3 percent each). Two percent of MSM in the Kathmandu Valley had anal NG, with a 4.4 percent prevalence among MSWs and 1.9 percent among non MSWs.

3.5 Use of Alcohol and Other Drug Use

Alcohol consumption and drug use are often associated with risky sexual behavior, leading to HIV and STI transmission. This section attempts to analyze the extent of drug use including drug injecting habits and alcohol consumption by MSM/TG in the Kathmandu Valley.

3.5.1 Alcohol Consumption Habits

It is apparent from Table 3.8 that the around one fifth of the MSW (17.8%) and non-MSM (20%) had not consumed alcohol while the remaining large majority of the respondents in both the categories had consumed alcohol at least once. The majority of these respondents had consumed alcohol even in the month preceding the survey. Among them, 44.3 percent had consumed alcohol at least once a week, while 9.9 percent had done so every day in the past month. Not much difference was noticed in alcohol consumption practice between MSWs and non-MSWs. Moreover, consumption of alcohol during last sex was reported by less number of respondents. For instance, nearly three fourth of the MSW (70.3%) and two third of the non-MSW (67.5%) said that they did not take any alcoholic drink during last sex. On the other 31.6 percent of respondents had consumed alcohol the last time they had sex; this included 32.5 percent of non-MSWs and 29.7 percent of MSWs (Table 3.8).

Table 3.8: Alcohol Consumption

Alcohol Consumption	MSW/SW-TG		Non-MSW/ Non SW-TG		Total	
	N	%	N	%	N	%
Ever consumed alcohol						
Yes	111	82.2	212	80.0	323	80.8
No	24	17.8	53	20.0	77	19.3
Total	135	100.0	265	100.0	400	100.0
Consumption of alcohol in last month						
Every day	14	12.6	18	8.5	32	9.9
3-4 days a week	20	18.0	35	16.5	55	17.0
At least once a week	46	41.4	97	45.8	143	44.3
Did not drink alcohol in the last month	29	26.1	62	29.2	91	28.2
Don't know	2	1.8			2	.6
Total	111	100.0	212	100.0	323	100.0
Consumption of alcohol during last sex						
Yes	33	29.7	69	32.5	102	31.6
No	78	70.3	143	67.5	221	68.4
Total	111	100.0	212	100.0	323	100.0

3.5.2 Other Drug Use and Drug Injecting Practice

Use of drug was reported by less number of respondents. Overall, 26.3 percent of the MSM had used drugs in the last year. A relatively higher proportion of non-MSWs (28.3%) than MSWs (22.2%) reported doing so. Among the different forms of drugs tried, Marijuana, locally known as *ganja*, was the most popular drug, used by 80 percent of respondents. Other oral/inhaled drugs used by the respondents are listed in Table 3.9. However, only a negligible percentage of respondents (2%) had tried intravenous drugs in the past 12 months (Table 3.9).

Table 3.9: Use of Illicit Drugs

Use of Illicit Drugs	MSW/SW-TG		Non-MSW/ Non SW-TG		Total	
	N	%	N	%	N	%
Used Illicit drugs in the past year						
Yes	30	22.2	75	28.3	105	26.3
No	105	77.8	190	71.7	295	73.8
Total	135	100.0	265	100.0	400	100.0
Ganja						
Yes	23	76.7	61	81.3	84	80.0
No	7	23.3	14	18.7	21	20.0
Total	30	100.0	75	100.0	105	100.0
Chares						
Yes	2	6.7	14	18.7	16	15.2
No	28	93.3	61	81.3	89	84.8
Total	30	100.0	75	100.0	105	100.0
Tablets						
Yes	4	13.3	16	21.3	20	19.0
No	26	86.7	59	78.7	85	81.0
Total	30	100.0	75	100.0	105	100.0
Glue/dendrite						
Yes			4	5.3	4	3.8
No	30	100.0	71	94.7	101	96.2
Total	30	100.0	75	100.0	105	100.0
Heroine						
Yes			3	4.0	3	2.9
No	30	100.0	72	96.0	102	97.1
Total	30	100.0	75	100.0	105	100.0
Others						
Yes	10	33.3	18	24.0	28	26.7
No	20	66.7	57	76.0	77	73.3
Total	30	100.0	75	100.0	105	100.0
Injected drugs in the past year						
Yes	3	2.2	5	1.9	8	2.0
No	132	97.8	260	98.1	392	98.0
Total	135	100.0	265	100.0	400	100.0

*Note: Multiple responses allowed

3.6 Sexual Behavior and Condom Use

3.6.1 Sexual Behavior

This chapter deals with the sexual behavior of MSM. It focuses particularly on sexual debut, risky sexual behavior, type and number of partners, as well as the use of condoms and lubricants in different sexual acts.

3.6.1.1 First Sexual Contact

Six in ten MSM (61%) had their sexual debut at a very young age, 16 years and below. Notably, 73.3 percent of MSWs had their first sexual contact at the age of 10-16 years compared to 54.7 percent of non-MSWs. Very few MSM (6.5%) said that their first sexual experience was after crossing 20 years of age. The rest of the MSM (32.5%) had their first sexual experience when they were between 17 and 20 years of age. The person or sex partner with whom most MSM had their first sexual encounter was a male (73.3%). Relatively high proportion of MSWs (81.5%) had their first sexual experience with a male partner than non-MSWs (69.1%).

Overall, 46.8 percent of MSM reported ever having sex with a male partner in exchange for money. Not all of these were MSWs: 52 non-MSWs (19.6%) also had at least one sexual contact in return for money in the past.

Table 3.10: Sexual Behavior and Sex Partners

Sexual Behavior and Sex Partners	MSW/SW-TG		Non-MSW/ Non SW-TG		Total	
	N	%	N	%	N	%
Age at first sex						
10-16	99	73.3	145	54.7	244	61.0
17-20	29	21.5	101	38.1	130	32.5
21-30	7	5.2	19	7.2	26	6.5
Total	135	100.0	265	100.0	400	100.0
Median	15		16		16	
Mean/Std. dev	15.24/3.08		16.27/2.84		15.92/2.96	
First sex partner						
Male	110	81.5	183	69.1	293	73.3
Female	25	18.5	82	30.9	107	26.8
Total	135	100.0	265	100.0	400	100.0
Ever had sex with a male in exchange for money						
Yes	135	100.0	52	19.6	187	46.8
No			213	80.4	213	53.3
Total	135	100.0	265	100.0	400	100.0
Age at first sex with a male in exchange for money						
12-16	27	20.0	10	19.2	37	19.8
17-20	73	54.1	27	51.9	100	53.5
21-31	35	25.9	15	28.8	50	26.7
Median age	19		18		19	
Mean/Std.dev	19.20/3.63		19.56/3.61		19.30/3.61	
Total	135	100.0	52	100.0	187	100.0
Time of last sex with male/in exchange for money						
Within last 7 days	103	76.3	-	-	103	55.1
8-15 days	11	8.1	-	-	11	5.9
16-30 days	9	6.7	-	-	9	4.8
31-60 days	7	5.2	-	-	7	3.7
60 days-1 year	5	3.7	-	-	5	2.7
Before 1 year	-	-	52	100.0	52	27.8
Total	135	100.0	52	100.0	187	100.0

Around one-fifth of the MSM (19.8%) had sold sex for the first time between the ages of 12-16 years. The median age for starting to exchange sex for money was 25 years among MSWs and 24 years among non-MSWs. More than half of those who had sex with a male partner in exchange for money were 17 to 20 years old at the time of their first such sexual encounter (53.5%).

A total of 76.3 percent of MSWs had last exchanged sex for money in the past week preceding the survey. While 8.1 percent of MSWs had had sex in exchange for money 8-15 days before the survey, 3.7 percent of them had done so over 2 months prior to the survey.

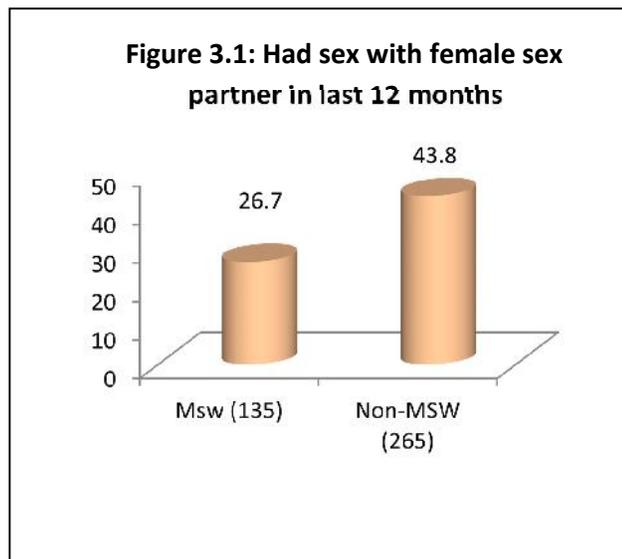
3.6.1.2 Sex Partners of MSM and TG

This study made efforts to cover as many different types of sex partners of MSM as possible. Six types of sex partners were cited by MSM. These are (1) non-paying male, (2) non-paying female, (3) one-time paying male, (4) regular paying male, (5) paid male and (6) paid female partners. This section deals with information on number of different types of sex partners respondents had in the month preceding the

Table 3.11: Different types of sex partners

Different types of sex partners	MSW/SW-TG	Non-MSW/Non SW-TG	Total
Mean Number of non-paying male sex partner	3.4	3.2	3.3
Mean Number of non-paying female sex partner	.6	.6	.6
Mean Number of one-time paying male sex partner	7.4	.0	2.5
Mean Number of regular paying male sex partner	5.2	.0	1.8
Mean Number of paid male sex partner	.9	.5	.6
Mean Number of paid female sex worker	.0	.1	.1

While all of the study participants had had sex with a male partner in the past year, 26.8 percent of them had sexual contact with female partners too. A larger proportion of non-MSWs (43.8%) than MSWs (26.7%) have had sexual contact with female partner in the past year (Figure 3.1).



Sex Partners in the Past Month

Non-paying Partners

The survey made an effort to assess the sexual practices of the respondents in the month preceding the survey. 75 percent of the MSM who participated in the survey had sex with a non-paying male partner in the last month, while 56 percent had also sex with a non-paying female sex partner in the last month (Table 3.13).

It is interesting to note that there is little difference between MSWs and non-MSWs in terms of the number of non-paying male partners.

Paying Partners

The paying partners of MSWs were categorized as one-time paying partners and regular paying partners. While 21.5 percent of MSWs did not have a one-time paying sexual partner, 26.7 percent of MSWs did not have a regular paying male sex partner in the past month. On the other hand, 31.1 percent had more than five one-time paying male sex partners while 30.4 percent of them had more than five regular paying sex partners in the month preceding the survey (Table 3.12).

Table 3.12: Number of Different Types of Sex Partners in the past month

Number of Different Types of Sex Partners in the past month	MSW/SW-TG		Non-MSW/ Non SW-TG		Total	
	N	%	N	%	N	%
Number of non-paying male sex partner						
None	45	33.3	55	20.8	100	25.0
One	28	20.7	61	23.0	89	22.3
Two-Five	43	31.9	104	39.2	147	36.8
>Five	19	14.1	45	17.0	64	16.0
Total	135	100.0	265	100.0	400	100.0
Number of non-paying female sex partner						
None	15	41.7	52	44.8	67	44.1
One	20	55.6	56	48.3	76	50.0
Two-Five	1	2.8	8	6.9	9	5.9
Total	36	100.0	116	100.0	152	100.0
Number of one-time paying male sex partner						
None	29	21.5	-	-	29	7.3
One	25	18.5	-	-	25	6.3
Two-Five	39	28.9	-	-	39	9.8
>Five	42	31.1	-	-	42	10.5
NA			265	100.0	265	66.3
Total	135	100.0	265	100.0	400	100.0
Number of regular paying male sex partner ^						
None	36	26.7	-	-	36	9.0
One	12	8.9	-	-	12	3.0
Two-Five	46	34.1	-	-	46	11.5
>Five	41	30.4	-	-	41	10.3
NA			265	100.0	265	66.3
Total	135	100.0	265	100.0	400	100.0
Number of paid male sex partner ^^						
None	105	77.8	212	80.0	317	79.3
One	9	6.7	17	6.4	26	6.5
Two-Five	14	10.4	32	12.1	46	11.5
>Five	7	5.2	4	1.5	11	2.8
Total	135	100.0	265	100.0	400	100.0
Number of paid female sex worker ^^^						
None	133	98.5	251	94.7	384	96.0
One	1	.7	7	2.6	8	2.0
Two-Five	1	.7	5	1.9	6	1.5
>Five			2	.8	2	.5
Total	135	100.0	265	100.0	400	100.0

Paid Sex Partners

Twenty percent of MSM had paid for sex with male partners, while 4 percent of them had paid for sex with female partners in the past month. Comparatively, more MSWs than non-MSWs had paid for male sex partner while more non-MSW than MSW had paid for female sex partner

About 20 percent of the MSM taking part in the survey had more than one paid male sex partner in the past month. On the other hand, 4 percent of the MSM had sex with more than one female sex worker in the past month.

The study participants visited different sites to meet their sex partners. Some of the most commonly visited sites in the past six months have been listed in Annex - 8.

3.6.1.3 Anal and Oral Sex Partners

The predominant sex practice among MSM is anal sex, followed by oral sex. Almost all MSM had practiced anal sex (96.8%) and 91 percent had performed oral sex in the past month. At the same time, 91 percent of MSM had performed both oral and anal sex in the month preceding the survey. Cent percent of non-MSW had performed such sexual acts in the past month (Table 3.13).

Table 3.13: Type of Sexual Contact with Male Partners in the Past Month

Sexual Contact with Male Partners in the Past Month	MSW/SW-TG		Non-MSW/Non SW-TG		Total	
	N	%	N	%	N	%
Anal sex with male						
Yes	122	90.4	265	100.0	387	96.8
No	13	9.6			13	3.3
Total	135	100.0	265	100.0	400	100.0
Oral sex male						
Yes	100	74.1	265	100.0	365	91.3
No	35	25.9			35	8.8
Total	135	100.0	265	100.0	400	100.0
Anal and Oral sex with male						
Yes	99	73.3	265	100.0	364	91.0
No	36	26.7			36	9.0
Total	135	100.0	265	100.0	400	100.0

Anal sex partners of MSW in the past month consists of, non-paying males (97.8%), one-time paying males (99.1%), paying regular males (100%) and paid males (98.8%) (Table 3.14).

On the other hand, the anal sex partners of non-MSWs in the past month consisted of non-paying male partners (93.8%) and paid male partners (98.1%).

The respondents mostly had more than one male anal sex partner in the previous month (Table 3.14).

Table 3.14: Number of Different Types of Anal Sex Partners in the Past Month

Different Types of Anal Sex Partners in the Past Month	MSW/SW-TG		Non-MSW/ Non SW-TG		Total	
	N	%	N	%	N	%
Number of non-paying male anal sex partner						
None	2	2.2	13	6.2	15	5.0
One	30	33.3	64	30.5	94	31.3
More than one	58	64.4	133	63.3	191	63.7
Total	90	100.0	210	100.0	300	100.0
Number of one-time paying male anal sex partner						
None	1	.9	-	-	1	.3
One	27	25.5	-	-	27	7.3
More than one	78	73.6	-	-	78	21.0
NA			265	100.0	265	71.4
Total	106	100.0	265	100.0	371	100.0
Number of regular paying male anal sex partner						
One	18	18.4	-	-	18	5.0
More than one	80	81.6	-	-	80	22.0
NA	-	-	265	100.0	265	73.0
Total	98	100.0	265	100.0	363	100.0
Number of paid male anal sex partner						
None	-	-	1	1.9	1	1.2
One	9	30.0	16	30.2	25	30.1
More than one	21	70.0	36	67.9	57	68.7
Total	30	100.0	53	100.0	83	100.0

MSWs also had oral sex with (a) one-time paying male (57.7%) and (b) regular paying male (57%) partners in the past month. Around two fifth MSWs had oral sex with more than one paying male partner (40.7%) and regular paying (45.9%) partner in the past month. Besides, 40 percent of them had also performed sexual activities other than oral/anal penetration to bring their partners to orgasm.

Table 3.15: Oral Sex with Different Paying Partners in the Past Month

Oral Sex with Different Paying Partners in the Past Month	MSW/SW-TG		Non-MSW/ Non SW-TG		Total	
	N	%	N	%	N	%
Number of one time paying male oral sex partner						
None	57	42.2	-	-	57	42.2
One	23	17.0	-	-	23	17.0
More than one	55	40.7	-	-	55	40.7
Total	135	100.0	-	-	135	100.0
Number of paying regular male oral sex partner						
None	58	43.0	-	-	58	43.0
One	15	11.1	-	-	15	11.1
More than one	62	45.9	-	-	62	45.9
Total	135	100.0	-	-	135	100.0
Brought one time or regular paying male sex partner to orgasm without penetration						
Yes	54	40.0	-	-	54	13.5
No	45	33.3	-	-	45	11.3
Didn't have paying partner	36	26.7	-	-	36	9.0
NA	-	-	265	100.0	265	66.3
Total	135	100.0	265	100.0	400	100.0

3.6.1.4 Types of Sex Role with Sex Partners

In this study, MSM/TG in Kathmandu were also asked about the sex role they performed in the month prior to interview. They were asked specifically about their roles in anal and oral sex acts.

Table 3.16: Sexual Role among surveyed MSM/TG

Sexual Role among surveyed MSM/TG	MSW/SW-TG		Non-MSW/ Non SW-TG		Total	
	N	%	N	%	N	%
Role performed in anal sex						
All receptive'	33	24.4	121	45.7	154	38.5
All insertive	71	52.6	50	18.9	121	30.3
Mostly receptive	1	.7	8	3.0	9	2.3
Mostly insertive	10	7.4	8	3.0	18	4.5
Equally receptive and insertive	9	6.7	32	12.1	41	10.3
Didn't remember	11	8.1	46	17.4	57	14.3
Total	135	100.0	265	100.0	400	100.0
Role performed in oral sex						
All receptive	25	18.5	92	34.7	117	29.3
All insertive	54	40.0	43	16.2	97	24.3
Mostly receptive	1	.7	8	3.0	9	2.3
Mostly insertive	11	8.1	8	3.0	19	4.8
Equally receptive and insertive	9	6.7	30	11.3	39	9.8
Didn't have oral sex in the past month	35	25.9	84	31.7	119	29.8
Total	135	100.0	265	100.0	400	100.0

Type of Anal Sex Act: 38 percent of the respondents had performed exclusively receptive role while 30 percent had performed an exclusively insertive anal sex. One in seven (14.3%) had not remembered the sexual roles in the past month while one in ten had performed both insertive and receptive sexual roles in the past month (10.3%).

Comparatively, more MSWs than non-MSWs (52.6% MSWs and 18.9% non-MSWs) had performed an exclusively insertive role, while more non-MSWs than MSWs (45.7% MSWs and 24.4% non-MSWs respectively) had practiced an exclusively receptive role in the anal sex in the month preceding the survey.

Type of Oral Sex Act: Nearly 29.8 percent of MSM reported not being involved in oral sex in the last month. While 24.3 percent had performed exclusively insertive oral sex and 29.3 percent had performed only a receptive role, 9.8 percent of respondents were engaged in both insertive and receptive oral sex in the past month.

As in anal sex, more MSWs than non-MSWs (40%, MSWs and 16.2% non-MSWs) had played insertive roles and more non-MSWs than MSWs (34.7% non-MSWs and 18.5% MSWs) had performed receptive roles in oral sex in the month preceding the survey.

3.6.1.5 Type of Different Partners at First Sex and Last Sex Acts

This survey also collected information about the partners at first and last sexual contact. More than two third of MSM (68.6%) have had their first sexual intercourse with a non- paying male partner, while one fourth (24.3%) had a non-paying female as their first sex partner. A relatively larger proportion of MSWs (74.8%) than non-MSWs (65.4%) had had their first sexual contact with a non-paying male partner. On the other hand, more non-MSWs (28.6%) had their first sexual encounter

with a non-paying female partner than MSWs (16.3%).

Overall, 49.7 percent of MSM reported that their last sex partner was a non-paying male. Non-MSWs mostly had their last sexual contact with a non-paying male partner (66.3%) while most MSWs last sexual encounter was with male clients (80%).

Table 3.17: First and Last Sex Partners

First and Last Sex Partners	MSW/SW-TG		Non-MSW/ Non SW-TG		Total	
	N	%	N	%	N	%
First sex partner						
Non-paying male partner	101	74.8	170	65.4	271	68.6
Non-paying female partner	22	16.3	74	28.5	96	24.3
Male client	9	6.7	3	1.2	12	3.0
Female client	-	-	1	.4	1	.3
Paid male sex worker	3	2.2	6	2.3	9	2.3
Paid female sex worker (FSW)			6	2.3	6	1.5
Total	135	100.0	260	100.0	395	100.0
Last sex partner						
Non-paying male partner	24	17.8	173	66.3	197	49.7
Non-paying female partner	3	2.2	33	12.6	36	9.1
Male client	108	80.0	-		108	27.3
Paid male sex worker	-	-	51	19.5	51	12.9
Paid female sex worker (FSW)	-	-	4	1.5	4	1.0
Total	135	100.0	261	100.0	396	100.0

Female partners, non-paying, paying as well as paid by the respondents, were the last sex partners for 10.1 percent of MSM. More non-MSWs (14.1%) than MSWs (2.2%) had their last sexual encounter with a female partner (Table 3.17).

Half of the respondents had their last act of anal intercourse with a non-paying male partner (49.7%); this included 66.3 percent of non-MSWs and 17.8 percent of MSWs. Four out of five MSWs had their last anal sex act with a male client (80%). Additionally, 19.5 percent non-MSWs had their last anal sex act with a paid male partner.

3.6.2 Condom Use Behavior of MSM/TG

3.6.2.1 Consistent Condom Use behavior

This section deals with condom using behavior among MSM. Table 3.18 shows condom use at sexual debut and during the last sex act with either a male or female partner. One third of MSM had used condom at their first sexual debut (36.5%). However, more MSM (84.8%) had used condom in their last sexual contact. About 90 percent MSWs had used condoms during last sex compared to 81.9 percent non-MSWs reporting so.

Most of the MSM had used condom in their last anal sex (86.9%). Higher proportion of MSW (90.4%) than non-MSW (85.1%) reported of using condom in their last anal sex.

Table 3.18: Condom Use behaviors with First and Last Sex Partners

Condom Use behaviors with First and Last Sex Partners	MSW/SW-TG		Non-MSW/ Non SW-TG		Total	
	N	%	N	%	N	%
Used condom in first sex						
Yes	39	28.9	107	40.4	146	36.5
No	96	71.1	156	58.9	252	63.0
Didn't remember			2	.8	2	.5
Total	135	100.0	265	100.0	400	100.0
Used condom in last sex						
Yes	122	90.4	217	81.9	339	84.8
No	13	9.6	47	17.7	60	15.0
Didn't remember			1	.4	1	.3
Total	135	100.0	265	100.0	400	100.0

Three types of sex practices anal, oral and vaginal, with different partners were reported by the respondents. Table 3.18 depicts the condom use behavior of MSM during their last act of sex with different type of sex partners. Since MSWs and non- MSWs have different type of sex partners, their condom using practices have been discussed in separate sections.

MSWs and Condom Use in the Last Act of Sex

Of the four types of different male sex partners of MSWs; (1) non-paying (2) one- time paying (3) regular paying and (4) paid partner; the highest percent of condom use during the last act of anal sex was with a regular male client (94.9%) followed by paid male sex partner (93.3%) and one time male client (91.4%).

The majority of MSWs had also used a condom the last time they had anal sex with one time male partners (91.4%) and nonpaying male sex partner (81.8%).

Of the 21 MSWs who had had sex with non-paying female sex partners, 9 (42.9%) had used a condom the last time they had sex with them. At the same time, 2 MSWs who had sex with paid female sex partners in last month had used condoms.

Table 3.19: Use of Condom in the Last Sex with Different Sex Partners

Use of Condom in the Last Sex with Different Sex Partners	MSW/SW-TG		Non-MSW/ Non SW-TG		Total	
	N	%	N	%	N	%
Used condom in the last anal sex with non-paying male sex partner						
Yes	72	81.8	171	86.8	243	85.3
No	16	18.2	25	12.7	41	14.4
Don't know			1	.5	1	.4
Total	88	100.0	197	100.0	285	100.0
Used the condom in the last sex with one time paying male sex partner						
Yes	96	91.4			96	25.9
No	9	8.6			9	2.4
NA			265	100.0	265	71.6
Total	105	100.0	265	100.0	370	100.0
Used condom in the last anal sex with regular paying male sex partner						
Yes	93	94.9			93	25.6

Use of Condom in the Last Sex with Different Sex Partners	MSW/SW-TG		Non-MSW/ Non SW-TG		Total	
	N	%	N	%	N	%
No	5	5.1			5	1.4
NA			265	100.0	265	73.0
Total	98	100.0	265	100.0	363	100.0
Used condom in the last vaginal/anal/oral sex with non-paying female sex partner						
Yes	9	42.9	28	43.8	37	43.5
No	12	57.1	36	56.3	48	56.5
Total	21	100.0	64	100.0	85	100.0
Used condom in the last anal sex with paid male sex partner						
Yes	28	93.3	47	90.4	75	91.5
No	2	6.7	5	9.6	7	8.5
Total	30	100.0	52	100.0	82	100.0
Used condom in the last sex with paid female sex partner in the last month						
Yes	2	100.0	11	84.6	13	86.7
No	-	-	2	15.4	2	13.3
Total	2	100.0	13	100.0	15	100.0

NA- Not applicable for non-MSWs

Non-MSWs and Condom Use in the Last Act of Sex

Overall, condom use in the last act of anal sex was higher with paid male sex partners (90.4%) than with non-paying male sex partners (86.8%). Condom use with non-paying female sex partners was comparatively low, with 43.8 percent using condoms the last time they had sex with them; a relatively higher proportion (84.6%) had used a condom the last time they had sex with a paid female partner (Table 3.20).

As these findings indicate, MSWs as well as non-MSWs and with male paid partners than with their non-paying female partners, which put their wives or girlfriends at risk of contracting HIV and STIs. Overall, 86.9 percent of the MSM had used a condom in last anal sex with their male sex partner (90.4% MSWs and 85.1% non-MSWs). However, only 51.5 percent of the MSM had used a condom the last time they had oral sex with their male partners. More MSWs (59.3%) than non-MSWs (47.5%) had used a condom in the last act of oral sex Table 3.20.

Table 3.20: Condom using practice of MSM/TG with different types of sex partners

Condom using practice	MSW/SW-TG		Non-MSW/ Non SW-TG		Total	
	N	%	N	%	N	%
Used condom in last anal sex with male partner						
Yes	122	90.4	223	85.1	345	86.9
No	13	9.6	38	14.5	51	12.8
Didn't remember	-	-	1	.4	1	.3
Total	135	100.0	262	100.0	397	100.0
Used condom in last oral sex with male partner						
Yes	80	59.3	126	47.5	206	51.5
No	50	37.0	133	50.2	183	45.8
Didn't remember	5	3.7	6	2.3	11	2.8
Total	135	100.0	265	100.0	400	100.0

3.6.2.2 Consistent Condom Use with Different Type of Sex Partners

The MSM who had sexual intercourse in the last month were asked questions on consistent condom use. Overall *consistent condom use* was the highest with regular paid male anal sex partners (85.7%) among MSWs and with paid female sex partners (84.6%) among non-MSWs in the month preceding the survey.

Table 3.21: Consistent Use of Condom with Different Sex Partners in Past Month

Consistent Use of Condom with Different Sex Partners in Past Month	MSW/SW-TG		Non-MSW/ Non SW-TG		Total	
	N	%	N	%	N	%
Used condom with non-paying male anal sex partner						
Always	61	69.3	146	74.1	207	72.6
Not always	27	30.7	51	25.9	78	27.4
Total	88	100.0	197	100.0	285	100.0
Used condom with one-time paying male anal sex partner						
Always	88	83.8	-	-	88	83.8
Not always	17	16.2	-	-	17	16.2
Total	105	100.0	-	-	105	100.0
Used condom with regular paying male anal sex partner						
Always	84	85.7	-	-	84	85.7
Not always	14	14.3	-	-	14	14.3
Total	98	100.0	-	-	98	100.0
Used condom with paid male anal sex partner						
Always	23	76.7	38	73.1	61	74.4
Not always	7	23.3	14	26.9	21	25.6
Total	30	100.0	52	100.0	82	100.0
Used condom in vaginal/oral/anal sex with non-paying female sex partner						
Always	8	38.1	22	34.4	30	35.3
Not always	13	61.9	42	65.6	55	64.7
Total	21	100.0	64	100.0	85	100.0
Used condom with paid female sex partner						
Always	2	100.0	11	84.6	13	86.7
Not always			2	15.4	2	13.3
Total	2	100.0	13	100.0	15	100.0

MSWs and Consistent Condom Use in Past Month

Consistent condom use by MSWs with different types of male sex partners was as high as 100 percent with paid female partners. The consistent use of condoms was lowest at 38.1 percent for non-paying female sex partner. Around eight in ten MSWs (83.8%) had used condoms consistently with one-time paying male partners, while around seven in ten (76.7%) had consistently used condoms with paying male anal sex partners in the past month. Additionally, 69.3 percent of MSWs had been consistent condom users with non-paying male anal sex partners in the month preceding the survey (Table 3.21).

Non-MSWs and Consistent Condom Use in Past Month

Partner-wise, 84.6 percent of non-MSWs had used condoms consistently with paid female partners, compared to 73.1 percent of them who had used condoms consistently with paid male anal sex partners in the past month. At the same time, 74.1 percent of those non-MSWs who had had sex with non-paying male anal sex partners in the last month had used condoms consistently with them. However, consistent condom use was relatively low with non-paying female sex partners (34.4%) in the past month (Table 3.21).

3.6.2.3 Availability of Condoms and Brand Names

All the MSM could identify a condom. The table below describes the availability of condoms. Only about a third of the MSM (27.8%) were carrying condoms with them at the time of the interview. The majority of MSM (91.8%) said they could get a condom when they needed one. The reasons given by those MSM who reported not being able to get condoms when necessary (7%) were: not wanting to carry a condom around with them (75%), shop/pharmacy too far away (67.9%) or was closed (60.7%), cost too much (21.4%) and feeling awkward buying a condom (10.7%).

Table 3.22: Condom Possession and its Availability

Condom Possession and its Availability	MSW/SW-TG		Non-MSW/ Non SW-TG		Total	
	N	%	N	%	N	%
Can identify male condom						
Yes	135	100.0	263	99.2	398	99.5
No			2	.8	2	.5
Total	135	100.0	265	100.0	400	100.0
Possess a condom at the time of interview						
Yes	43	31.9	68	25.7	111	27.8
No	92	68.1	197	74.3	289	72.3
Total	135	100.0	265	100.0	400	100.0
Can have condom whenever needed						
Yes	125	92.6	242	91.3	367	91.8
No	8	5.9	20	7.5	28	7.0
Don't need one	2	1.5	3	1.1	5	1.3
Total	135	100.0	265	100.0	400	100.0
Reason for not being able to have condom when needed *						
Cost too much			6	30.0	6	21.4
Shop/pharmacy too far away	5	62.5	14	70.0	19	67.9
Shops/pharmacies closed	7	87.5	10	50.0	17	60.7
Shy to buy condom	2	25.0	1	5.0	3	10.7
Don't want to carry condom	7	87.5	14	70.0	21	75.0
Others	1	12.5	1	5.0	2	7.1
Total	8	100.0	20	100.0	28	100.0
Received condom from an outreach service, drop-in centre or sexual health clinic						
Yes	121	89.6	197	75.2	318	80.1
No	14	10.4	65	24.8	79	19.9
Total	135	100.0	262	100.0	397	100.0
Source of last obtained condom						
Shop	1	.7	2	.8	3	.8
Pharmacy	18	13.4	71	27.0	89	22.4
Health facility	3	2.2	3	1.1	6	1.5
Friends	9	6.7	24	9.1	33	8.3
BDS drop-in center	20	14.9	31	11.8	51	12.8
BDS field workers	23	17.2	57	21.7	80	20.2
Parchaya Samaj	17	12.7	32	12.2	49	12.3
Cruisedes	40	29.9	36	13.7	76	19.1
Never received condom	1	.7	2	.8	3	.8
Didn't remember	2	1.5	5	1.9	7	1.8
Total	134	100.0	263	100.0	397	100.0
Price for last condom (NRs.)						
Free	17	47.2	36	32.1	53	35.8

Condom Possession and its Availability	MSW/SW-TG		Non-MSW/ Non SW-TG		Total	
	N	%	N	%	N	%
Re. 1			4	3.6	4	2.7
2-5	2	5.6	13	11.6	15	10.1
6-10	7	19.4	13	11.6	20	13.5
11 +	10	27.8	46	41.1	56	37.8
Total	36	100.0	112	100.0	148	100.0
Median	3		10		8	
Mean	9.19		17.72		15.69	
Most preferred condom brand						
Dhal	4	3.0	15	5.7	19	4.8
Panther	17	12.6	22	8.3	39	9.8
Number one	17	12.6	32	12.1	49	12.3
Jodi	7	5.2	34	12.8	41	10.3
Kamsutra	1	.7	8	3.0	9	2.3
Black cobra	59	43.7	89	33.6	148	37.0
Others	5	3.7	18	6.8	23	5.8
Don't remember/Don't know	25	18.5	47	17.7	72	18.0
Total	135	100.0	265	100.0	400	100.0

**Note: Percentages add up to more than 100 because of multiple responses*

Overall, 80.1 percent MSM (89.6% MSWs and 75.2% non-MSWs) had received condom from an outreach service, DIC or a health facility in the past year. Regarding the source of their most recent condom, 22.4 percent of MSM had bought it from pharmacy, 20.2 percent had received it from a Blue Diamond Society (BDS) field workers, while another 19.1 percent got it from Cruisedes. Others had obtained their most recent condom from friends, from Parichaya Samaj, the BDS drop-in center and health facilities center (Table 3.22)

While 35.8 percent of MSM had received their last condom free of cost, 10.1 percent had paid Rs. 2-5, and 13.5 percent had paid Rs 6-10 for one condom and 37.8 percent paid more than 10 rupees. Notably, a larger proportion of MSWs (47.2%) had obtained free condoms than non-MSWs (69.2%).

The most preferred brand of condom was Cobra (28.3%) followed by Number One (25%). Other preferred brands were condoms distributed by the Ministry of Health/ Nepal, Jodi and Panther.

Use of Lubricant

Overall, 78.8 percent of the MSM had used lubricant during anal sex. More MSWs (90.4%) than non-MSWs (72.8%) had used lubricant during anal sex. The most common lubricant used by them was water based lubricants (85,4%).

The majority of respondents (91.7%) had used condoms with lubricant during their last act of anal sex; this included 91.8 percent of MSWs and 91.7 percent of non- MSWs.

The MSM were asked if they have heard about specially made lubricant (branded lubricant) for use with condoms. Ninety one percent of the MSM reported of heard of such lubricant but only 36.1 percent could cite the brand name. Comparatively, more MSWs (94.3%) than non-MSWs (89.1%) had heard of branded lubricant. Water base lubricant (43.2%) followed by Black Cobra (40.8%) was the most recalled brand name.

Over three fifth of those MSM (63.4%) who had heard of specially made lubricant had used them in anal sex during last month. A higher percentage of MSWs (66.9%) had used lubricants with condoms than non-MSWs (60.7%).

Those who had never used lubricants or did not use lubricant consistently stated they did not consider the use of lubricants necessary (36.4%). A higher proportion of non-MSWs (40.8%) than MSWs (26.2%) gave this reason for not using lubricant. Lack of knowledge on where to find it (35%), shy to buy it (27.9%), unaware of such product were other reasons cited for not using such lubricant by the MSMs (Table 3.23).

Almost all MSM who used lubricant reported that it decreased pain/inflammation during sexual contact (99.4%). At the same time, 56.1 percent also perceived that use of lubricant decreased the risk of condom breakage while 16.7 percent had the misconception that they could avoid HIV transmission with the use of lubricant.

Table 3.23: Use of Lubricant

Use of Lubricant	MSW/SW-TG		Non-MSW/ Non SW-TG		Total	
	N	%	N	%	N	%
Ever used lubricant in anal sex						
Yes	122	90.4	193	72.8	315	78.8
No	13	9.6	72	27.2	85	21.3
Total	135	100.0	265	100.0	400	100.0
Types of lubricant used in the last anal sex						
Saliva	4	3.3	13	6.7	17	5.4
Oil			3	1.6	3	1.0
Water based lube	111	91.0	158	81.9	269	85.4
Antiseptic/antibiotic cream	3	2.5	1	.5	4	1.3
Ghee	-	-	1	.5	1	.3
Cream/lotion	-	-	2	1.0	2	.6
Others	1	.8	6	3.1	7	2.2
Don't know/remember	3	2.5	9	4.7	12	3.8
Total	122	100.0	193	100.0	315	100.0
Used condom with lubricant in the last anal sex						
Yes	112	91.8	177	91.7	289	91.7
No	10	8.2	16	8.3	26	8.3
Total	122	100.0	193	100.0	315	100.0
Heard of lubricant that is specially used with condom						
Yes	115	94.3	172	89.1	287	91.1
No	7	5.7	21	10.9	28	8.9
Total	122	100.0	193	100.0	315	100.0
Know brand name of lubricant						
Yes	45	39.1	59	34.1	104	36.1
No	70	60.9	114	65.9	184	63.9
Total	115	100.0	173	100.0	288	100.0
Brand Name of Lubricant						
Black cobra	33	28.7	84	48.8	117	40.8
Water base lubricant	61	53.0	63	36.6	124	43.2
Number 1	13	11.3	11	6.4	24	8.4
KY Jelly	7	6.1	12	7.0	19	6.6
Zycolin	1	.9	2	1.2	3	1.0

Total	115	100.0	172	100.0	287	100.0
Frequency of use of special lubricant with condom in anal sex in the past month						
Every time	79	66.9	91	60.7	170	63.4
Sometimes or Never	29	24.6	59	39.3	88	32.8
Did not have anal sex in the past month	10	8.5			10	3.7
Total	118	100.0	150	100.0	268	100.0
Reason for occasional or no use of lubricant *						
Cost too much	5	11.9	2	2.0	7	5.0
Shy to buy lubricant	15	35.7	24	24.5	39	27.9
Don't know where to obtain	16	38.1	33	33.7	49	35.0
I do not need to use	11	26.2	40	40.8	51	36.4
I use other cream	1	2.4			1	.7
Not aware of such products	6	14.3	22	22.4	28	20.0
Others	3	7.1			3	2.1
Don't know			1	1.0	1	.7
Total	42	100.0	98	100.0	140	100.0
Purpose of using lubricant *						
Decrease pain/inflammation	124	101.6	186	97.9	310	99.4
Increase feeling/stamina	27	22.1	27	14.2	54	17.3
Decrease risk of condom breakage	75	61.5	100	52.6	175	56.1
Prevent HIV/AIDS infection	23	18.9	29	15.3	52	16.7
Others	5	4.1	16	8.4	21	6.7
Don't know	1	.8	1	.5	2	.6
Total	122	100.0	190	100.0	312	100.0

*Multiple responses allowed

** Water based lubricants are those that are distributed by organizations providing services to MSM, they come in sealed packs with water based lubricant written on it.

3.6.3 Knowledge and Use of Condoms

The entire survey participant knew about condom. Overall 86.9 percent of MSM/TG had used condom in last anal sex with their male sex partner. Table 3.24 reveals that 90.4 MSW/TG-SW and 85.1 percent of Non-MSW/TG non-SW had used condom in last anal sex with their male sex partner.

Table 3.24: Knowledge and use of condoms

Use of condom in last anal sex with male sex partner	MSW/TG-SW		Non-MSW/TG Non-SW		MSM/TG	
	N	%	N	%	N	%
Yes	122	90.4	223	85.1	345	86.9
No	13	9.6	38	14.5	51	12.8
Didn't remember	-	-	1	.4	1	.3
Total	135	100.0	262	100.0	397	100.0

Table 3.25: Sources of Condoms and Lubricants

Sources of Condoms and Lubricants	MSW/SW-TG		Non-MSW/Non SW-TG		Total	
	N	%	N	%	N	%
Shop	12	8.9	23	8.7	35	8.8
Pharmacy/Medical hall	75	55.6	173	65.3	248	62.0
Bar/Guest House/Hotel			1	.4	1	.3
BDS drop-in center	35	25.9	28	10.6	63	15.8
BDS field workers	39	28.9	65	24.5	104	26.0

Parichaya Samaj	19	14.1	33	12.5	52	13.0
Cruise Aids	33	24.4	35	13.2	68	17.0
Others	11	8.1	27	10.2	38	9.5
Don't know	1	.7	1	.4	2	.5
Total	135	100.0	265	100.0	400	100.0

*Note: Percentages add up to more than 100 because of multiple responses

3.6.4 Problems in Using Condoms and Lubricants

While the majority of condom users (84.7%) did not face any problem while using lubricant with condoms, some MSM mentioned that they encountered certain problems like irritation/burning sensation (10.2%), condom slippage (1.6%) and condom breakage (0.6%) while using lubricant with condoms (Table 3.26).

Table 3.26: Problem Encountered in Using Lubricant with Condom

Problem Encountered in Using Lubricant with Condom	MSW/SW-TG		Non-MSW/ Non SW-TG		Total	
	N	%	N	%	N	%
Types of problem encountered in using lubricant						
Condom slippage	3	2.5	2	1.0	5	1.6
Irritation or burning sensation	18	14.8	14	7.3	32	10.2
Condom breakage	1	.8	1	.5	2	.6
No problem	96	78.7	170	88.5	266	84.7
Others	3	2.5	5	2.6	8	2.5
Don't know	1	.8	-	-	1	.3
Total	122	100.0	192	100.0	314	100.0
Condom broke during sex in the past month						
Yes	43	31.9	37	14.0	80	20.1
No	92	68.1	227	86.0	319	79.9
Total	135	100.0	264	100.0	399	100.0
Perceived reason for condom breakage						
Use of oil based lubricant	-	-	1	2.9	1	1.3
Improper use of condom	28	68.3	23	67.6	51	68.0
Others	11	26.8	6	17.6	17	22.7
Don't know	2	4.9	4	11.8	6	8.0
Total	41	100.0	34	100.0	75	100.0

Twenty percent of the respondents have had condom breakage during sexual contact in the last month. Most of the respondents (68%) perceived that the breakage was caused by improper use of the condom. The majority of the respondents (62%) preferred to buy condoms and lubricants from a pharmacy whilst BDS field workers were the next preferred suppliers of condoms for 26 percent of them.

3.7 Knowledge of HIV and STIs

This chapter deals with the level of knowledge among MSM regarding STIs. Along with HIV/AIDS awareness, knowledge about STIs is also crucial to reducing the risk of HIV transmission.

3.7.1 Knowledge about STIs

The majority of the MSM (86.5%) mentioned that they were aware of at least one of the STI symptoms. However, 13.5 percent of them said that they could not mention any symptoms. The proportion of respondents reporting to be unaware of any symptoms of STIs was higher among non-MSWs (15.1%) than MSWs (10.4%).

Table 3.27: Awareness of STI and Reported STI Symptoms in the Past Year

Aware of at least one male STI symptoms	MSW/TG-SW		Non-MSW/TG-Non-SW		Total	
	N	%	N	%	N	%
Yes	121	89.6	225	84.9	346	86.5
No	14	10.4	40	15.1	54	13.5
Total	135	100.0	265	100.0	400	100.0

Most of the MSM (82%) cited genital ulcers as an STI symptom. The other most commonly cited symptoms were genital discharge (47.8%), burning sensation during urination (46.5%), and anal ulcers/sores (33.5%).

More MSWs than non-MSWs could name STI symptoms in males. For instance, a larger proportion of MSWs cited genital ulcers (86.7% MSWs and 79.6% non-MSWs), genital discharge (51.9% MSW and 45.7% non-MSW) and burning pain during urination (49.6% MSWs and 44.9% non-MSWs). Other symptoms were also cited by more MSWs than non-MSWs (Table 3.28).

Table 3.28: Knowledge of Symptoms of STIs

Knowledge of Symptoms of STIs	MSW/TG-SW		Non-MSW/TG-Non-SW		Total	
	N	%	N	%	N	%
Perceived symptoms of male STI *						
Genital discharge	70	51.9	121	45.7	191	47.8
Burning pain during urination	67	49.6	119	44.9	186	46.5
Genital ulcers/sores	117	86.7	211	79.6	328	82.0
Swellings in groin area	44	32.6	47	17.7	91	22.8
Anal discharge	18	13.3	9	3.4	27	6.8
Anal ulcer/sores	49	36.3	85	32.1	134	33.5
Itching in genital parts	31	23.0	50	18.9	81	20.3
Low appetite	1	0.7	7	2.6	8	2.0
Fever	6	4.4	8	3.0	14	3.5
HIV/AIDS	7	5.2	10	3.8	17	4.3
Weight loss	1	0.7	5	1.9	6	1.5
Genital warts	3	2.2	4	1.5	7	1.8
Others	7	5.2	14	5.3	21	5.3
Don't know	14	10.4	40	15.1	54	13.5
Total	135	100.0	265	100.0	400	100.0
Number of known male STI symptoms						
None	14	10.4	40	15.1	54	13.5
One symptom	9	6.7	16	6.0	25	6.3

Knowledge of Symptoms of STIs	MSW/TG-SW		Non-MSW/TG-Non-SW		Total	
	N	%	N	%	N	%
Two symptoms	18	13.3	56	21.1	74	18.5
Three symptoms	29	21.5	77	29.1	106	26.5
Four symptoms	36	26.7	49	18.5	85	21.3
Five symptoms	29	21.5	27	10.2	56	14.0
Total	135	100.0	265	100.0	400	100.0

**Note: Percentages add up to more than 100 because of multiple responses*

Overall, 26 percent of the respondents could cite three STI symptoms while 21.5 percent could name four STI symptoms and 18.5 percent could cite at least two symptoms (Table 3.28).

The MSM were then asked if they had ever experienced symptoms such as genital discharge, genital ulcers/sores in the past year. Overall 6 percent of the MSM said that they have had genital discharge, while 20.3 percent said they had experienced genital ulcers/sores in the past year (Table 3.29). Anal ulcers/sores were reported by 7 percent of the MSM. A relatively larger proportion of MSWs (11.9%) than non-MSWs (4.5%) had anal ulcers/sores in the past year. Likewise, symptoms such as genital discharge/penile ulcers/sores were reportedly experienced by more MSWs (21.5%) than non-MSWs (19.6%). On the other hand, more non-MSWs (15.1%) than MSWs (10.4%) have had genital ulcers/sores in the past year.

Table 3.29: Reported STI Symptoms and Treatment in the Past 12 Months

STI symptoms experienced and treatment sought	MSW/TG-SW		Non-MSW/TG-Non-SW		Total	
	N	%	N	%	N	%
Have you had genital ulcer / discharge / sore (penis and or anal) during the past 12 months						
Yes	29	21.5	52	19.6	81	20.3
No	106	78.5	213	80.4	319	79.8
Total	135	100.0	265	100.0	400	100.0
Have you had a urethral discharge during the past 12 months?						
Yes	9	6.7	15	5.7	24	6.0
No	126	93.3	250	94.3	376	94.0
Total	135	100.0	265	100.0	400	100.0
Have you had anal discharge during the last 12 months?						
Yes	8	5.9	6	2.3	14	3.5
No	127	94.1	259	97.7	386	96.5
Total	135	100.0	265	100.0	400	100.0
Have you had a genital ulcer/sore during the past 12 months?						
Yes	14	10.4	40	15.1	54	13.5
No	121	89.6	225	84.9	346	86.5
Total	135	100.0	265	100.0	400	100.0
Have you had an anal ulcer/sore during the past 12 months?						
Yes	16	11.9	12	4.5	28	7.0
No	119	88.1	253	95.5	372	93.0
Total	135	100.0	265	100.0	400	100.0
First step taken after experiencing STI						
Sought treatment from hospital	1	3.4	5	9.6	6	7.4
Sought treatment from chemist	7	24.1	14	26.9	21	25.9
Sought treatment from private doctor/clinician			4	7.7	4	4.9
Sought treatment from BDS clinic	2	6.9	4	7.7	6	7.4

STI symptoms experienced and treatment sought	MSW/TG-SW		Non-MSW/ TG-Non-SW		Total	
	N	%	N	%	N	%
Sought treatment from 6 Parichaya Samaj	2	6.9	2	3.8	4	4.9
Sought treatment from Cruse	3	10.3	-	-	3	3.7
Home remedy	4	13.8	3	5.8	7	8.6
None	5	17.2	13	25.0	18	22.2
Sought treatment from SACTS	4	13.8	1	1.9	5	6.2
Others	1	3.4	6	11.5	7	8.6
Total	29	100.0	52	100.0	81	100.0
Days waited for seeking treatment for last experienced STI symptom						
Did not seek treatment	6	27.3	14	29.8	20	29.0
1 day	1	4.5	3	6.4	4	5.8
2-7 days	12	54.5	19	40.4	31	44.9
8-30 days	3	13.6	7	14.9	10	14.5
31-90 days			4	8.5	4	5.8
Total	22	100.0	47	100.0	69	100.0
Amount spent for the treatment last STI symptom (including doctor' fee and other medical expenses)						
Free of cost	7	43.8	8	24.2	15	30.6
5-90	2	12.5			2	4.1
91-200	2	12.5	8	24.2	10	20.4
201-5500	5	31.3	17	51.5	22	44.9
Total	16	100.0	33	100.0	49	100.0

**Note: Percentages add up to more than 100 because of multiple responses*

Around 25.9 percent of those who had sought treatment had gone to chemist shop, while 7 percent each of the respondents had sought treatment from a hospital or from BDS clinic and almost an equal percentage of MSM respondents (8.6%) reported that they had used medicine that was available at home. A quarter of non-MSW (25%) and less than a fifth of the MSW (17.2%) said that they did nothing.

A larger proportion of MSW than non-MSW had sought treatment from the clinics of SACTS, Parichaya Samaj and Crusede and resorted to home remedy while a larger proportion of non-MSWs than MSWs had been to a pharmacy and hospital and had sought treatment from private clinic (Table 3.29).

Of those who went to a doctor or pharmacy/clinic, 44.9 percent had waited up to one week before seeking treatment. The range of cost for treatment varied from NRs.5 to NRs. 5500. Higher proportion of MSM (44.9%) had spent NRs. 201 to 5500 for the treatment of STI. About one third of MSM (30.6%) received the treatment free of cost (Table 3.29).

As seen in Table 3.30, 21.5 percent of MSWs and 19.6 percent non-MSWs had reportedly experienced at least one symptom of STI in the past year. Among those MSM who had reported experiencing STIs in the past year, 29 percent had never sought any treatment; this included more non-MSWs (29.8%) than MSWs (27.3%).

Table 3.30: STI Symptoms Experienced in the Past Year and Treatment Status

STI Symptoms Experienced in the Past Year and Treatment Status	MSW/TG-SW		Non-MSW/TG-Non-SW		Total	
	N	%	N	%	N	%
Have you had genital ulcer / discharge / sore (penis and or anal) during the past 12 months						
Yes	29	21.5	52	19.6	81	20.3
No	106	78.5	213	80.4	319	79.8
Total	135	100.0	265	100.0	400	100.0
Days waited for seeking treatment for last experienced STI symptom						
Did not seek treatment	6	27.3	14	29.8	20	29.0
1 day	1	4.5	3	6.4	4	5.8
2-7 days	12	54.5	19	40.4	31	44.9
8-30 days	3	13.6	7	14.9	10	14.5
31-90 days			4	8.5	4	5.8
Median	2		3		3	
Mean	5		10.09		8.46	
Total	22	100.0	47	100.0	69	100.0

3.7.2 Knowledge about HIV

Respondents were asked about measures to prevent HIV. Their understanding of the major HIV/AIDS prevention measures was assessed, including abstinence from sex (A); being faithful to one sex partner (B); and consistent condom use (C). Nearly all of them knew that consistent use of condoms (97.5%) and being faithful to one partner (92.8%) will reduce the risk of HIV/AIDS. While two third (65.5%) stated abstinence from sexual contact was one of the ways of preventing HIV.

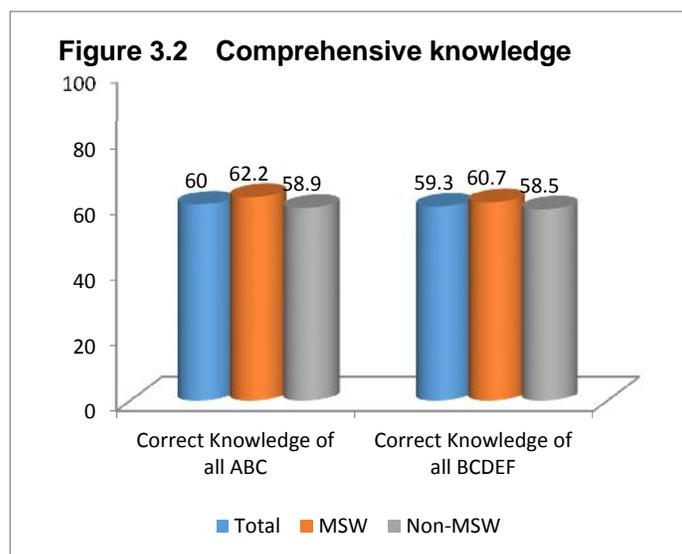
Table 3.31: Knowledge about Prevention of HIV

Knowledge about Prevention of HIV	MSW/TG-SW		Non-MSW/TG-Non-SW		Total	
	N	%	N	%	N	%
Can people protect themselves from HIV by abstaining from sexual intercourse? (This means abstaining from anal as well as oral sex)						
Yes	94	69.6	168	63.4	262	65.5
No	41	30.4	95	35.8	136	34.0
Don't know			2	.8	2	.5
Total	135	100.0	265	100.0	400	100.0
Can people protect themselves from HIV by having one uninfected faithful sex partner?						
Yes	123	91.1	248	93.6	371	92.8
No	12	8.9	16	6.0	28	7.0
Don't know			1	.4	1	.3
Total	135	100.0	265	100.0	400	100.0
Can people reduce their risk of HIV by using a condom correctly every time they have sex?						
Yes	131	97.0	259	97.7	390	97.5
No	4	3.0	5	1.9	9	2.3
Don't know			1	.4	1	.3
Total	135	100.0	265	100.0	400	100.0
Do you think that a healthy-looking person can be infected with HIV, the virus that causes AIDS?						
Yes	128	94.8	230	86.8	358	89.5
No	6	4.4	32	12.1	38	9.5
Don't know	1	.7	3	1.1	4	1.0
Total	135	100.0	265	100.0	400	100.0
Can a person get the HIV virus from mosquito bites?						

Knowledge about Prevention of HIV	MSW/TG-SW		Non-MSW/ TG-Non-SW		Total	
	N	%	N	%	N	%
Yes	31	23.0	62	23.4	93	23.3
No	99	73.3	190	71.7	289	72.3
Don't know	5	3.7	13	4.9	18	4.5
Total	135	100.0	265	100.0	400	100.0
Can a person get the HIV virus by sharing meal with someone who is infected?						
Yes	7	5.2	22	8.3	29	7.3
No	128	94.8	238	89.8	366	91.5
Don't know	-	-	5	1.9	5	1.3
Total	135	100.0	265	100.0	400	100.0

Additionally, nine in ten respondents knew that a healthy-looking person can be infected with HIV (D: 89.5%); and HIV cannot be transmitted while sharing meal with an HIV-infected person (F: 91.5%). However, a relatively smaller proportion of MSM (E: 72.3 %) agreed that a person cannot get the HIV virus from a mosquito bite.

Overall, 60 percent of MSM were aware of all three major modes of transmission, i.e. 'ABC' (62.2% MSWs and 58.9% non-MSWs). On the other hand, 59.3 percent were aware of five ways –BCDEF- by which one can protect oneself against HIV and ways in which it cannot be transmitted (60.7% MSWs and 58.5% non-MSWs)(Figure 3.2).



More MSWs (68.1%) than non-MSWs (49.8%) knew someone living with HIV or who had died of an HIV- related illness. When asked about the type of relationship they shared with such individuals, 15.2 percent of MSWs and 14.4 percent non-MSWs said they were close friends or relatives. Four fifth of the MSM (85.3%) had heard/seen such people but did not have any relationship with them (Table 3.32).

Table 3.32: Knowledge on Ways of HIV/AIDS Transmission

Statements related to HIV/AIDS	MSW/TG-SW		Non-MSW/ TG-Non-SW		Total	
	N	%	N	%	N	%
Know a person who is infected with HIV or who has died of AIDS						
Yes	92	68.1	132	49.8	224	56.0
No	43	31.9	133	50.2	176	44.0
Total	135	100.0	265	100.0	400	100.0
Related shared with the person who is infected with HIV or has died of AIDS						
Yes	14	15.2	19	14.4	33	14.7
No	78	84.8	113	85.6	191	85.3
Total	92	100.0	132	100.0	224	100.0
Can people reduce their risk of HIV by using a condom correctly every time they have anal sex?						

Statements related to HIV/AIDS	MSW/TG-SW		Non-MSW/ TG-Non-SW		Total	
	N	%	N	%	N	%
Yes	133	98.5	260	98.1	393	98.3
No	2	1.5	3	1.1	5	1.3
Don't know			2	.8	2	.5
Total	135	100.0	265	100.0	400	100.0
Can a person get the HIV virus by using a needle that is used by someone else?						
Yes	132	97.8	261	98.5	393	98.3
No	3	2.2	3	1.1	6	1.5
Don't know			1	.4	1	.3
Total	135	100.0	265	100.0	400	100.0
Can blood transfusion from an infected person to the other transmit HIV?						
Yes	135	100.0	264	99.6	399	99.8
Don't know			1	.4	1	.3
Total	135	100.0	265	100.0	400	100.0
Can a person get HIV by shaking hand with an HIV infected person?						
Yes	2	1.5	7	2.6	9	2.3
No	133	98.5	254	95.8	387	96.8
Don't know			4	1.5	4	1.0
Total	135	100.0	265	100.0	400	100.0
Can a pregnant woman infected with HIV transmit the virus to her unborn child?						
Yes	127	94.1	245	92.5	372	93.0
No	6	4.4	10	3.8	16	4.0
Don't know	2	1.5	10	3.8	12	3.0
Total	135	100.0	265	100.0	400	100.0
Can women with HIV transmit the virus to her newborn child through breast-feeding?						
Yes	111	82.2	191	72.1	302	75.5
No	18	13.3	46	17.4	64	16.0
Don't know	6	4.4	28	10.6	34	8.5
Total	135	100.0	265	100.0	400	100.0
What can a pregnant woman do to protect her unborn child against the risk of HIV transmission?						
Take medicine	31	24.4	59	24.1	90	24.2
Take doctor's advice	21	16.5	35	14.3	56	15.1
Avoid unsafe sex	-	-	5	2.0	5	1.3
Go for treatment	3	2.4	5	2.0	8	2.2
Others	1	.8	4	1.6	5	1.3
Don't know	71	55.9	137	55.9	208	55.9
Total	127	100.0	245	100.0	372	100.0

The respondents' perception on HIV/AIDS and its different modes of transmission were further tested with the help of certain probing questions. Almost all of the respondents knew the correct condom usage for each act of anal sex reduces the risk of HIV transmission (98.3%) and that injecting with a previously used needle (98.35%) and having a blood transfusion from an HIV-positive person (99.8%) will transmit the virus. They also knew that holding an HIV infected person's hand does not transmit HIV (96.8%) and that a woman with HIV/AIDS can transmit the virus to her newborn child (93%). However, a comparatively lower proportion of non-MSWs (72.1%) than MSWs (82.2%) believed that a woman with HIV/AIDS can transmit the virus to her newborn child through breastfeeding.

Twenty four percent of respondents stated that pregnant women can protect her unborn child against the risk of HIV transmission by taking medicine and by taking doctor's advice was cited by 15.1 percent.

3.7.3 Knowledge about HIV Testing Facilities

The availability of and awareness about confidential HIV testing allows people to undertake HIV tests promptly and without the fear of being exposed. Seventy two percent of the MSM (84.4% MSWs and 66.8% non-MSWs) knew about the existence of a confidential HIV testing facility in their community. Among these, more MSWs (78.5%) than non-MSWs (54.3%) had ever taken an HIV test. The majority of both MSWs (80.2%) and non-MSWs (72.9%) had taken up the test voluntarily. Almost all (96.2% MSWs and 98.6% non-MSWs) had also received their HIV test results. Most of those who had been tested (92.4%) had been given counseling at the time of the HIV test.

Two-thirds (67.7%) of MSM had their most recent HIV test within the last one year (76.4% MSWs and 61.8% non-MSWs). One third had been tested more than one year before.

Table 3.33: Perception on HIV Testing

Perception on HIV Testing	MSW/TG-SW		Non-MSW/ TG-Non-SW		Total	
	N	%	N	%	N	%
Confidential HIV testing facility available in the community						
Yes	114	84.4	177	66.8	291	72.8
No	19	14.1	78	29.4	97	24.3
Don't know	2	1.5	10	3.8	12	3.0
Total	135	100.0	265	100.0	400	100.0
Ever had an HIV test						
Yes	106	78.5	144	54.3	250	62.5
No	29	21.5	121	45.7	150	37.5
Total	135	100.0	265	100.0	400	100.0
HIV self-tested with recommended by others						
Yes	85	80.2	105	72.9	190	76.0
No	21	19.8	39	27.1	60	24.0
Total	106	100.0	144	100.0	250	100.0
Received HIV test result						
Yes	102	96.2	142	98.6	244	97.6
No	4	3.8	2	1.4	6	2.4
Total	106	100.0	144	100.0	250	100.0
Received counseling at the time of HIV						
Yes	98	92.5	133	92.4	231	92.4
No	8	7.5	11	7.6	19	7.6
Total	106	100.0	144	100.0	250	100.0
Time of most recent HIV test						
Within past one year	81	76.4	89	61.8	170	68.0
One year before	25	23.6	55	38.2	80	32.0
Total	106	100.0	144	100.0	250	100.0

3.7.4 Perception on Risk of HIV among MSM/TG

After assessing their awareness about HIV the respondents were asked what measures they had adopted to avoid getting HIV. In response, 93.3 percent of MSWs and 83.4 percent of non-MSWs mentioned that they have been consistently using condoms. A smaller proportion of them also pointed out that they had avoided skin pricking (11.5%), not shared needles (6%), and had practiced safe sex (6.5%) while 5% take no precautionary measures.

Table 3.34: Risk Perception and Reason for Such Perception

Risk Perception and Reason for Such Perception	MSW/TG-SW		Non-MSW/TG-Non-SW		Total	
	N	%	N	%	N	%
Measures adopted to avoid getting HIV *						
Take medicine	1	.7	1	.4	2	.5
None	4	3.0	16	6.0	20	5.0
Always use condom	126	93.3	221	83.4	347	86.8
Avoid use of needle syringe	10	7.4	14	5.3	24	6.0
Avoid sex with unknown person	3	2.2	10	3.8	13	3.3
Avoid skin pricking tools	11	8.1	35	13.2	46	11.5
Safe sex	7	5.2	19	7.2	26	6.5
Blood transfusion after testing only	3	2.2	6	2.3	9	2.3
Use Lubricant	9	6.7	1	.4	10	2.5
Gone for test	7	5.2	3	1.1	10	2.5
Others	9	6.7	25	9.4	34	8.5
Don't know			1	.4	1	.3
Total	135	100.0	265	100.0	400	100.0
Risk perception level						
High risk	24	17.8	16	6.0	40	10.0
Some risk	25	18.5	45	17.0	70	17.5
Little or no risk	86	63.7	202	76.2	288	72.0
Don't know			2	.8	2	.5
Total	135	100.0	265	100.0	400	100.0
Reason for considering self at risk of HIV *						
High risk job	25	51.0	10	16.4	35	31.8
Multiple sex partners	39	79.6	27	44.3	66	60.0
Frequent and regular anal sex	21	42.9	32	52.5	53	48.2
Don't use condoms	6	12.2	13	21.3	19	17.3
Irregular condom use	10	20.4	12	19.7	22	20.0
Needles sharing	1	2.0			1	.9
Sometime condom breakage	13	26.5	16	26.2	29	26.4
Others	3	6.1	7	11.5	10	9.1
Total	49	100.0	61	100.0	110	100.0
Reason for perceiving self at little or no risk of HIV *						
Always use condoms	83	79.0	180	74.7	263	76.0
Only one sex partner	2	1.9	18	7.5	20	5.8
Partners are clean	6	5.7	25	10.4	31	9.0
Partners are healthy	9	8.6	39	16.2	48	13.9
Never share injections	27	25.7	70	29.0	97	28.0
Very few sex partners	2	1.9	13	5.4	15	4.3
Sex with faithful partner only			6	2.5	6	1.7
Regular health checkup	4	3.8	5	2.1	9	2.6
Others	15	14.3	22	9.1	37	10.7
No response	13	12.4	22	9.1	35	10.1
Total	105	100.0	241	100.0	346	100.0

**Multiple responses allowed.*

An effort was also made to understand whether or not the MSM perceived them to be at risk of HIV infection. Around three in four respondents (63.7% of MSWs and 76.2% of non-MSWs) perceived themselves to be at little or no risk of contracting HIV. At the same time 17.5 percent of them (18.5% MSWs and 17% non-MSWs) thought that they were at some risk while 10 percent (17.8% MSWs and 6% non-MSWs) considered that they were at high risk of getting HIV.

Those MSM who considered themselves at some risk of getting HIV thought so mainly because of having multiple sex partners (60%), frequent anal sex (48.2%), condom breakage during sexual contact (26.4%) irregular use of condoms (20%) and not using condom (17.3%). A relatively larger proportion of MSWs than non-MSWs cited some of these underlying reasons for their risk perception (Table 3.34).

On the other hand, those MSM who saw themselves at little or no risk of getting HIV thought so mainly because they used a condom consistently (79% MSWs and 74.7% non-MSWs). However, there were some respondents (8.6% MSWs and 16.2% non-MSWs) who assumed that they could not get HIV because they had healthy partners, and some who said that they could not have the disease since their partners are clean (5.7% MSWs and 10.4% non-MSWs).

3.7.5 Attitude towards HIV

The stigma associated with HIV increases the impact of HIV on the patient as well as on the key population at higher risk. The perception of MSM about HIV- positive persons and the stigma associated with the disease was examined with the help of series of questions as shown in Table 3.35.

The majority of the respondents were ready to take care of an HIV-positive male relative (97% MSWs and 90.2% of non-MSWs) or an HIV-positive female relative (94.1% MSWs and 89.8% of non-MSWs) in their homes if necessary. On the other hand, around six in ten MSM (59.3% MSWs and 65.3% of non-MSWs) said that if a family member had HIV they would rather keep it confidential and not talk about it with others.

The majority of MSM (95.6% MSWs and 94.7% non-MSWs) said that they would readily buy food from an HIV-positive vendor. An equally high proportion of them (93.3% MSWs and 94% non-MSWs) also agreed that unless very sick, people with HIV should be allowed to continue in their jobs.

When asked about the health care needs of HIV-positive patients, 54.8 percent of MSWs and 47.9 percent of non-MSWs maintained that they should be provided the same care and treatment as necessary for any patient of a chronic disease, while 43.7 percent of MSWs and 49.4 percent of non-MSWs believed that the health care needs of an HIV-infected person were more than people suffering from other chronic diseases (Table 3.35).

Table 3.35: Perception and Stigma of HIV

Perception and Stigma of HIV	MSW/TG-SW		Non-MSW/ TG-Non-SW		Total	
	N	%	N	%	N	%
Willing to take care of an HIV positive male relative at home						
Yes	131	97.0	239	90.2	370	92.5
No	4	3.0	24	9.1	28	7.0
Don't know	-	-	2	.8	2	.5
Total	135	100.0	265	100.0	400	100.0
Willing to take care of HIV positive female relative at home						
Yes	127	94.1	238	89.8	365	91.3
No	8	5.9	24	9.1	32	8.0
Don't know	-	-	3	1.1	3	.8
Total	135	100.0	265	100.0	400	100.0
Would prefer to hide the HIV positive status of a family member						
Yes	80	59.3	173	65.3	253	63.3

Perception and Stigma of HIV	MSW/TG-SW		Non-MSW/ TG-Non-SW		Total	
	N	%	N	%	N	%
No	54	40.0	91	34.3	145	36.3
Don't know	1	.7	1	.4	2	.5
Total	135	100.0	265	100.0	400	100.0
Would buy supplies from HIV Infected shopkeeper						
Yes	129	95.6	251	94.7	380	95.0
No	6	4.4	13	4.9	19	4.8
Don't know	-	-	1	.4	1	.3
Total	135	100.0	265	100.0	400	100.0
Believe that an HIV infected person who is not so sick should be allowed to continue his/her job						
Yes	126	93.3	249	94.0	375	93.8
No	9	6.7	15	5.7	24	6.0
Don't know	-	-	1	.4	1	.3
Total	135	100.0	265	100.0	400	100.0
Believe that an HIV infected person should be provided equal, more or less health care compared to other person with chronic						
Same	74	54.8	127	47.9	201	50.3
More	59	43.7	131	49.4	190	47.5
Less	2	1.5	6	2.3	8	2.0
Don't know	-	--	1	.4	1	.3
Total	135	100.0	265	100.0	400	100.0

3.7.6 Physical and Sexual Violence against MSM and TG

Many studies have shown that MSM are also subjected to discrimination and physical violence because of their sexual orientation. This study tried to find out if any of the study participants had been subjected to violence and discrimination in the past year.

Overall, one in seven of the MSM had been beaten up (14.3%), and equal percentage had been forced to have sex (13%), one in five had been threatened (22.3%) and an equal proportion had faced discrimination at work (19.8%) in the past year. In addition one in four (25.8%) had faced different problems because of their sexual identity (43% MSWs and 17% non-MSWs).

Table 3.36: Personal Experience of Violence and Discrimination in the Past 12 Months

Subjected to Violence/ Discrimination	MSW/TG-SW		Non-MSW/ TG-Non-SW		Total	
	N	%	N	%	N	%
Was beaten up in the past 12 months						
Yes	39	28.9	18	6.8	57	14.3
No	96	71.1	247	93.2	343	85.8
Total	135	100.0	265	100.0	400	100.0
Was beaten up by *						
Police	24	61.5	6	33.3	30	52.6
Military	3	7.7	1	5.6	4	7.0
Client	12	30.8	1	5.6	13	22.8
Sexual Partner	3	7.7	5	27.8	8	14.0
Hooligans group	11	28.2	2	11.1	13	22.8
Others	5	12.8	2	11.1	7	12.3
Don't know	-	-	1	5.6	1	1.8
Total	39	100.0	18	100.0	57	100.0

Subjected to Violence/ Discrimination	MSW/TG-SW		Non-MSW/ TG-Non-SW		Total	
	N	%	N	%	N	%
Was forced to have sex in the past 12 months						
Yes	28	20.7	24	9.1	52	13.0
No	107	79.3	241	90.9	348	87.0
Total	135	100.0	265	100.0	400	100.0
People who forcefully had sex *						
Police	9	32.1	5	20.8	14	26.9
Military	3	10.7	-	-	3	5.8
Client	6	21.4	5	20.8	11	21.2
Regular Partner	3	10.7	1	4.2	4	7.7
Sexual Partner	4	14.3	9	37.5	13	25.0
Hooligans group	8	28.6	5	20.8	13	25.0
Others	6	21.4	2	8.3	8	15.4
Total	28	100.0	24	100.0	52	100.0
Was blackmailed in the past 12 months						
Yes	57	42.2	32	12.1	89	22.3
No	78	57.8	233	87.9	311	77.8
Total	135	100.0	265	100.0	400	100.0
Faced discrimination at job or everyday life in the past 12 months						
Yes	43	31.9	36	13.6	79	19.8
No	92	68.1	229	86.4	321	80.3
Total	135	100.0	265	100.0	400	100.0
Ever experienced any kind of problems due to sexual orientation						
Yes	58	43.0	45	17.0	103	25.8
No	77	57.0	220	83.0	297	74.3
Total	135	100.0	265	100.0	400	100.0

*Note: The percentages add up to more than 100 because of multiple responses.

MSWs reported to be more vulnerable to the social stigma associated with their sexual preference than non-MSWs. More MSWs than non-MSWs had been subjected to physical/sexual violence such as beatings (28.9% of MSWs and 6.8% of non-MSWs), forced sex (20.7% of MSWs and 9.1% of non-MSWs), blackmailing (42.2% of MSWs and 12.1% of non-MSWs) and discrimination at job or daily life (31.9% of MSWs and 13.6% of non-MSWs) in the past year (Table 3.36).

The police, sexual partners and hooligans are the main offenders. Two-thirds of the MSM (52.6%) who were beaten up in the last 12 months, were beaten up by the police, and one-fourth (22.8%) by hooligans. MSWs were particularly vulnerable to forced sex by police (26.9%), hooligans and sexual partner (25% each). Non-MSWs were more likely to be assaulted by their sex partners (41.7%).

3.8 Exposure to HIV Prevention Interventions

Various intervention programs are underway to create awareness and educate people in HIV/AIDS and to disseminate information regarding preventive measures. Some of these programs target specific key population at higher risk groups while some others conduct general awareness campaigns. Respondents' exposures to the ongoing HIV/AIDS awareness programs and their participation in these activities have been assessed in this chapter.

3.8.1 Peer/Outreach Education

Mobilization of peer educators, outreach educators and community mobilizers/community educators (PEs/OEs/CMs/CEs) in conducting awareness raising activities at different sites in the community is

one of the major components of awareness raising component of ongoing prevention programs. They meet the target groups and hold discussions regarding HIV/AIDS and safe injecting practices, safe sex and other related topics. They also distribute Information, Education and Communication (IEC) materials, condoms, and refer the target groups to drop-in centers (DICs) and STI treatment services.

Table 3.37: Meeting/Interaction with Peer /Outreach Educator/Community Mobilizer/Community Educator

Exposure to HIV Prevention Interventions	MSW/TG-SW		Non-MSW/ TG-Non-SW		Total	
	N	%	N	%	N	%
Met/discussed/interacted with peer/outreach educators or community mobilize/ community educator in the last 12 months						
Yes	113	83.7	172	64.9	285	71.3
No	22	16.3	93	35.1	115	28.8
Total	135	100.0	265	100.0	400	100.0
Activities carried out with/by PE/OE/CM/CEs *						
Discussion on how HIV/AIDS is/isn't transmitted	108	95.6	154	89.5	262	91.9
Discussion on how STI is/isn't transmitted	90	79.6	123	71.5	213	74.7
Regular/non-regular use of Condom	72	63.7	110	64.0	182	63.9
Demonstration on using condom correctly	57	50.4	79	45.9	136	47.7
Received condom/Lubricants	19	16.8	31	18.0	50	17.5
Counseling	3	2.7	6	3.5	9	3.2
Others	12	10.6	9	5.2	21	7.4
Total	113	100.0	172	100.0	285	100.0
Organizations represented by PW/OE/CM/CEs *						
BDS	74	65.5	103	59.9	177	62.1
Parichaya Samaj	36	31.9	45	26.2	81	28.4
Cruisedes	51	45.1	63	36.6	114	40.0
Others	5	4.4	8	4.7	13	4.6
Don't know	3	2.7	16	9.3	19	6.7
Total	113	100.0	172	100.0	285	100.0
Number of meetings with PE or OE or CM or CE in the past 12 months						
One	4	3.5	12	7.0	16	5.6
1-3 times	9	8.0	23	13.4	32	11.2
4-6 times	12	10.6	24	14.0	36	12.6
7-12 times	21	18.6	33	19.2	54	18.9
More than 12 times	67	59.3	80	46.5	147	51.6
Total	113	100.0	172	100.0	285	100.0

*Note: The percentages add up to more than 100 because of multiple responses.

Seventy one percent of the MSM had met PEs/OEs at least once in the past year. A relatively higher proportion of MSWs (83.7%) than non-MSWs (64.9%) had met PEs/OEs/CMs/CEs in the last year. In PE/OE meetings, respondents had mostly discussed HIV transmission (91.9%) and STI transmission (74.7%). Over three fifth had been told about using condom correctly and consistently (63.9%), nearly one-half had been given a demonstration on using condoms correctly (47.7%), and one in six had also received condoms and or lubricants (17.5%). It is evident from Table 8.1 that the MSM meet PEs/OEs/CMs/CEs quite often, as 51.6 percent of the MSM (59.3% MSW and 46.5% non-MSW) had met with PEs/OEs/CMs/CEs more than 12 times in the past year. There were a few MSM (3.5% of MSWs and 7% of non-MSWs) who had met PE/OE/CMs/CEs only once in the past year. The MSM had mostly met PEs/OEs/CMs/CEs from the Blue Diamond Society (62.1%), Cruisedes (40%), and Parichaya Samaj (28.4%).

3.8.2 Drop-in-Centers Visiting Practice

Outreach centers like DICs/information centers (IC)/Counseling Centers (CC) are another important component of the HIV prevention programs. Such centers not only provide a safe space for the target communities to socialize, but are also a site for educational and counseling activities. They offer a number of services to the target group, including counseling, group classes and discussions, individual counseling, and video shows on STIs/HIV/AIDS and also provide IEC materials and condoms for MSM.

Table 3.38: Outreach Center Visiting Practices

Outreach Center Visiting Practices	MSW/TG-SW		Non-MSW/ TG-Non-SW		Total	
	N	%	N	%	N	%
Activities carried out with/by PE/OE/CM/CEs *						
Went to collect condoms	64	62.7	85	61.2	149	61.8
Went to learn the correct way of using condom	47	46.1	78	56.1	125	51.9
Went to watch film on HIV/AIDS	36	35.3	33	23.7	69	28.6
Participated in discussion on HIV transmission	81	79.4	111	79.9	192	79.7
Took suggestion about safe sex	3	2.9	1	.7	4	1.7
Collect lubricants	1	1.0	3	2.2	4	1.7
Gathering with friends	2	2.0	4	2.9	6	2.5
Information about HIV	1	1.0	3	2.2	4	1.7
Others	12	11.8	12	8.6	24	10.0
Don't know			1	.7	1	.4
Total	102	100.0	139	100.0	241	100.0
Name of organizations that run the visited DIC/IC/CC *						
BDS	64	62.7	80	57.6	144	59.8
Parichaya Samaj	27	26.5	47	33.8	74	30.7
Cruisedes	54	52.9	68	48.9	122	50.6
SACTs	10	9.8	7	5.0	17	7.1
FNCC	1	1.0	1	.7	2	.8
Others	1	1.0	9	6.5	10	4.1
Don't know	1	1.0			1	.4
Total	102	100.0	139	100.0	241	100.0
Number of visits to the DIC/IC/CC in the past 12 months						
One	4	3.9	11	7.9	15	6.2
1-3 times	20	19.6	42	30.2	62	25.7
4-6 times	15	14.7	26	18.7	41	17.0
7-12 times	10	9.8	15	10.8	25	10.4
More than 12 times	53	52.0	45	32.4	98	40.7
Total	102	100.0	139	100.0	241	100.0

*Note: The percentages add up to more than 100 because of multiple responses.

Around 55 percent of the MSM had visited a DIC/IC/CC in the past year; this included a larger proportion of MSWs than non-MSWs (78.5% MSWs and 42.3% non-MSWs). The majority (79.7%) of those who visited a DIC/IC/CC in the last year had taken part in discussions relating to HIV transmission at DICs, 61.8 had collected condoms from there, while 51.9 percent had learnt the correct way of using a condom. Moreover, 28.6 percent of them had watched a movie related to HIV.

Overall, DICs run by BDS were the most frequently visited DICs by the respondents participating in this survey (62.7% MSWs and 57.6% non-MSWs); followed by the SACTS (50.6%) and Parichaya Samaj (30.7%). MSWs were more likely to visit DICs run by BDS and SACTS while more non-MSWs

likely to visit DIC run by Parichaya Samaj. MSWs also tend to visit DICs more often than non-MSWs. Nearly 52 percent of MSWs had visited a DIC more than 12 times in the past year, while among non-MSWs 32.4 percent had reported doing so.

3.8.3 STI Clinic Visiting Practices

MSM who are engaged in unsafe sexual encounters are at high risk of STIs. Timely detection of STIs may prevent them from serious health problems. There are different clinics being run by various government as well as non-government organizations for providing STI testing and treatment. Only about one-sixth (16.3%) of respondents had visited an STI clinic in the past year. Most of those who visited an STI clinic had visited for physical examination (61.6%), had given their blood sample for STI detection (58.5%), had discussed on how the STI is transmitted (55.4%), and use of condoms at the clinic (33.8%).

Table 3.39: STI Clinic Visiting Practices

STI Clinic Visiting Practices	MSW/TG-SW		Non-MSW/TG-Non-SW		Total	
	N	%	N	%	N	%
Visited any STI clinic in the past 12 months						
Yes	32	23.7	33	12.5	65	16.3
No	103	76.3	232	87.5	335	83.8
Total	135	100.0	265	100.0	400	100.0
Participated activities at STI Clinic *						
Blood tested for STI	19	59.4	19	57.6	38	58.5
Physical examination conducted for STI identification	19	59.4	23	69.7	42	64.6
Discussed on how STI is/isn't transmitted	20	62.5	16	48.5	36	55.4
Discussed on regular/non-regular use of condom	13	40.6	9	27.3	22	33.8
Took a friend with me	6	18.8	6	18.2	12	18.5
Others			5	15.2	5	7.7
Total	32	100.0	33	100.0	65	100.0
Name of the organization that run the visited STI clinic *						
BDS	8	25.0	8	24.2	16	24.6
Parichaya Samaj	7	21.9	8	24.2	15	23.1
Cruisedes	12	37.5	8	24.2	20	30.8
SACTs	10	31.3	6	18.2	16	24.6
CAC	1	3.1			1	1.5
Clinic	3	9.4	6	18.2	9	13.8
Others	1	3.1	9	27.3	10	15.4
Number of visits to STI clinics in the past 12 months						
One time	12	37.5	12	36.4	24	36.9
1-3 times	14	43.8	11	33.3	25	38.5
4-6 times	2	6.3	6	18.2	8	12.3
7-12 times	2	6.3	1	3.0	3	4.6
More than 12 times	2	6.3	3	9.1	5	7.7
Total	32	100.0	33	100.0	65	100.0

*Note: The percentages add up to more than 100 because of multiple responses.

The most visited STI clinics were run by Cruisedes (30.8%) followed by BDS and SACTS (24.6% each). While 38.5 percent had visited an STI clinic 2 to 3 times in the past year and 36.9 percent of the MSM had visited such a clinic once. Very few (7.7%) MSM had been to an STI clinic more than 12 times in

the last year (Table 3.39). Percentage of non-MSWs visiting STI clinics more than 12 times in the past year (9.1%) was higher compared to MSWs (6.3%).

3.8.4 HIV Testing and Counseling Centers Visiting Practice

VCT centers provide HIV and STI tests along with pre- and post-test counseling. Information related to safe injecting practices, HIV and STI transmission, and treatment facilities are also disseminated from these centers. VCT centers form an integral part of the HIV prevention program.

Overall, 44.8 percent of the MSM had visited a VCT center in the past year, with more MSWs (64.4%) than non-MSWs (34.7%). The majority of those who had been to a VCT center had given a blood sample for HIV testing (87.2%), had received pre-test counseling (83.8%), had received the HIV test result (72.1%) and had received post-HIV test counseling (67.6%).

Table 3.40: VCT Visiting Practices

VCT Visiting Practices	MSW/TG-SW		Non-MSW/TG-Non-SW		Total	
	N	%	N	%	N	%
Visited VCT center in the past 12 months						
Yes	87	64.4	92	34.7	179	44.8
No	48	35.6	173	65.3	221	55.3
Total	135	100.0	265	100.0	400	100.0
Activities participated in at VCT Center *						
Received pre-HIV/AIDS test counseling	74	85.1	76	82.6	150	83.8
Blood sample taken for HIV/AIDS test	78	89.7	78	84.8	156	87.2
Received post HIV/AIDS test counseling	61	70.1	60	65.2	121	67.6
Received HIV/AIDS test result	65	74.7	64	69.6	129	72.1
Received counseling on using condom correctly in each sexual	46	52.9	43	46.7	89	49.7
Took a friend with me	2	2.3	9	9.8	11	6.1
Received information on HIV/AIDS window period	4	4.6	1	1.1	5	2.8
Others	2	2.3	2	2.2	4	2.2
Total	87	100.0	92	100.0	179	100.0
Name of the organization that run the visited VCT *						
BDS	38	43.7	36	39.1	74	41.3
Parichaya Samaj	23	26.4	23	25.0	46	25.7
Cruisedes	41	47.1	34	37.0	75	41.9
SACTs	12	13.8	8	8.7	20	11.2
CAC	2	2.3	-	-	2	1.1
Others	6	6.9	8	8.7	14	7.8
Don't know	1	1.1	3	3.3	4	2.2
Total	87	100.0	92	100.0	179	100.0

**Multiple responses allowed.*

About two-fifth of the MSM had visited a VCT centre run by Cruisedes and BDS, while 25.7 percent had been to the VCT centre of Parichaya Samaj and 11.2 percent to the SACTS VCT centers. While 21.1 percent of the MSM had visited a VCT center once in the past year, 38.3 of them had visited such center more than 12 times. More MSWs (53.3%) than non- MSWs (21.7%) had been such frequent visitors (Table 3.40).

3.8.5 Participation in HIV Awareness Programme

Various government departments as well as non-government organizations have been involved in implementing HIV awareness activities. Their programs include workshops, group discussions, talk programs, training sessions, radio programs, Condom Day, AIDS Day and street theatre. Some of these programs specifically target MARPs while some include the general population.

Table 3.41: Participation in STI/HIV/AIDS Awareness Program

Participations in HIV/AIDS Awareness Programs	MSW/TG-SW		Non-MSW/TG-Non-SW		Total	
	N	%	N	%	N	%
Ever participated in HIV/AIDS awareness raising program or community events						
Yes	75	55.6	110	41.5	185	46.3
No	60	44.4	155	58.5	215	53.8
Total	135	100.0	265	100.0	400	100.0
Activities participated in STI/HIV/AIDS Awareness Program *						
Street drama	36	48.0	38	34.5	74	40.0
AIDS Day	44	58.7	52	47.3	96	51.9
Condom Day	49	65.3	52	47.3	101	54.6
Video Shows	2	2.7	6	5.5	8	4.3
Group discussions	30	40.0	47	42.7	77	41.6
Talk programs	-	-	1	.9	1	.5
HIV/AIDS related training	14	18.7	27	24.5	41	22.2
HIV/AIDS related Workshops	9	12.0	22	20.0	31	16.8
Condom use demonstrations	10	13.3	13	11.8	23	12.4
Others	9	12.0	11	10.0	20	10.8
Total	75	100.0	110	100.0	185	100.0
Name of the organization that organized such activities						
BDS	53	70.7	67	60.9	120	64.9
Parichaya Samaj	20	26.7	32	29.1	52	28.1
Cruisedes	34	45.3	38	34.5	72	38.9
Others	6	8.0	22	20.0	28	15.1
Don't know	1	1.3	3	2.7	4	2.2
Total	75	100.0	110	100.0	185	100.0
Frequency of such participation in past 12 months						
One	10	13.3	29	26.4	39	21.1
2-3 times	27	36.0	46	41.8	73	39.5
4-6 times	17	22.7	13	11.8	30	16.2
7-12 times	9	12.0	7	6.4	16	8.6
More than 12 times	7	9.3	6	5.5	13	7.0
None	5	6.7	9	8.2	14	7.6
Total	75	100.0	110	100.0	185	100.0
Heard about Community Home Based Care Program(CHBC)						
Yes	83	61.5	97	36.6	180	45.0
No	52	38.5	168	63.4	220	55.0
Total	135	100.0	265	100.0	400	100.0
Have you heard about programs that provide essential services for people with HIV, ART services and that which gives information on ART						
Yes	67	49.6	105	39.6	172	43.0
No	68	50.4	160	60.4	228	57.0
Total	135	100.0	265	100.0	400	100.0

*Multiple responses allowed.

Overall, 46.3 percent of the MSM had participated in at least one HIV awareness raising

program or similar event. Comparatively more MSWs (55.6%) than non-MSWs (41.5%) had taken part in these activities. Among them, many had participated in Condom Day celebrations (65.3% MSW and 47.3% non-MSW), AIDS Day (58.7% MSWs and 47.3% of non-MSWs), group discussion (40% MSW and 42.7% non-MSW) and street drama (48% MSW and 34.5% non-MSW). Others had participated in HIV/AIDS-related training and workshops.

Around two in three MSM reported taking part in events organized by the Blue Diamond Society (64.9%), two in five in events organized by Cruisedes (38.9%) and one in four had also been part of Parichaya Samaj activities (28.1%).

Two fifth of the MSM had taken part in such programs 2 to 3 times (39.5%), while one fifth had taken part just once in the past year (21.1%). Very few MSM (7.6%) had not taken part in any of such activities/programs in the past year (6.7% MSWs and 8.2% non-MSWs). (Table 3.41)

In addition to this, the MSM were also asked if they were aware of Community Home Based Care Program (CHBC) and Community Care Support and Treatment (CCST) program. Forty five percent of the MSM had heard about CHBC services provided to HIV-positive people, while 43 percent of them had heard of the CCST program.

3.10 Prevalence of Psychosocial factors

3.10.1 Housing Instability

Table 3.46 shows the current residence status of the MSM/TG. Almost eight out of 10 (78.8%) were living in rented apartment/room while only 2 out of 10 (18.2%) were living in own home. Furthermore the table also reveals that MSW/TG-SW, who lives in own home, were in lesser proportion (16.3%) than Non-MSW/TG non-SW (20%). Similarly the proportion of living in rented apartment/room of MSW/TG-SW is higher (82.2%) than the proportion of Non-MSW/TG-SW (77%).

Table 3.46: Housing Instability

Housing Instability	MSW/TG-SW		Non-MSW/ TG Non-SW		MSM/TG	
	N	%	N	%	N	%
Living in own home	22	16.3	53	20.0	75	18.8
Living in a residential hotel	1	.7	1	.4	2	.5
Rented apartment/room	111	82.2	204	77.0	315	78.8
Others	1	.7	7	2.6	8	2.0
Total	135	100.0	265	100.0	400	100.0

3.10.2 Mental Health Status of MSM/TG

The prevalence of distress and depression is 56.3 percent among MSM/TG who involved in sex work. Similarly, prevalence of distress and depression is also high (48.7%) among MSM/TG who are not involved in sex work. The overall prevalence of distress and depression is 51.2 percent.

Table 3.47: Depression Prevalence

TYPES	Frequency	Valid Percent
MSW		
Euthymic	59	43.7
Distressed	32	23.7
Depressed	44	32.6
Total	135	100
Non-MSW		
Euthymic	136	51.3
Distressed	60	22.6
Depressed	69	26.1
Total	265	100
MSM/TG		
Euthymic	195	48.8
Distressed	92	23
Depressed	113	28.2
Total	400	100

3.10.3 Acts of Violence Faced by MSM/TG

Table 3.48 shows various types of violence had been faced by MSM/TG in the past 12 months because of sexual behavior of the study participants. In most of the cases more MSW/TG-SW had faced such various types of violence than Non MSW/TG SW in the past 12 months.

Table 3.48: Personal experience of violence and discrimination in the past 12 months

Experience of violence and discrimination in the past 12 months	MSW/TG-SW		Non-MSW/TG Non-SW		Total	
	N	%	N	%	N	%
Ever beaten because of your sexual behavior in the past 12 months						
Yes	39	28.9	18	6.8	57	14.3
No	96	71.1	247	93.2	343	85.8
Total	135	100.0	265	100.0	400	100.0
In the past 12 months, were you forced to have sex with someone against your wishes?						
Yes	28	20.7	24	9.1	52	13.0
No	107	79.3	241	90.9	348	87.0
Total	135	100.0	265	100.0	400	100.0
In the past 12 months, have you been cheated /threatened because of your sexual behavior?						
Yes	57	42.2	32	12.1	89	22.3
No	78	57.8	233	87.9	311	77.8
Total	135	100.0	265	100.0	400	100.0
In the past 12 months, have you faced any kind of discrimination in your job or every day activities because of your sexual behavior?						
Yes	43	31.9	36	13.6	79	19.8
No	92	68.1	229	86.4	321	80.3
Total	135	100.0	265	100.0	400	100.0
Have you ever faced any problems because of your sexual identity?						
Yes	58	43.0	45	17.0	103	25.8
No	77	57.0	220	83.0	297	74.3
Total	135	100.0	265	100.0	400	100.0

CHAPTER 4

TREND ANALYSIS OF KEY INDICATORS

This chapter seeks to analyze the change between the first, the second and the third rounds of IBBS among MSM on certain selected variables. It specifically deals with the socio-demographic characteristics, sexual behavior, condom use and HIV prevalence among the MSM in the Kathmandu Valley. Data from the second round of the survey have been analyzed using RDSAT software, while the first round and the third round data represent unadjusted proportions calculated through SPSS software. However its impact on comparability is expected to be minimal.

4.1 Prevalence of HIV and Syphilis Infection

HIV prevalence among the MSM has not changed significantly throughout the three rounds of the survey. As seen in Table 4.1, the first round of IBBS showed that the HIV prevalence among MSM was 3.9 percent, 3.3 percent in the second round which again increased to 3.8 percent in the third round. Unlike in 2007 when the prevalence was slightly higher among non-MSWs (3.4%) than among MSWs (2.9%), in 2004 and 2009 more MSWs had HIV than non-MSWs (4.8% MSWs and 3.6% non-MSWs in 2004, 5.2% MSWs and 3% non-MSWs in 2009).

Table 4.1: HIV and STI Prevalence among MSM by Surveyed Years

HIV prevalence	First round			Second round (2007)			Third round			Fourth round		
	SPSS (%)			RDS EPP (%)			SPSS (%)			SPSS (%)		
	MSW (N=83)	Non- MSW	MSM (N=358)	MSW (N=135)	Non- MSW	MSM (N=400)	MSW (N=135)	Non- MSW	MSM (N=400)	MSW (N=135)	Non- MSW	MSM (N=400)
HIV	4.8	3.6	3.9	2.9	3.4	3.3	5.2	3.0	3.8	6.8	2.9	3.8
Active Syphilis	2.4	1.5	1.7	1.5**	2.3**	2.4	3.0	0.8	1.5	2.2	0	0.8
Syphilis History	14.5	7.3	8.9	3.0**	2.6**	2.8	4.4	1.5	2.5	5.2	1.1	2.5
Anal-CT	20.5	1.5	5.9	11.6	2.6	3.6	11.1	1.9	5.0	3.0	3.0	3.0
Anal-NG	12.0	3.6	5.6	8.3	8.1	8.1	18.5	9.4	12.5	4.4	1.9	2.8
Urethral-CT	1.2	2.2	2.0	0.7**	1.1**	0.5	0.7	3.4	2.5			2.5
Urethral-NG	1.2	2.2	2.0	0.0**	0.8**	0.3	0.7	0.8	0.8			0.8
P-Value										.000	.000	.000

*Note: Estimated population proportion (%) of the variables with double asterisks (**) did not meet the required numerator to be calculated with RDSAT and therefore represents unadjusted proportion*

Overall, syphilis prevalence among MSM was 2.4 percent in second round compared to 1.7 percent in first round; and 1.5 percent in the third round. Syphilis history however had decreased from 8.9 percent in the first round to 2.8 percent in the second round and further to 2.5 percent in the third

round. On the other hand, the prevalence of anal NG increased from 5.6 percent in the first round in 2007, to 8.1 percent in the second round and further to 12.5 percent in the third round. The difference is statistically significant.

The anal CT infection rate had decreased from 5.9 percent in the first round to 3.6 percent in the second round but had again increased to 5 percent in the third round. The prevalence of anal CT and anal NG was noticeably higher among MSWs than non-MSWs in all the three rounds. Urethral NG and urethral CT among the MSM were two percent each in the first round, which decreased to 0.3 percent and 0.5 percent respectively in the second round, before increasing to 0.8 percent and 2.5 percent respectively in the third round.

4.2 Socio Demographic Characteristics of MSM and TG

The socio-demographic characteristics of the MSM indicate a similar pattern in all the rounds of the survey. More than half of the study participants (60.3% in 2004, 57.3% in 2007 and 56% in 2009) in all of the three rounds were made up of young respondents below 25 years of age. The median age of the MSM was 24 years in all three rounds of the survey.

Table 4.2: Socio-Demographic Characteristics of MSM by Surveyed Years

Socio-demographic characteristics	First round (2004)			Second round (2007)			Third round (2009)			Fourth round		
	SPSS (%)			RDS EPP (%)			SPSS (%)			SPSS (%)		
	MSW (N=83)	Non-MSW (N=275)	MSM (N=358)	MSW (N=135)	Non-MSW (N=265)	MSM (N=400)	MSW (N=135)	Non-MSW (N=265)	MSM (N=400)	MSW (N=135)	Non-MSW (N=265)	MSM (N=400)
Below 25 years	59.0	60.7	60.3	56.1	55.7	57.3	51.1	58.5	56.0	48.1	50.2	49.5
25 years and above	41.0	39.3	39.7	43.9	44.3	42.7	48.9	41.5	44.0	51.9	49.8	50.5
Median age	24	24	24	24	24	24	24	24	24	25	24	25
Mean/Std. Dev										26.09/6.69	26.72/8.67	26.51/8.05
Brahmin/Chhetri/Thakuri	36.1	40.0	39.1	33.9	40.7	38.2	33.3	47.2	42.5			42.5
Newar	14.5	19.3	18.2	18.3	14.7	14.2	16.3	15.8	16.0			
Rai/Limbu/Gurung/Tamang /Magar	30.1	29.5	29.6	38.5	25.8	27.8	27.4	24.9	25.8			36.5
Terai Caste	15.7	8.0	9.8	5.8	14.8	16.1	18.5	6.4	10.5			
Other hill caste/Muslim	3.6	3.3	3.4	3.5	4.0	3.7	4.4	5.7	5.3			

Similarly, the ethnic/caste background of the MSM remained mostly similar in all three rounds, with almost two-fifths of the MSM belonging to the Brahmin/Chetri/Thakuri caste groups (39.1% in 2004, 38.2% in 2007 and 42.5% in 2009). Around three in ten respondents in all the three rounds were represented by the Rai/Limbu/Gurung/Tamang/Magar castes (29.6% in 2004, 27.8% in 2007 and 25.8% in 2009). MSM belonging to the Terai castes increased from 9.8 percent in 2004 to 16.1 percent in 2007 and again went down to 10.5 percent in 2009.

4.3 Comprehensive Knowledge of HIV

Among the total study population six out of 10 (60%) had correct knowledge of ABC while 62.2% and 58.9% of MSW/TG-SW and Non-MSW/TG Non-SW had correct knowledge respectively (Table 4.3).

Furthermore, Almost six out of 10 (59.3%) of the study population had correct comprehensive knowledge while 58.5% and 60.7% of Non-MSW/TG Non-SW and MSW/TG-SW had correct comprehensive knowledge of HIV (Table 4.3).

Table 4.3: Comprehensive knowledge of HIV

Comprehensive knowledge of HIV	MSW/TG-SW		Non-MSW/TG Non-SW		MSM/TG	
	N	%	N	%	N	%
Knowledge of all ABC						
Correct knowledge	84	62.2	156	58.9	240	60.0
Incorrect	51	37.8	109	41.1	160	40.0
Total	135	100.0	265	100.0	400	100.0
Comprehensive knowledge of all 3 indicators(DEF)						
Correct knowledge	82	60.7	155	58.5	237	59.3
Incorrect	53	39.3	110	41.5	163	40.8
Total	135	100.0	265	100.0	400	100.0

4.4 Condom Use Behavior with Different Sexual Partners

The trend of consistent condom use with different type of partners showed some changes over the three rounds of the survey. The proportion of MSM reporting consistent condom use with a non-paying male partner increased from 44.3 percent in 2004 to 70.1 percent in 2007, but again went down to 65.2 percent in 2009. This is still a significant increase since the first round. Likewise, reported consistent condom use with a paid male anal sex partner in the month preceding the survey increased from 50 percent in 2004 to 89.3 percent in 2007 but went down to 77 percent in 2009. However, this too is a significant increase since the first round.

The consistent use of condom with non-paying female sex partners, however improved all through the three rounds of the study (19.2% in 2004, 33% in 2007 and 40% in 2009); statistically too this is a highly significant change since the first round.

Table 4.4: Consistent Use of Condom with Different Sex Partners in the Past month by Surveyed Years

Consistent use of condom	First round (2004)			Second round (2007)			Third round (2009)			Fourth round (2012)		
	SPSS (%)			RDS EPP (%)			SPSS (%)			SPSS (%)		
	MSW	Non-MSW	MSM	MSW	Non-MSW	MSM	MSW	Non-MSW	MSM	MSW	Non-MSW	MSM
With non-paying male anal sex partner	N=54	N=140	N=194	N=108	N=193	N=301	N=104	N=186	N=290	N=88	N=197	N=285
Always	57.4	39.3	44.3	71.8	70.9	70.1	65.4	65.1	65.2	69.3	74.1	72.6

Consistent use of condom	First round (2004)			Second round (2007)			Third round (2009)			Fourth round (2012)		
	SPSS (%)			RDS EPP (%)			SPSS (%)			SPSS (%)		
	MSW	Non-MSW	MSM	MSW	Non-MSW	MSM	MSW	Non-MSW	MSM	MSW	Non-MSW	MSM
Not always	42.6	60.7	55.7	28.2	29.1	29.9	34.6	34.9	34.8	30.7	25.9	27.4
With one time paying male anal sex partner	N=48			N=92			N=94			N=105		
Always	68.8	NA	NA	94.6**	NA	NA	85.1	NA	NA	83.8	NA	NA
Not always	31.2	NA	NA	5.4**	NA	NA	14.9	NA	NA	16.2	NA	NA
With regular paying male anal sex partner	N=36	NA	NA	N=101			N=99	NA	NA	N=98	NA	NA
Always	50.0	NA	NA	97.2	NA	NA	75.8	NA	NA	85.7	NA	NA
Not always	50.0	NA	NA	2.8	NA	NA	24.2	NA	NA	14.3	NA	NA
With paid male anal sex partner	N=12	N=34	N=46	N=21	N=35	N=56	N=9	N=65	N=74	N=30	N=52	N=82
Always	58.3	47.1	50.0	100.0**	82.9**	89.3	100.0	73.8	77.0	76.7	73.1	74.4
Not always	41.7	52.9	50.0	0.0**	17.1**	10.7	0.0	26.2	23.0	23.3	26.9	25.6
With non-paying female sex Partner	N=15	N=63	N=78	N=28	N=86	N=114	N=20	N=70	N=90	N=21	N=64	N=85
Always	40.0	14.3	19.2	69.2	33.8	33.0	50.0	37.1	40.0	38.1	34.4	35.3
Not always	60.0	85.7	80.8	30.8	66.2	67.0	50.0	62.9	60.0	61.9	65.6	64.7

NA- Not applicable for non-MSWs

Although the trend of consistent condom use among MSWs with one time paying and regular paying male anal sex partner has improved over the years, it did not show significant changes since the first round of the study. Consistent condom use with one-time paying male anal sex partners among MSWs was reported by 68.8 percent of them in the first round, 94.6 percent in the second round and 85.1 percent in the third round. Similarly, consistent condom use with regular paying male anal sex partners went up from 50 percent in 2004 to 97.2 percent in 2007, but again decreased to 75.8 percent in 2009.

4.5 Sexual Behavior

The sexual behavior of the MSM did not change much from the first round of the survey. The majority of the respondents had their first sexual contact before the age of 21 (90.8% in 2004 89% in 2007 and 94.3% in 2009).

Table 4.5: Sexual Behavior of MSM by Surveyed Years

Sexual behavior	First round (2004)			Second round (2007)			Third round (2009)			Third round (2012)		
	SPSS (%)			RDS EPP (%)			SPSS (%)			SPSS (%)		
	MSW (N=83)	Non-MSW (N=275)	MSM (N=358)	MSW (N=135)	Non-MSW (N=265)	MSM (N=400)	MSW (N=135)	Non-MSW (N=265)	MSM (N=400)	MSW (N=135)	Non-MSW (N=265)	MSM (N=400)
Age at first sexual intercourse												
Up to 16 years	79.5	52.0	58.4	62.8	48.2	51.5	82.2	50.6	61.3	73.3	54.7	61.0
17-20 years	14.5	37.8	32.4	31.0	39.7	37.5	17.0	41.1	33.0	21.5	38.1	32.5
21 and above	4.8	9.8	8.7	6.2	12.1	11.0	0.7	8.3	5.8	5.2	7.2	6.5
Can't remember	1.2	0.4	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mean age at first sex	14.2	16.4	15.9	14.8	16.6	16.0	14.2	16.7	15.9	19.2	19.6	19.3
Median/Std Dev										15/3.08	16/2.84	16/2.9
First sex partner												
Male	21.7	58.5	50.0	68.5	31.5	36.1	89.6	43.8	59.3	81.5	69.1	73.3
Female	78.3	41.5	50.0	31.5	68.5	63.9	10.4	56.2	40.8	18.5	30.9	26.8
Ever had sex with a male in exchange for money												
Yes	14.5	12.7	13.1	20.0	15.5	17.4	6.7	25.3	19.0	100	19.6	46.8
No	85.5	87.3	86.9	80.0	84.5	82.6	93.3	74.7	81.0	0.0	80.4	53.2
Ever had sex with a female in exchange for money												
Yes	3.6	12.4	10.3	15.0	10.3	11.3	4.4	10.2	8.3			
No	96.4	87.6	89.7	85.0	89.7	88.7	95.6	89.8	91.8			
Sold anal sex to male in the past month												
Yes	71.1	NA	NA	82.2**	NA	NA	79.3	NA	NA	90.4	NA	NA
No	28.9	NA	NA	17.8**	NA	NA	20.7	NA	NA	NA	NA	NA

Note: Estimated population proportion (%) of the variables with double asterisks (**) did not meet the required numerator to be calculated with RDSAT and therefore represents unadjusted proportion NA- Not applicable for non-MSWs

Fifty percent of the MSM in 2004 had sex with a female partner, while 63.9 percent of respondents reported the same in 2007, followed by 40.8 percent in 2009.

Likewise, about the same proportion of the MSM in the first two rounds (10.3% in 2004 and 11.3% in 2007) had paid a female partner for sex in the past month, while in 2009 the proportion of MSM reporting so went down to 8.3 percent.

While in 2007, 82.2 percent of MSWs had sold sex to a male partner in the month preceding the survey compared to 71.1 percent of MSWs reporting so in 2004, in 2009 again a slightly lower proportion of MSWs (79.3 %) had sold sex in the month preceding the survey.

4.6 Drug Injecting Practices

The percentage of MSM injecting drugs nearly halved in second round (1.8%) since the first round (3.4%) and further decreased to 1.3 percent in the third round. As in the previous two rounds most MSM (98.8%) had not injected even once in the past year.

Table 4.6: Drug Injecting Practices of MSM by Surveyed Years

Drug injecting practice	First round (2004)			Second round (2007)			First round (2009)			Fourth round (2012)		
	SPSS (%)			RDS EPP (%)			SPSS (%)			SPSS (%)		
	MSW (N=83)	Non-MSW (N=275)	MSM (N=1358)	MSW (N=135)	Non-MSW (N=265)	MSM (N=400)	MSW (N=135)	Non-MSW (N=265)	MSM (N=400)	MSW (N=135)	Non-MSW (N=265)	MSM (N=400)
Yes	0.0	4.4	3.4	4.2	1.6	1.8	1.5	1.1	1.3	2.2	1.9	2.0
No	92.8	95.6	95.0	95.8	98.4	98.2	98.5	98.9	98.8	97.8	98.1	98.0
Don't remember	7.2	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

CHAPTER 5

SUMMARY OF MAJOR FINDINGS AND POSSIBLE POLICY AND PROGRAMME IMPLICATIONS

5.1 Summary of Major Findings

General Findings

HIV prevalence among MSM in the Kathmandu Valley is 6.3 percent, while the overall prevalence rate of at least one STI is 10.8 percent (i.e. Percentage of respondents who have at least one of the following infections: HIV, active syphilis, anal and urethral neisseria gonorrhoea and anal and urethral chlamydia trachomatis).

The MSM group was mostly young, with 72.6 percent being below the age of 30. Overall, 24.5 percent were living with a regular sex partner at the time of the survey. Of these 17.1 percent were living with a male partner while 86.5 percent with a female partner.

The predominant sex practice among MSM was anal sex, followed by oral sex. The majority of them (96.8%) had practiced anal sex in the past month while 91 percent had oral as well as anal sex in the past month. All of the Survey participants had sexual contact with a male in the past year while 26.8 percent of them had sex with a female partner too.

The data reveals that the consistent condom use with different partners was high among MSMs. However, MSM group tends to not use condoms consistently with their regular female partners. The past month's sexual encounters showed that overall *consistent condom use* was low with non-paying female sex partners (35.3%).

Ninety-two percent of MSM could get condoms whenever necessary. An equal percentage of MSMs also had heard of lubricants that are made specially to be used with condoms. Among them, 63.4 percent had used such lubricants consistently during anal sex in the month preceding the survey.

Twenty percent of the MSM group had experienced condom breakage during sex in the past month. Two-third (68%) of them knew that such breakage had been caused due to the improper use of condoms.

Overall, 13.5 percent of MSM could not correctly name any symptom of STIs in men. On the other hand, 20.3 percent had experienced at least one symptom of STI in the past 12 months.

While 60 percent of MSM knew about 'ABC', an equal percentage of MSM (59.3%) were aware of all of 'DEF' (A: abstinence, B: being faithful to one partner, C: consistent condom use prevent HIV transmission, D: a healthy looking person can be infected with HIV, E: a person cannot get HIV from a mosquito bite and F: HIV is not transmitted while sharing meal with an HIV infected person).

Around 73 percent of MSM knew about a confidential HIV testing facility in their community. However, only 62.5 percent had ever taken an HIV test. Among them, 68 percent had taken the test within the past year.

Around 27 percent of MSM perceived themselves to be at *medium or high risk* of contracting HIV, 72 percent saw little or no such risk for themselves.

MSMs are also subjected to discrimination and physical violence because of their sexual orientation. Overall, one in seven of the MSM had been beaten up (14.3%), an equal percentage had been forced to have sex (13%), one in five had been threatened (22.3%) and an equal proportion had faced discrimination at work (19.8%) in the past year. In addition one in four (25.8%) had faced different problems because of their sexual identity.

78 percent of MSM had met peer/outreach educators while 54.5 percent had visited a drop-in center (DIC), 46.3 percent had participated in at least one HIV/STI awareness program/community event and 44.8 had visited a VCT center at least once in the past year. A relatively smaller proportion of them (16.3%) had visited an STI clinic in the year preceding the survey. MSM had mostly participated or visited programs run by Cruisedes, the Blue Diamond Society and Parichaya Samaj.

Group Specific Findings on MSWs and Non-MSWs

MSWs had a slightly higher prevalence of HIV than non-MSWs, as 6.8 percent of 135 MSWs and 2.9 percent of 265 non-MSWs tested HIV-positive. The prevalence of at least one STI, i.e., HIV, current syphilis, anal CT and NG and urethral CT and NG was also higher (31.9%) among MSWs than non-MSWs (6.8%).

Around 28 percent of MSM were currently married. Among them 20 percent MSWs were married to male partners, 16 percent of non-MSWs had been married to males.

While 1.9 percent of non-MSWs had never been to a formal school but could read and write, twice as many MSWs (10.4%) reported so.

A relatively larger proportion of MSWs (18.5%) represented different Terai castes compared to non-MSWs (6.4%).

MSWs were found to engage in sexual encounters at an earlier age than non-MSWs, as 82.2 percent of MSWs had their first sexual contact at the age of between 10-16 years compared to 54.7 percent of non-MSWs reporting so. At the same time, a relatively higher proportion of MSWs (81.5%) had their first sexual experience with a male partner than non-MSWs (69.1%).

More non-MSWs (43.8%) than MSWs (26.7%) had sexual contact with female partners in the past year. At the same time, non-MSWs had mostly performed the role of receptive partner (45.7%) while MSWs had mostly performed the insertive role (52.6%) during anal sex in the month preceding the survey.

Overall *consistent condom use* was the highest with paid male anal sex partners (100%) among MSWs and with paid female sex partners (85.2%) among non-MSWs in the month preceding the survey.

More MSWs (94.3%) than non-MSWs (89.1%) had heard of branded lubricants. Likewise, a higher percentage of MSWs (66.9%) than non-MSWs (60.7%) had used lubricants with condoms in each anal sex in the past month.

A higher proportion of non-MSWs (15.1%) than MSWs (10.4%) were unaware of any symptoms of male STIs. Among the different symptoms of STIs, slightly higher proportion of MSWs (21.5%) than non-MSWs (19.6%) had experienced at least one symptom of STI in the past year. Similarly, a relatively larger proportion of MSWs (11.9%) than non-MSWs (4.5%) had experienced anal ulcers/sores in the past year. On the other hand, more non-MSWs (15.1%) than MSWs (10.4%) have had genital ulcers/sores in the past year.

More non-MSWs (32.7%) than MSWs (20%) had not sought treatment for the symptoms of STI/S experienced by them in the past year. A relatively higher proportion of MSWs than non-MSWs had sought treatment from Cruisedes (17.1% MSWs and 7.3% non-MSWs), Parichaya Samaj (14.3% MSWs and 3.6% non-MSWs), and private doctor/clinician (11.4% MSWs and 5.5% non-MSWs) while a larger proportion of non-MSWs than MSWs had been to a pharmacy (18.2% non-MSWs and none of the MSWs (0%)) and had used medicine available at home for treatment (14.5% non-MSWs and 5.7% MSWs).

While 84.4 percent of MSWs knew about the existence of a confidential HIV testing facility in their community, 66.8 percentage of non-MSWs knew about it. Among them more MSWs (78.5%) than non-MSWs (54.3%) had ever taken an HIV test. More MSWs (36.3%) than non-MSWs (23%) also perceived them to be at some or high risk of contracting HIV.

More MSWs than non-MSWs had been subjected to physical/sexual violence such as beating (28.9% MSWs and 6.8% non-MSWs), forced sex (20.7% MSWs and 9.1% non-MSWs), blackmailing (42.2% MSWs and 12.1% non-MSWs) and discrimination at their job or in daily life (31.9% MSWs and 13.6% non-MSWs) in the past one year and had faced problems because of sexual identity (43% MSWs and 17% non-MSWs).

More MSWs than non-MSWs had been exposed to ongoing HIV/AIDS awareness programs and activities including exposure to PEs/OEs/CMs/CEs, visit to DICs, STI clinics, VCT centers or participation in any program/event.

5.2 Recommendations

Based on the findings of this Survey, some specific recommendations are as follows:

The data revealed that the prevalence of HIV and STI has increased over the years, suggesting unsafe/unprotected sexual practices among MSM. Around 27 percent of MSM perceived themselves to be at *medium or high risk* of contracting HIV because of their risky behaviors. Consistent condom use was relatively low with non-paying female partners while condom use was inconsistent with other partners too. Comprehensive program catering to MSM and their sexual networks (that consist of female partners too), should be designed. Advocacy, behavioral change programs, and health promotion intervention should be further scaled up. The contents of the messages should be improved further and disseminated widely.

Data revealed that a considerable proportion of MSM have their first sexual debut at a very young age (73.3% MSWs and 54.7% non-MSWs were less than 16 at time of their first sexual contact). The sexual networks of MSM population are highly diverse which are not limited to male partners only. They have different types of partners and possess multiple partners as well. This diverse network poses a big challenge in program interventions including STI, VCT, and care and treatment program. It will not be easy to embrace the diverse groups of MSM network in the effective prevention and care interventions among MSM population. Therefore, program coverage should be increased and specific program activities that target adolescents and youths, school children and college students should be designed to impart HIV/AIDS awareness and sex education in an effective way.

One in four MSM were not aware of a confidential HIV testing facility being available in the valley. At the same time, 37.5 percent of the respondents had never tested themselves for HIV so far. Increasing awareness about confidential HIV testing facilities in the community and increasing HIV test uptake is of crucial importance. Strengthen and expand client-friendly HIV counseling and testing facilities and STI treatment services to cover more of the MSM population and made aware of locations and availability of such services to them.

Peer/outreach educators are good contact points to disseminate the necessary information related to STI and HIV/AIDS, safe sex and other related topics and distribute IEC materials to the target population. 71 percent of the respondents had met them at least once in the past year. One-to-one education for behavioral change and safe sexual practices through outreach education programs should be continued and expanded to cover more of the target population. Ensure adequate training to local NGOs staff to increase access to more of target population in such facilities.

Some MSM were subjected to physical violence such as beating and forced sex, threatening, and discrimination on the basis of their sexuality. Necessary information related to sexuality and to the rights of sexual minorities should be provided at a larger scale through awareness campaigns such as street drama and radio and television programs to change the negative attitude of the society. Emphasis should be put on the availability of health services to MSM who are subjected to sexual violence.

The group-specific findings suggest that a relatively smaller proportion of non-MSWs than MSWs have participated in different programs/services related to the MSM community and HIV/AIDS. New strategies need to be designed to cover unexposed MSMs and their clients.

Utilize different mediums of communications such as hotlines, websites, PEs/OEs, print media, radio/television and social media to reach these groups.

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ANNEXES

Annex 1: Indicators for monitoring and evaluation framework for HIV

Prevention 1: HIV related risk and transmission among MSM	Results (%)	Indicators
Impact/Outcome indicators		
Percentage of MSM/TG who are HIV infected	3.8	
Percentage of Non-MSWs/TG non-SWs who are HIV infected	2.9	
Percentage of MSWs who are HIV infected	6.8	
Percentage of condom use by total MSM/TG at last anal sex	86.9	
Percentage of condom use by total MSWs at last anal sex	90.4	
Percentage of condom use by total non-MSWs at last anal sex	85.1	
Percentage of MSM reporting consistent condom use with their clients over the past 12 months	86.7	
Percentage of MSM who both correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV transmission	59.3	
Output/coverage indicators		
Percentage of MSM reached with targeted HIV prevention service programs (BCC with OE/PE or DIC or STI Clinics or VCT or community events / trainings or drug treatment or rehabilitation)	54.3	
Percentage of MSM reached with HIV prevention programs (Knows where to receive HIV test and have received condoms)	72.8	
Percentage of MSM who received an HIV test in the last 12 months and who know their results	97.6	

Annex 2: Survey Questionnaire

Government of Nepal
Ministry of Health and Population (MoHP)
National Center for AIDS and STD Control (NCASC)
Integrated Biological and Behavioral Surveillance Survey (IBBS) among Men who have Sex with
Men/Transgender people in Kathmandu Valley - 2012

(MSM Questionnaire)

Namaste! My name is..... I am here from to collect data for a research study being conducted under the leadership of **National Centre for AIDS and STD Control (NCASC), Ministry of Health and Population, Government of Nepal**. During this data collection, I will ask you some personal questions that will be about sexual behavior, use and promotion of condoms, STI/HIV/AIDS and drugs. We will also take your blood, anal swab and urine sample for testing HIV, syphilis, *Chlamydia trachomatis* (CT) and *Neisseria gonorrhoeae* (GC). If it is determined that you have any STI symptoms, we will provide treatment free of charge. The information given by you will be strictly treated as confidential. Nobody will know whatever we talk about because your name will not be mentioned on this form and collected samples. All the mentioned information will be used only for the study purpose. This survey will take about 40 to 60 minutes.

It depends on your wish to participate in this survey or not. You do not have to answer those questions that you do not want to answer, and you may end this interview at any time you want to. But I hope you will participate in this survey and make it a success by providing correct answers to all the questions.

Would you be willing to participate?

1. Yes 2. No

Signature of the interviewer: _____ Date: ____/____/2069

Operational definition of respondent: Inclusion definition for MSM: 'biological males who have engaged in sexual relationship (oral and/or anal sex) with another biological male at least once within the past 12 months prior to the date of survey'

Male Sex Workers (MSWs)/ TG who involved in sex work: "regardless of their identity or label if one male has had sold anal and/or oral sex to another male in exchange for money or any other commodities in the 12 months preceding the study".

Code Respondent: (circle)

MSW: 1	Non-MSW : 2
Seed: 1. Yes	2. No

IDENTIFICATION NUMBER: (Write "0" for seed)

Coupon number of Respondent (If respondent is seed write "0")

Coupon number given: 1) 2) 3)

Ask the respondent to mention number of MSM/metis who is/are in his/her contact or are known to him in the past one year

Did the interviewee abandon the interview?

1. Yes (Precise the number of the last question completed: Q ____) 2. No

Name of Interviewer: _____ Code No. of Interviewer:

Date of Interview: ____/____/2069

Checked by the supervisor: Signature: _____ Date: ____/____/2069

001. Has someone interviewed you from Intrepid Nepal PVT Ltd with a questionnaire in last few weeks?

1. Yes 2. No (Continue Interview)

↓
When?

_____ Days ago (End Interview)

Respondents ID No.

Respondent referred by coupon no.

Interviews Starting Time: _____ hrs. _____ min.

Interviews Completion Time: _____ hrs. _____ min.

1.0 PERSONAL INFORMATION

Q. N.	Questions	Coding Categories	Skip to
101	How old are you?	Age <input type="text"/> <input type="text"/> <i>(Write the completed years)</i>	
102	What is your caste?	Ethnicity/Caste _____ (Specify) Code No. <input type="text"/> <input type="text"/>	
103	Do you follow any religion?	Yes 1 No..... 2	→104
103.1	What is your religion? (Only one response)	Hindu..... 1 Buddhist..... 2 Muslim 3 Christian 4 Others (Specify) 96 Don't remember/know 98 No Response 99	
104	What is your educational status? (Circle '0' if illiterate, '19' for the literate without attending the school, and write exact number of the passed grade)	Illiterate..... 0 Literate..... 19 Grade <input type="text"/> <input type="text"/> <i>(Write the grade completed)</i>	
105	What kind of person do you get attracted to? (Multiple answer possible)	Dohori 1 Ta 2 Pinky ta 3 Man/mard 4 Homosexual 5 Gay 6 Meta/medi 7 Pinky meta 8 Woman 9 Hijara 10 Others (Specify) 96 Don't remember/know 98 No Response 99	
106	How would you identify yourself on the basis of your sexual orientation/ behavior ? (Only one answer)	Dohori 1 Ta 2 Pinky ta 3 Man/mard 4 homosexual..... 5 Gay 6 Meta/medi 7 Pinky meta 8 Woman 9 Hijara 10 Others (Specify) 96 Don't remember/know 98 No Response 99	
106.1	How do you identify yourself on the basis of gender (Only one answer)	Tesro Lingi 1 Man 2 Woman 3 Don't Know 98 No Response 99	

Q. N.	Questions	Coding Categories	Skip to
106.2	Which of the following best describes your current living situation? (Select only one option)	Homeless on the street.....1 Living in own home.....2 Living in a residential hotel.....3 Rented apartment/room.....4 Other (specify).....96	→107
106.3	How often your landlord or male partner forced you to vacate the rented room or apartment in the last 5 years?	Never.....1 Once/twice.....2 Three to five times.....3 More than five times.....4 Do not remember98	
107	Are you currently married?	Yes..... 1 No..... 2 No response 99	} 107.2
107.1	Who is your married sex partner? (Multiple answer possible)	Male 1 Female 2 Others (Specify) 96	→108
107.2	Does your family force you for marriage with female?	Yes.....1 No.....2	
108	Are you currently living with a regular sexual partner?	Yes..... 1 No..... 2 No response 99	} 110
109	Is your regular sexual partner who you live with male or female? (If female, confirm if she is wife or other female partner)	Male 1 Wife 2 Other female 3 No response 99	
110	In the last 12 months, have you been away from your home for more than one-month altogether?	Yes..... 1 No..... 2 Don't remember/know 98 No response 99	
111	What is your main profession? (Only one response)	Student 1 Driver 2 Police..... 3 Military..... 4 Other civil servant..... 5 Businessman 6 Private company staff 7 Unemployed 8 Laborer/wage labor 9 Sex worker 10 Others (Specify) 96 Don't know..... 98 No response 99	
112	What was your total income in last month? (Write total income from one or more than one professions)	NRs _____ <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> If response is "00" go to Q.201 Don't remember/don't know 98 No response 99	} 115
113	How did you earn that money?	Sex work..... 1 Money from family 2 Salaried job 3 Own business..... 4	

Q. N.	Questions	Coding Categories	Skip to
	(Record all. If the respondents says "work" or "my job" probe for whether formal salaried job or informal sector) (Multiple answer possible)	Wage labor..... 5 Other work (Specify) 96 Don't remember/know 98 No response 99	} 115
114	How many people are you supporting with your income now?	Number of people..... <input type="text"/> <input type="text"/> Don't remember/don't know 98 No response Own business..... 99	
115	Does your family force you to live outside of home because of your sexual orientation/ behaviours?	Yes.....1 No.....2 No response 99	
116	Is there at least someone in your immediate family that you can talk openly with about your homosexual/bisexual behaviour?	Yes.....1 No.....2 No response 99	

2.0 INFORMATION ON SEXUAL BEHAVIOR

Q. N.	Questions	Coding Categories	Skip to
201	At what age did you first have sexual intercourse? (I mean any type of anal and or vaginal sex even if you were forced to have it)	Age in years..... <input type="text"/> <input type="text"/> (Completed years) Never had oral, vaginal or anal sex 1 Don't know/Can't recall 98 No response 99	→ Stop interview
202	Was your first sexual partner male or female?	Male/meti 1 Female 2 Don't know..... 98 No response 99	
202.1	Was your have first sex it was mutual or forcefully (vaginal, anal or oral sex)	Forcefully.....1 Mutual2 Don't remember 98 No response 99	
203	Have you had vaginal, anal or oral sex with a female in the last 12 months? (Check with answer in Q No. 109)	Yes..... 1 No..... 2 Don't remember 98 No response 99	
204	Have you had anal/oral sex with a male/meti in the last 12 months?	Yes..... 1 No..... 2 Don't remember 98 No response 99	→ Stop interview
205	Have you ever had sex with a male/meti in exchange for money or any other commodities?	Yes..... 1 No..... 2 Don't remember 98 No response 99	→ 301
206	In the last 12 months have had sex with a male/meti for money?	Yes..... 1 No..... 2 Don't remember 98 No response 99	
207	How old were you when you had sex with a male/meti for money for the first time? (In Completed years)	Year's old <input type="text"/> <input type="text"/> Don't remember 98 No response 99	

Q. N.	Questions	Coding Categories	Skip to
208	When did you last have sex with a male/meti for money? (I mean any kind of sex, including oral sex, etc.)	Days <input type="checkbox"/> <input type="checkbox"/> Weeks <input type="checkbox"/> <input type="checkbox"/> Months..... <input type="checkbox"/> <input type="checkbox"/> Don't remember 98 No response 99	
209	Have you had anal (receptive, insertive or both) sexual intercourse in the last six months with a male partner?	Yes..... 1 No..... 2 Don't remember 98 No response 99	
210	If yes in Q209 Did you or your partner use a condom the last time you had anal sex (in the last six months)?	Yes..... 1 No..... 2 Don't remember 98 No response 99	

3.0 USE OF CONDOM WITH SEX PARTNERS

CONDOM USE WITH NON-PAYING MALE SEX PARTNER

Non-paying male sex partner: Male partners with whom you may have had sex without paying any cash or without exchanging gifts. When answering these questions please think about your “meti” or “ta” as well as other male partners.

Q. N.	Questions	Coding Categories	Skip to
301	In the past one month, how many male sex partners have you had sex with where no payment was involved?	Number <input type="checkbox"/> <input type="checkbox"/> No one..... 0 Don't remember 98 No response 99	} 306
302	With how many of those partners did you have anal sex?	Number <input type="checkbox"/> <input type="checkbox"/> No one..... 0 Don't remember 98 No response 99	→ 304
303	The last time you had anal sex with a non-paying male sex partner, did you use a condom?	Always 1 Most of the time 2 Sometimes 3 Never 4 Don't remember 98 No response 99	
304	How often did you use condom while you had anal sex with non-paying male sex partner in the last month?	Yes..... 1 No..... 2 Don't remember 98 No response 99	
305	Where did you meet your last non-paying male sex partner?	Park 1 Discothèque 2 Restaurant..... 3 Dance Restaurant..... 4 Massage Parlor..... 5 Street 5 Pub/Café 7 Temple 8	

Q. N.	Questions	Coding Categories	Skip to
		Bus Station 9 Public Toilets 10 Cinema Hall 11 Near Army barracks 12 Internet café 13 Sauna/Steam Bath 14 Swimming Pools/sports center 15 Home 16 <i>Bhatti Pasal</i> 17 Forest 18 Saloon 19 Shopping center 20 Others (Specify) _____ 96 Don't remember 98	

CONDOM USE WITH NON-PAYING FEMALE SEX PARTNER

Non-paying female sex partner: Female partners with whom you may have had sex without paying in cash or without exchanging any gifts.

If no in Q. 203 go to Q.N. 309

Q. N.	Questions	Coding Categories	Skip to
306	In the past one month, how many female sex partners have you had vaginal, anal or oral sex with where no payment was involved? (Including your wife if married as well as other women)	Number <input type="text"/> <input type="text"/> No one.....0 Don't remember98 No response99	} 309
307	The last time you had vaginal, anal or oral sex with a non-paying female sex partner, did you use a condom?	Yes.....1 No.....2 Don't remember98 No response99	
308	How often did you use condom while you had vaginal, oral or anal sex with non-paying female sex partner in the last month?	Always1 Most of the time2 Sometimes3 Never4 Don't remember98 No response99	

CONDOM USE WITH ONE-TIME MALE CLIENT

One-time male clients: Men who paid or gave other commodities to you for sex as client and you have never had sex with him before

Q. N.	Questions	Coding Categories	Skip to
309	In the past one month, how many one-time male clients have you had sex with you? (Include oral, anal sex partner)	Number <input type="text"/> <input type="text"/> No one.....0 Don't remember98 No response99	} 315
310	How many one-time male clients did you have anal sex with in the last month?	Number <input type="text"/> <input type="text"/>	

Q. N.	Questions	Coding Categories	Skip to
		No-one0 Don't remember98 No response99	→ 314
311	Did you ask them to use condoms?	All of them.....1 Some of them.....2 None of them3 Don't remember98 No response99	
312	The last time you had anal sex with a one-time male client, did he use a condom?	Yes.....1 No.....2 Don't remember98 No response99	
313	How often did you use condom while you have had anal sex with a one-time male client in the last month?	Always1 Most of the time2 Sometimes.....3 Never4 Don't remember98 No response99	
314	How many one-time male clients did you have oral sex with in the last month?	Number <input type="text"/> <input type="text"/> No-one0 Don't remember98 No response99	

CONDOM USE WITH REGULAR MALE CLIENTS

Regular male clients: Men who paid or gave other commodities to you for sex as client and you have had sex with him more than once

Q. N.	Questions	Coding Categories	Skip to
315	In the past one month, how many regular male/meti clients have you had sex with you?	Number <input type="text"/> <input type="text"/> No one.....0 Don't remember98 No response99	} 320
316	How many regular male/meti clients did you have anal sex with in the last month?	Number <input type="text"/> <input type="text"/> No on0 Don't remember98 No response99	→ 319
317	The last time you had anal sex with a regular male/meti client, did you use a condom?	Yes.....1 No.....2 Don't remember98 No response99	
318	How often did you use condom while you have had anal sex with regular male/meti client in the last month?	Always1 Most of the time2 Sometimes3 Never4 Don't remember98 No response99	
319	How many regular male/meti clients did you have oral sex with in the last month?	Number <input type="text"/> <input type="text"/> No-one0 Don't remember98 No response99	

Q. N.	Questions	Coding Categories	Skip to
320	In the past month, have you brought any male/meti client to orgasm without penetration? (Any male client: Regular or one-time)	Yes.....1 No.....2 Don't remember98 No response99	
321	How much did your last male/meti client pay you? (Regular or one time client)	Rs. <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> Don't remember98 No response99	
322	Where did you meet your last male/meti client? (Regular or one time client)	Park1 Discotheque2 Restaurant.....3 Dance Restaurant.....4 Massage Parlor5 Street5 Pub/Café7 Temple8 Bus Station9 Public Toilets10 Cinema Hall11 Near Army barracks12 Internet /café13 Sauna/Steam Bath14 Swimming Pools15 Home16 Bhatti Pasal17 Forest18 Saloon19 Shopping center20 Others (Specify)96 Don't remember98 No response99	
323	What are the most common occupations among your clients? (Do not read options. Probe for up to three)	Student.....1 Police/Military.....2 Civil servant.....3 Businessman4 Laborer5 Unemployed.....6 Driver7 Private office staff.....8 Others (Specify)96 Don't know98 No response99	

CONDOM USE WITH FEMALE CLIENTS

Female clients: women who paid you for sexual services

Q. N.	Questions	Coding Categories	Skip to
324	In the past one-month, how many women have paid or gave other commodities to you for sexual services?	Number <input type="text"/> <input type="text"/> No one.....0 Don't remember98 No response99	} 327
325	The last time you had vaginal or anal sex with a female client, did you use a condom?	Yes.....1 No.....2	

Q. N.	Questions	Coding Categories	Skip to
		Don't remember98 No response99	
326	How often did you use condom while you have had vaginal or anal sex with female clients in the las month?	Always1 Most of the time2 Sometimes3 Never4 Don't remember98 No response99	

CONDOM USE WITH PAID MALE/ METI SEX PARTNER

Paying male sex partner: Men to whom you have paid in cash or gave some commodities for sex

Q. N.	Questions	Coding Categories	Skip to
327	In the past one month, how many different men/meti did you give money or any other commodities so that they would have sex with you?	Number <input type="text"/> <input type="text"/> No one.....0 Don't remember98 No response99	331
328	How many male/meti partners did you pay to have anal sex with in the last month?	Number <input type="text"/> <input type="text"/> Not paid0 Don't remember98 No response99	331
329	The last time you had anal sex with a paid male sex partner, did you use a condom?	Yes 1 No.....2 Don't remember 98 No response 99	
330	How often did you use condom while you have had anal sex with paying male sex partners in the last month?	Always 1 Most of the time 2 Sometimes 3 Never 4 Don't remember 98 No response 99	
330.1	If a client (regular or casual) refuses to use a condom, what do you usually do?	Refuses to have sex with the client.....1 Forces the client to use a condom.....2 Explains the advantages of condoms.....3 Still has sex with the client.....4 Only takes medication/treatment after sex.....5 Other (Specify) 96 Don't know.....98	
330.2	How often do you have sex with regular and casual clients without condoms to make more money within 6 months?	Always.....1 Most of the time.....2 Sometimes.....3 Never.....4 Don't know.....98 No response.....99	

CONDOM USE WITH PAID FEMALE SEX PARTNER (FEMALE SEX WORKERS)

Paid female sex partner: Women to whom you have paid in cash or gave some gifts for sex

Q. N.	Questions	Coding Categories	Skip to
331	In the past one-month, how many female sex workers did you pay or give other commodities to for sexual contact?	Number <input type="text"/> <input type="text"/> No one.....0 Don't remember98 No response99	334
332	The last time you had vaginal or anal sex with a paid female sex partner, did you use a condom?	Yes.....1 No.....2 Don't remember98 No response99	
333	How often did you use condom while you have had vaginal or anal sex with paying female sex partners in the last month?	Always1 Most of the time2 Sometimes3 Never4 Don't remember98 No response99	
334.	With whom did you have the first sexual intercourse (vaginal or anal)? (Check with answer in Q 202)	Non-paying male partner1 Non paying female partner2 Male client3 Female client4 Paid male sex worker5 Paid female sex worker (FSW)6 Don't Know98 No response99	
335.	Did you use a condom in the first sexual intercourse?	Yes.....1 No.....2 Don't remember/don't know98 No response99	
336	With whom did you have the last sexual intercourse (anal or vaginal)?	Non-paying male partner1 Non paying female partner2 Male client3 Female client4 Paid male sex worker5 Paid female sex worker (FSW)6 Don't Know98 No response99	
337	Did you use a condom in the last sexual intercourse (anal or vaginal)?	Yes.....1 No.....2 Don't remember/don't know98 No response99	
338	Who was your last male anal sexual partner? (Check the answer given in Q 336)	Non-paying male partner1 Male client2 Paid male sex worker3 No anal sexual intercourse in last 12 months4 → Don't Know98 No response99	401
339	Did you use a condom in the last anal sexual intercourse with male sex partner?	Yes.....1 No.....2 Don't remember/don't know98 No response99	
340	How many different sex partners you had in the last six months (count all types of partners:	Number <input type="text"/> <input type="text"/> <input type="text"/>	

Q. N.	Questions	Coding Categories	Skip to
	paid, not-paid, regular, one time among all male, female and <i>tesro lingis</i> also)	No-one 0 Don't remember 98 No response 99	

4.0 SEXUAL PRACTICES AND VIOLENCE

Q. N.	Questions	Coding Categories	Skip to
401	Among all your male sexual partners with whom you had oral sex last month, <u>were your partners (not you):</u>	All receptive..... 1 All insertive 2 Mostly receptive 3 Mostly insertive 4 Equally receptive and insertive 5 Didn't have oral sex in the last month..... 6 Don't remember 98 No response 99	
402	I am still talking about oral sex. Did you use a condom with your last male partner with whom you had oral sex?	Yes 1 No 2 Don't remember/don't know 98 No response 99	
403	Among all your male sexual partners with whom you had also anal sex last month, <u>were your partners (not you):</u>	All receptive..... 1 All insertive 2 Mostly receptive 3 Mostly insertive 4 Equally receptive and insertive 5 Didn't have anal sex in the last month..... 6 Don't remember 98 No response 99	
404	In the past 12 months, were you ever beaten because of your sexual behavior?	Yes 1 No 2 Don't remember/don't know 98 No response 99	} 406
405	Who was/were the people who beat you? (Multiple answers possible don't read possible answer)	Police 1 Military 2 Client 3 Regular Partner 4 Sexual Partner 5 Hooligans group 6 Others (Specify) 96 Don't remember 98 No response 99	
406	In the past 12 months, were you forced to have sex with someone against your wishes?	Yes 1 No 2 Don't remember/don't know 98 No response 99	→ 408
407	Who were these people who forced you to have sex against your will? (Multiple answer possible)	Police 1 Military 2 Client 3 Regular Partner 4 Sexual Partner 5 Hooligans group 6 Others (Specify) 96 Don't remember 98 No response 99	

408	In the past 12 months, have you been cheated /threatened because of your sexual behavior?	Yes1 No.....2 Don't remember.....98 No response99	
409	In the past 12 months, have you faced any kind of discrimination in your job or every day activities because of your sexual behavior?	Yes1 No.....2 Don't remember.....98 No response99	
409.1	Were you ever fired from the job or forced to leave the job due to your sexual orientation/ behavior?	Yes.....1 No.....2 Don't remember.....98 No Response.....99	
410	Have you ever faced any problems because of your sexual identity?	Yes1 No.....2 Don't remember.....98 No response99	
410.1	Have you ever experienced discrimination, been prevented from doing something, or been hassled or made to feel inferior in any of the following situations because of your sexual orientation?		

Response/ frequency	At school	Getting hired or getting a job	At work	Getting housing (renting or buying)	Getting medical care	Getting service in a store or restaurant	On a street or in a public setting (park)	From the police/ other security personnel
Response	Yes= 1 No= 2 Never= 3	Yes= 1 No= 2 Never= 3	Yes= 1 No= 2 Never= 3	Yes= 1 No= 2 Never= 3	Yes= 1 No= 2 Never= 3	Yes= 1 No= 2 Never= 3	Yes= 1 No= 2 Never= 3	Yes= 1 No= 2 Never= 3
QN 410.2. If yes, How many times did this happen?	Never= 0 Once= 2 2/3 times= 3 4≥ times= 4	Never= 0 Once= 1 2/3 times= 2 4≥ times= 3						
QN 410.3	When you are treated unfairly because of your sexual orientation, what is your reaction? Accept it/keep to self= 0 Do something/keep to self= 1 Do something/talk to others= 2							

411. Below is a list of the ways you might have felt or behaved. Please tell me how often you have felt this way during the past week.				
SCORING: zero for answers in the first column, 1 for answers in the second column, 2 for answers in the third column, 3 for answers in the fourth column.	Rarely on none of the time (less than 1 day)	Some or a little of the time (1-2 days)	Occasionally or moderate of the time (3-4 days)	Most or all the time (5-7 days)
I1. I was bothered by things that usually don't bother me				
I2. I did not feel like eating; my appetite was poor.				
I3. I felt that I could not shake off the blues even with help from my family or friends.				
I4. I felt I was just as good as other people				
I5. I had trouble keeping my mind on what I was doing.				

I6. I felt depressed				
I7. I felt that everything I did was an effort.				
I8. I felt hopeful about the future.				
I9. I thought my life had been a failure.				
I10. I felt fearful.				
I11. My sleep was restless				
I12. I was happy				
I13. I talked less than usual				
I14. I felt lonely.				
I15. People were unfriendly				
I16. I enjoyed life.				
I17. I had crying spells.				
I18. I felt sad.				
I19. I felt that people dislike me.				
I20. I could not get "going."				

Q. N.	Questions	Coding Categories	Skip to
413	Did you ever feel so low you thought a lot about committing suicide?	Yes 1 No 2	501
414	How often did you have any thoughts about ending your own life in last 12 months?	Many times.....1 A few times.....2 Once or twice.....3 No response.....99	
414.1	Have you ever made a plan to commit suicide?	Yes 1 No 2 No response.. 99	
415	Did you ever attempt suicide?	Yes 1 No 2 No response..... 99	

5.0 ACCESSIBILITY OF CONDOM AND LUBRICANT

Q. N.	Questions	Coding Categories	Skip to
501	SHOW CONDOM Can you tell me what this is?	Can identify as condom 1 Cannot identify as condom 2 No response..... 99	
502	Do you have condoms with you at this moment? Please show me	Can show condoms 1 Cannot show a condom 2 No response..... 99	
502.1	In the last 12 months have you been given condoms? (e.g. through an outreach service, drop-in centre or sexual health clinic)	Yes.....1 No 2 Don't remember 98 No response..... 99	
503	Last time, from where did you get condom? (Multiple answers. DO NOT READ the possible answers)	Shop 1 Pharmacy..... 2 Health facility..... 3 Bar/Guest House/Hotel..... 4 Friends..... 5 Clients..... 6 BDS drop-in center..... 7 BDS field workers..... 8	

Q. N.	Questions	Coding Categories	Skip to
505	Can you obtain a condom every time you need it ?	Yes..... 1 No 2 Don't need one..... 3 Don't remember 98 No response 99	→507 } 507
506	Why can't you get a condom every time you need it? (Multiple answers. DO NOT READ the possible answers)	Cost too much 1 Shop/pharmacy too far away 2 Shops/pharmacies closed 3 Shy to buy condom 4 Don't know where to obtain 5 Don't want to carry condom 6 Other (Specify) 96 Don't know 98 No response 99	
507	Which is your most preferred condom brand?	Dhal 1 Panther 2 Number one 3 Jodi 4 Kamasutra 5 Other (Specify) 96 Don't know 98 No response 99	
508	Have you ever used lubricant when having anal sex? (Lubricants: Something to make your or your partner's penis slippery so it is easier to insert without pain)	Yes..... 1 No 2 Don't remember 98 No response..... 99	
509	What types of lubricant did you used during last anal sex?	Saliva 1 Oil..... 2 Water based lube 3 Antiseptic/antibiotic cream..... 4 Ghee..... 5 Cream/lotion 6 Other (Specify) 96 Don't know 98 No response 99	
510	Were you using a condom that time?	Yes..... 1 No 2 Don't know..... 98 No response..... 99	
511	Some people use a lubricant product made especially for using with condom. Have you heard of such a product?	Yes..... 1 No 2 Don't remember 98 No response..... 99	} 513
512	Could you tell me the brand name of such a product?	Yes, (Name) 1 No 2 Don't remember 98 No response..... 99	
513	In the past 30 days, how often have you used a special lubricant for condoms together with a condom during anal sex?	Always 1 Most of the time 2 Sometimes 3 Never..... 4	→515

Q. N.	Questions	Coding Categories	Skip to
514	Why do you sometimes not use special condom lubricant, or never use it?	Cost too much 1 Shy to buy lubricant 2 Don't know where to obtain 3 I do not need to use 4 I use other cream 5 Not aware of such products 6 Other (Specify) _____ 96 Don't remember 98 No response 99	
515	If the respondent is 4 in Q.N. 510 go to Q.N. 513 For you, what are the purposes of using special lubricant with condoms during sex? (Multiple answers. DO NOT READ the possible answers)	Decrease pain/inflammation 1 Increase feeling/stamina 2 Decrease risk of condom breakage 3 Prevent HIV/AIDS infection 4 Other (Specify) _____ 96 Don't know 98 No response 99	
516	Have you faced any problems while using lubricants?	Condom slippage 1 Irritation or burning sensation 2 Condom breakage 3 No problem 4 Other (Specify) _____ 96 Don't know 98 No response 99	
517	What is your convenient/preferred place to buy condoms and lubricants? (Multiple answers. DO NOT READ the possible answers)	Shop 1 Pharmacy/Medical hall 2 Bar/Guest House/Hotel 3 BDS drop-in center 4 BDS field workers 5 Parichaya Samaj 6 Cruisedes 7 Other (Specify) _____ 96 Don't know 98 No response 99	
518	In the last month, was there such instance when your condom broke while you were using it?	Yes 1 No 2 Condom never used/didn't use last month 3 Don't know 98 No response 99	} 601
519	If you have experienced condom breakage, what do you think caused such breakage?	Use of oil based lubricant 1 Improper use of condom 2 Other (Specify) _____ 96 Don't know 98 No response 99	

6.0 USE OF ALCOHOL AND DRUGS

Q. N.	Questions	Coding Categories	Skip to
601	Have you ever had any drinks containing alcohol?	Yes..... 1 No 2 No response..... 99	→ 604
601.1	During the last 4 weeks how often have you had drinks containing alcohol?	Every day..... 1 3-4 days a week 2 At least once a week..... 3 Did not drink alcohol in the last week 4 Don't know / remember 98 No response..... 99	
602	Normally what type of drinks do you take?	Local <i>raksi</i> 1 Beer 2 <i>Jand</i> 3 Whisky..... 4 Other (Specify) 96 Don't know / remember 98 No response..... 99	
603	Last time you had sex, how much alcohol did you drink? (Only one response)	A lot (more than 6 small beers or 3 glass of local raw whisky) 1 Some (3-4 small beers or 1-3 glasses of wine) 2 A little (1-3 small beers or 1 glass of wine) 3 No alcohol..... 4 Don't know / remember 98 No response..... 99	
604	Some people have tried different types of drugs. Which of the following have you ever tried in the last 12 months? READ OUT ANSWERS	Yes No Ganja..... 1 2 Chares 1 2 Tablets 1 2 Glue/dendrite 1 2 Heroine 1 2 Other (Specify) 96	
605	Some people try injecting drugs using a syringe. Have you injected such drugs in the last 12 months DO NOT COUNT DRUGS INJECTED FOR MEDICAL PURPOSES OR TREATMENT OF AN ILLNESS	Yes..... 1 No 2 Don't remember/don't know..... 98 No response..... 99	
606	In the past 12 months, have you received any medical injections?	Yes..... 1 No 2 Don't know..... 98 No response..... 99	

7.0 SEXUALLY TRANSMITTED INFECTIONS (STI)

Q.N.	Questions	Coding Categories	Skip to
701	<p>Could you tell me about any symptoms of STIs in men?</p> <p>DO NOT READ OUT (Multiple responses possible)</p>	Penis discharge 1 Burning pain during urination..... 2 Genital ulcers/sores 3 Swellings in groin area 4 Anal discharge 5 Anal ulcer/sores 6 Other (Specify) _____ 96 Don't know..... 98 No response..... 99	
702	<p>Have you had a urethral discharge during the past 12 months?</p>	Yes..... 1 No 2 Don't know..... 98 No response..... 99	
703	<p>Have you had anal discharge during the last 12 months?</p>	Yes..... 1 No 2 Don't know..... 98 No response..... 99	
704	<p>Have you had a genital ulcer / sore during the past 12 months?</p>	Yes..... 1 No 2 Don't know..... 98 No response..... 99	
705	<p>Have you had an anal ulcer / sore during the past 12 months?</p>	Yes..... 1 No 2 Don't know..... 98 No response..... 99	
706	<p>Have you had genital ulcer / discharge / sore (penis and or anal) during the past 12 months</p> <p>(Check consistency with previous questions 702, 703, 704, 705 and 706)</p>	Yes..... 1 No 2 Don't know..... 98 No response..... 99	→ 801
707	<p>What was the first thing you did when you had those symptoms?</p> <p>DO NOT READ OUT</p>	Sought treatment from hospital 1 Sought treatment from chemist 2 Sought treatment from private doctor/ clinician 3 Sought treatment from BDS clinic 4 Sought treatment from Parichaya Samaj 5 Sought treatment from Cruse Aids 6 Received treatment from friend 7 Took medicine available at Home..... 8 Nothing 9 Other (Specify) _____ 96 Don't remember/know 98 No response..... 99	} 801
708	<p>Before going to see the doctor or the drug seller, did you take any drugs that you thought would treat your STI?</p>	Yes..... 1 No 2 Don't know..... 98 No response..... 99	

Q.N.	Questions	Coding Categories	Skip to
709	Last time you had one of those symptoms that you just told me about, how many days did you wait between discovering symptoms and going for treatment (If the same day, code 1)	Number of days..... <input type="text"/> <input type="text"/> No treatment at all 0 Don't remember/ know 98 No response 99	→ 801
710	Last time you sought treatment for those symptoms, how much did the treatment cost you, including the medicine and the fees for the service?	Rs. <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> Don't remember / know 98 No response 99	

8.0 HIV/AIDS KNOWLEDGE AND ATTITUDES

Q. N.	Questions	Coding Categories	Skip to
801	Have you ever heard of HIV or AIDS?	Yes 1 No 2 No response 99 Don't know 98	→ 801
802	Do you know anyone who is infected with HIV or has died of AIDS?	Yes 1 No 2 No response 99	→ 804
803	Do you have a close relative or close friend who is infected with HIV or has died of AIDS?	Yes, a close relative 1 Yes, a close friend 2 No 3 No response 99	
804	Can people reduce their risk of HIV by using a condom correctly every time they have sex?	Yes 1 No 2 Don't know 98 No response 99	
805	Can people reduce their risk of HIV by using a condom correctly every time they have anal sex?	Yes 1 No 2 Don't know 98 No response 99	
806	Can a person get the HIV virus from mosquito bites?	Yes 1 No 2 Don't know 98 No response 99	
807	Can people protect themselves from HIV by having one uninfected faithful sex partner?	Yes 1 No 2 Don't know 98 No response 99	
808	Can people protect themselves from HIV by abstaining from sexual intercourse? (This means abstaining from anal as well as oral sex)	Yes 1 No 2 Don't know 98 No response 99	
809	Can a person get the HIV virus by sharing meal with someone who is infected?	Yes 1 No 2 Don't know 98 No response 99	
810	Can a person get the HIV virus by using a needle that is used by someone else?	Yes 1 No 2 Don't know 98 No response 99	

Q. N.	Questions	Coding Categories	Skip to
811	Do you think that a healthy-looking person can be infected with HIV, the virus that causes AIDS?	Yes..... 1 No 2 Don't know..... 98 No response..... 99	
812	Can a person get HIV by shaking hand with an HIV infected person?	Yes..... 1 No 2 Don't know..... 98 No response..... 99	
813	Can blood transfusion from an infected person to the other transmit HIV?	Yes..... 1 No 2 Don't know..... 98 No response..... 99	
814	Can a pregnant woman infected with HIV transmit the virus to her unborn child?	Yes..... 1 No 2 Don't know..... 98 No response..... 99	→816 →816
815	What can a pregnant woman do to protect her unborn child against the risk of HIV transmission?	Take medication 1 Others (Specify) 96 Don't know..... 98	
816	Can women with HIV transmit the virus to her newborn child through breast-feeding?	Yes..... 1 No 2 Don't know..... 98 No response..... 99	
817	What have you done for yourself to avoid getting HIV? (Multiple response possible)	Take medicine 1 Nothing 2 Always use condoms..... 3 Others (Specify) 96 Don't know 98 No response..... 99	} 819
818	What medicine have you taken?	Name..... 1 Don't know 98 No response..... 99	
819	To what extent do you think that you are at risk of HIV infection?	High risk 1 Some risk 2 Little or no risk 3 Don't know 98 No response..... 99	→821 } 822
820	Why do you think you are at risk of getting HIV? Multiple answers possible (DO NOT READ OUT)	High risk job 1 Multiple sex partners..... 2 Frequent and regular anal sex 3 Don't use condoms 4 Irregular condom use..... 5 Needles sharing 6 Other (Specify) 96 Don't know 98 No response..... 99	} 822
821	Why do you think you are at little or no risk of HIV? Multiple answers possible (DO NOT READ OUT)	Always use condoms..... 1 Only one sex partner 2 Partners are clean 3 Partners are healthy 4 Never share injections 5 Share injections sometime only 6 Other (Specify)..... 96	

Q. N.	Questions	Coding Categories	Skip to
		Don't know 98 No response 99	
822	Apart from this study center, do you know any such place in Kathmandu valley where you could have a confidential HIV test? By confidential, I mean that no one will know the result if you don't want them to know it.	Yes 1 No 2 Don't know 98 No response 99	
823	I don't want to know the result, but have you ever had an HIV test?	Yes 1 No 2 Don't know 98 No response 99	901
824	Did you yourself take the test or did someone else ask you to have the test?	Voluntarily 1 I was asked 2 Don't know / remember 98 No response 99	
825	When you were tested for HIV, did you received counseling? (I mean proper information about HIV infection and prevention, the reason for taking HIV test and post test counseling)	Yes 1 No 2 Don't know 98 No response 99	
826	Please do not tell me the result, but did you yourself find out the result of your test?	Yes 1 No 2 Don't know 98 No response 99	
827	When did you have your HIV test?	Within past one year 1 One year before 2 Don't know 98 No response 99	

9.0 STIGMAS AND DISCRIMINATION

Q. N.	Questions	Coding Categories	Skip to
901	If a male relative of yours gets HIV, would you be willing to take care of him?	Yes 1 No 2 Don't know 98 No response 99	
902	If a female relative of yours gets HIV, would you be willing to take care of her?	Yes 1 No 2 Don't know 98 No response 99	
903	If a member of your family gets HIV, would you want it to remain a secret?	Yes 1 No 2 Don't know 98	
904	If you knew a shopkeeper or food seller had HIV, would you buy food from them?	Yes 1 No 2 Don't know 98 No response 99	
905	In your opinion, a person with HIV should get the same, more or less health care than someone suffering from some other chronic disease?	Same 1 More 2 Less 3 Don't know 98 No response 99	
906	If a colleague who is working with you has HIV but he is not very sick, should he/she be allowed to continue working?	Yes 1 No 2 Don't know 98	

Q. N.	Questions	Coding Categories	Skip to
		No response..... 99	

10.0 KNOWLEDGE AND PARTICIPATION IN STI AND HIV/AIDS PROGRAMS

Q. N.	Questions	Coding Categories	Skip to
1001	Have you met or interacted with Peer Educators (PE) or Outreach Educators (OE) or Community Mobilisers (CM) or Community Educators (CE) in the last 12 months?	Yes..... 1 No..... 2 No response..... 99	→1005
1002	What kind of activities did you participate in with such PE /OE/CE/CM? (Multiple answers. DO NOT READ the possible answers)	Discussion on how HIV/AIDS is/isn't transmitted..... 1 Discussion on how STI is/isn't Transmitted... .. 2 Regular/non-regular use of Condom..... 3 Demonstration on using Condom correctly..... 4 Others (Specify)..... 96	
1003	Do you know which organization were they from? (Multiple answers possible)	BDS 1 Parichaya Samaj 2 Cruisedes..... 3 Others (Specify) 96 Don't know 98	
1004	How many times have you been visited by PE, OE, CM and/or CE in the last 12 months?	Once 1 2-3 times 2 4-6 times 3 7-12 times 4 More than 12 times 5	
1005	Have you visited or been to any out reach center (DIC, IC or CC) in the last 12 months? Drop-In Center (DIC), Information Center (IC), Counseling Center (CC)	Yes..... 1 No..... 2	→ 1009
1006	When you went to the out reach center (DIC,IC or CC), which activities did you take part in? (Multiple answers. DO NOT READ the possible answers)	Went to collect condoms..... 1 Went to learn the correct way of using condom..... 2 Went to watch film on HIV/AIDS. 3 Participated in discussion on HIV transmission..... 4 Other (Specify)..... 96	
1007	Do you know which organizations run those out reach center (DIC,IC or CC)? (Multiple answers possible)	BDS 1 Parichaya Samaj 2 Cruisedes..... 3 SACTs..... 4 NFCC..... 5 CAC..... 6 Others (Specify) 96 Don't know 98	
1008	How many times have you visited out reach centers (DIC, IC or CC) in the last 12 months?	Once 1 2-3 times 2 4-6 times 3 7-12 times 4 More than 12 times 5	
1009	Have you visited any STI clinic in the last 12 months?	Yes..... 1 No..... 2	→ 1013

Q. N.	Questions	Coding Categories	Skip to
1010	When you visited such STI clinic in what activities were you involved? (Multiple answers. DO NOT READ the possible answers given below)	Blood tested for STI..... 1 Physical examination conducted for STI identification..... 2 Discussed on how STI is/isn't transmitted 3 Discussed on regular/non-regular use of condom 4 Took a friend with me 5 Other (Specify)..... 96	
1011	Do you know which organizations run those STI clinics? (Multiple answers possible)	BDS 1 Parichaya Samaj 2 Cruisedes..... 3 SACTs..... 4 NFCC..... 5 CAC..... 6 Others (Specify) 96 Don't know 98	
1012	How many times have you visited STI clinic in the last 12 months?	Once 1 2-3 times 2 4-6 times 3 7-12 times 4 More than 12 times 5	
1013	Have you visited any Voluntary Counseling and Testing (VCT) centers in the last 12 months?	Yes..... 1 No..... 2	→ 1017
1014	When you visited such VCT center in what activities were you involved? (Multiple answers. DO NOT READ the possible answers)	Received pre-HIV/AIDS test counseling 1 Blood sample taken for HIV/AIDS test 2 Received post HIV/AIDS test counseling 3 Received HIV/AIDS test result..... 4 Received counseling on using condom correctly in each sexual intercourse 5 Took a friend with me 6 Received information on HIV/AIDS window period 7 Other (Specify)..... 96	
1015	Do you know which organizations run those VCT centers? (Multiple answers possible)	BDS 1 Parichaya Samaj 2 Cruisedes..... 3 SACTs..... 4 NFCC..... 5 CAC..... 6 Others (Specify) 96 Don't know 98	
1016	For how many times have you visited VCT center in the last 12 months?	Once 1 2-3 times 2 4-6 times 3 7-12 times 4 More than 12 times 5	
1017	Have you ever participated in HIV/AIDS awareness raising program or community events in the last 12 months?	Yes..... 1 No..... 2	→ 1021

Q. N.	Questions	Coding Categories	Skip to
1018	When you participated in such events, what activities did you participate in? (Multiple answers. DO NOT READ the possible answers)	Street drama 1 AIDS Day 2 Condom Day 3 Video Shows..... 4 Group discussions 5 Talk programs 6 HIV/AIDS related training 7 HIV/AIDS related Workshops..... 8 Condom use demonstrations..... 9 Others (Specify) _____ 96	
1019	Do you know which organizations organized those activities? (Multiple answers. DO NOT READ the possible answers given below)	BDS 1 Parichaya Samaj 2 Cruisedes..... 3 Others (Specify) _____ 96 Don't know 98	
1020	How many times have you participated in such activities in the last 12 months?	Did not participate in last 12 months 0 Once 1 2-3 times 2 4-6 times 3 7-12 times 4 More than 12 times 5	
1021	Have you heard about Community Home Based Care (CHBC) services that are provided to people with HIV?	Yes..... 1 No..... 2	
1022	Have you heard about programs that provide essential services for people with HIV, ART services and that which gives information on ART (Community Care Support Treatment Program)?	Yes..... 1 No..... 2	

11.0 GENERAL INFORMATION

Q. N.	Questions	Coding Categories	Skip to
1101	Where were you born?	District _____ VDC/Municipality _____	
1102	Where do you live now? (Do not ask the exact address)	Districts: _____ VDC/Municipality: _____ Don't remember/know..... 98 No response 99	
1103	For how long have you been living in this district?	Number of Months <input type="text"/> <input type="text"/> (Record "00" if less than 1Month) Since Birth..... 95 Don't remember/know..... 98 No response 99	} 1201
1104	Before you moved here, where did you live?	Districts: _____ VDC/Municipality: _____ Don't remember/know..... 98 No response 99	

12.0 INFORMATION ON BDS AND MSM NETWORK

Q. N.	Questions	Coding Categories	Skip to
1201	Have you ever heard about Blue Diamond Society in Kathmandu city?	Yes 1 No 2 Don't know 98 No response..... 99	
1202	Do you have friends who have also sexual relationship with males from other district or cities than Kathmandu Valley?	Yes 1 No 2 No response..... 99	} 1204
1203	Which districts /cities ? (Multiple answer possible)	District City 1. _____	
1204	How many other MSM do you know (who also knows you well)? (Knowing someone is defined as being able to contact them, and having had contact with them in the past 12 months)	Number: <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Don't know 98 No response..... 99	
1205	Among those people, please try to estimate their number by their age group:	Less than 15 years old <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 15-20 years old <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 21-30 years old <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 31-40 years old <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> > 41 years old <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Don't know 98 No response 99	
1206	Again, among those guys, please try to estimate their number by religion:	Hindu <input type="checkbox"/> <input type="checkbox"/> Buddhist..... <input type="checkbox"/> <input type="checkbox"/> Muslim <input type="checkbox"/> <input type="checkbox"/> Christian..... <input type="checkbox"/> <input type="checkbox"/> Others (Specify) _____ <input type="checkbox"/> <input type="checkbox"/> Don't know 98 No response 99	
1207	How are you related with the person who gave you the coupon for taking part in the study? (Do not ask this to the seed)	A close friend 1 A friend 2 You sex partner 3 A relative 4 A stranger 5 Other (Specify) _____ 96 Don't know 98 No response..... 99	
1208	In the past 6 months, how often have you been	Very Often Often Some-time	Never

Q. N.	Questions	Coding Categories			Skip to	
	to the following locations to meet male sexual partners:	Park	1	2	3	4
		Discotheque	1	2	3	4
		Dance Restaurant	1	2	3	4
	(Ask for all the items proposed and probe for other locations, as well)	Massage parlor	1	2	3	4
		Street	1	2	3	4
		Pub/Cafe	1	2	3	4
		Temple	1	2	3	4
		Bus Station	1	2	3	4
		Public Toilets	1	2	3	4
		Cinema Hall	1	2	3	4
		Near Army barracks	1	2	3	4
		Internet (chat room)	1	2	3	4
		Personal Add (web site)	1	2	3	4
		Personal Add (magazine or other)	1	2	3	4
		Sauna/Steam bath				
		Swimming Pools	1	2	3	4
		Home			3	4
	Telephone	1	2	3	4	
	Other (Specify) _____	1	2	3	4	
		1	2	3	4	
	1	2				
1209	Please mention 3 places of kathmandu valley where you visit most often last 6 months with your male sexual partners:123 Don't know98 No response99				

Annex 3: Sample Size Formulae

$$n = D \frac{[Z_{1-\alpha/2} \sqrt{2\bar{p}(1-\bar{p})} + Z_{1-\beta} \sqrt{P_1(1-P_1) + P_2(1-P_2)}]^2}{(P_2 - P_1)^2}$$

n = required minimum sample size per survey round

D = design effect (assumed in the following equations to be the default value of 2)

P₁ = also added values the estimation proportion at the time of the first survey

P₂ = also add values the target population at some future date, so that (P₂-P₁) is the magnitude of change of change you want to be able to detect.

$\bar{P} = (P_1 + P_2)/2$

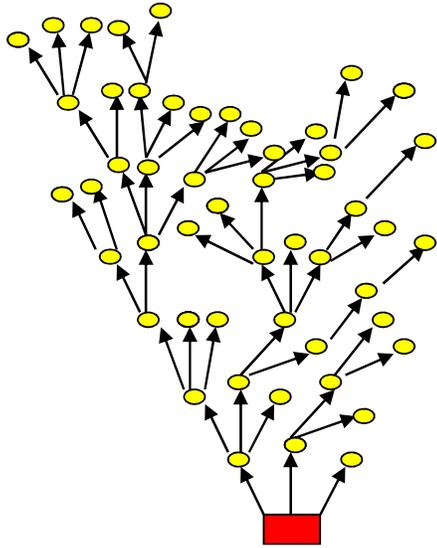
Z_{1- $\alpha/2$} = also add values the Z-score corresponding to the level of significance

Z_{1- β} = also add values the Z-score corresponding to the level of power

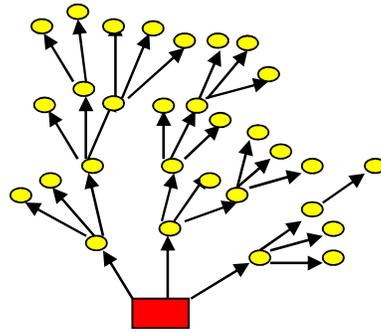
*Guidelines for repeated behavioral surveys in populations at risk of HIV, Page 47, FHI-2000

Annex 4: Respondent Driven Sampling Tree

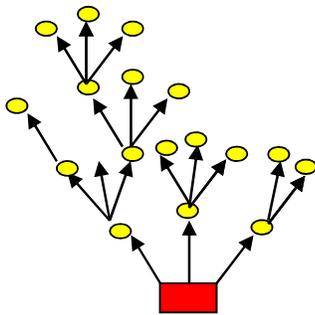
SEED A



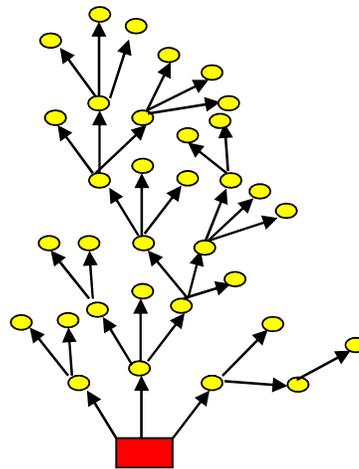
SEED B



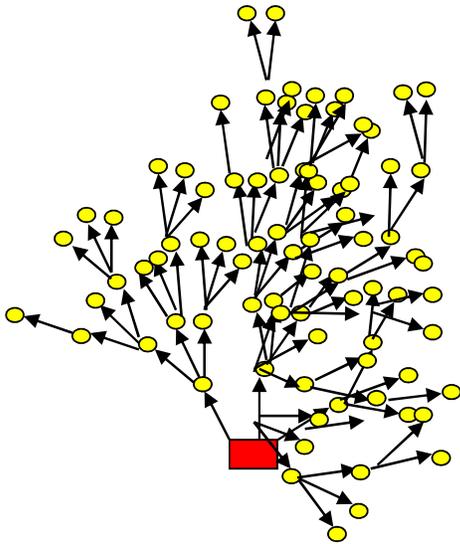
SEED H



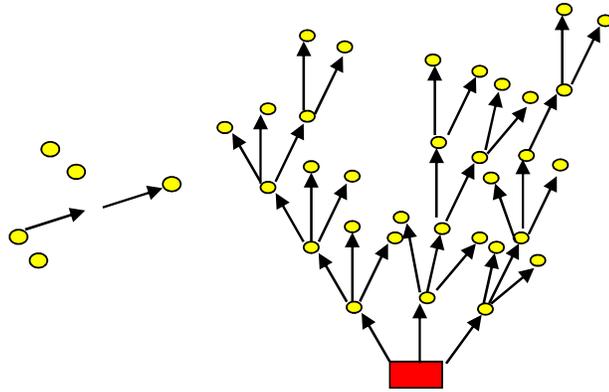
SEED G



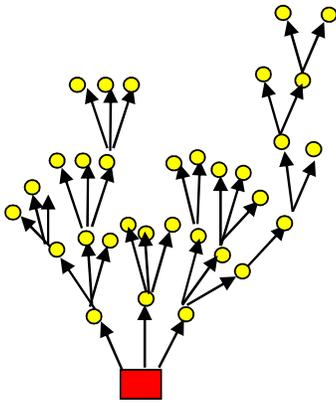
SEED E



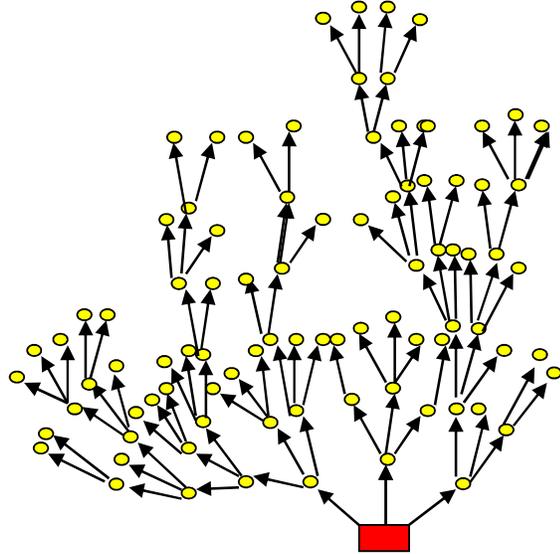
SEED F



SEED C



SEED D



Annex 5: Clinical/Lab Checklist

CONFIDENTIAL

**INTEGRATED BIO- BEHAVIORAL SURVEY (IBSS) AMONG MALE WHO HAVE SEX WITH MALE IN
KATHMANDU VALLEY
NCASC/INTREPID NEPAL – 2012**

Clinical/Lab Checklist

Respondent ID Number:
2069/___/___

--	--	--	--	--	--

Date:

Name of Clinician: _____

Name of Lab Technician: _____

(A) Clinical TEST

(B) Specimen collection

		<u>Yes</u>	<u>No</u>
Weight : _____	Kg Pre-test counseled	1	2
	Anal Swab Collected for Gonorrhea & Chlamydia	1	2
	Urine Collected for Gonorrhea & Chlamydia	1	2
B.P. : _____ mm of Hg	Blood Collected for HIV & Syphilis	1	2
Pulse : _____	Date & place for post-test results given	1 1	2 2

Temperature : _____ ° F Condom given 1 2
IEC materials given 1 2

1.0 Syndromic Treatment Information

101. Have you experienced genital discharge/burning urination/swelling and tenderness of testis or epididymis in the past one-month?

- 1. Yes
- 2. No

[If yes, give urethral discharge/scrotal swelling syndrome treatment]

102. Have you had genital ulcer/sore blister in the past one-month?

- 1. Yes
- 2. No

[If yes, give genital ulcer syndrome treatment and time for follow-up]

103. Have you had a tender or non-tender/solid or fluctuant swelling in the groin area in the past one month?

- 1 Yes
- 2. No

[If yes, give inguinal swelling (bubo) syndrome treatment and time for follow- up]

Annex 6: Self- Categorization by 'Third Gender' on the Basis of Their Sexual Orientation/Behavior

Self-Categorization	N=400	%
Man/mard	127	31.8
Meta/meti	76	19.0
Homosexual	69	17.3
Ta	44	11.0
Gay	37	9.3
Dohori	21	5.3
Woman	17	4.3
Pinky meta	4	1.0
Others	4	1.0
Pinky ta	1	.3

Annex 7: Common Professional Background of Paying Partners

Professional background of clients	N=135	%
Police/Military	20	14.8
Businessman	15	11.1
Laborer	15	11.1
Student	13	9.6
Civil servant	10	7.4
Private office staff	3	2.2
Unemployed	2	1.5
Don't know	57	42.2

Annex 8: Sites Visited to Meet Sex Partners in Past Six Months

Meeting Points	MSW/TG-SW (N=135)			Non-MSW/TG Non-SW (N=265)			MSM (N=400)		
	%	%	%	%	%	%	%	%	%
	Very Often	Often	Some-time	Very Often	Often	Some-time	Very Often	Often	Some-time
Park	23.7	24.4	35.6	9.8	24.2	34.3	16.8	24.3	34.9
Discotheque	2.2	11.1	34.1	1.1	6.4	19.6	1.7	8.8	26.8
Dance Restaurant	1.5	8.9	41.5	1.1	4.5	20.0	1.3	6.7	30.7
Massage parlor	0.7	0.0	3.0	0.4	0.0	6.4	0.6	0.0	4.7
Street	24.4	45.2	24.4	10.6	38.1	35.1	17.5	41.6	29.8
Pub/Cafe	0.7	8.9	24.4	1.1	8.3	25.3	0.9	8.6	24.9
Temple	0.7	11.9	34.8	1.9	7.9	28.3	1.3	9.9	31.6
Bus Station	5.2	23.0	35.6	1.9	12.1	35.5	3.5	17.5	35.5
Public Toilets	2.2	5.9	28.9	2.6	6.4	22.3	2.4	6.2	25.6
Cinema Hall	0.7	9.6	46.7	0.8	5.7	25.3	0.7	7.6	36.0
Near Army barracks	0.7	5.9	20.7	0.8	3.4	8.7	0.7	4.7	14.7
Internet (chat room)	4.4	11.1	17.0	8.7	10.2	12.5	6.6	10.6	14.7
Personal Add (web site)	0.7	3.0	8.9	1.1	3.0	10.2	0.9	3.0	9.5
Personal Add (magazine or other)	0.0	0.0	7.4	0.8	0.4	4.5	0.4	0.2	6.0
Sauna/Steam bath	0.0	0.0	1.5	0.4	0.4	2.6	0.2	0.2	2.1
Swimming Pools	0.0	4.4	15.6	1.1	2.6	9.1	0.6	3.5	12.3
Home	5.9	30.4	45.2	7.5	26.4	37.0	6.7	28.4	41.1
Telephone	40.0	40.7	13.3	26.4	38.1	24.5	33.2	39.4	18.9
Others	25.0	21.2	11.5	27.9	17.6	2.9	26.5	19.4	7.2

Annex 9: Association of condom use with different partners with HIV and Syphilis infections

	MSW/TG-SW								Non-MSW/TG Non-SW						MSM/TG			
	HIV				Active syphilis				HIV			Active syphilis			N	%	N	%
	Yes		No		Yes		No		Yes	No		No						
	N	%	N	%	N	%	N	%	N	%	N	%	N	%				
How often did you use condom while you had anal sex with non-paying male sex partner in the last month?																		
Always	9	10.2	52	59.1	2	2.3	59	67.0	4	2.0	142	72.1	146	74.1	207	72.6	207	72.6
Most of the time	2	2.3	11	12.5			13	14.8	1	.5	28	14.2	29	14.7	42	14.7	42	14.7
Sometimes			5	5.7			5	5.7	1	.5	10	5.1	11	5.6	16	5.6	16	5.6
Never	1	1.1	8	9.1	1	1.1	8	9.1			11	5.6	11	5.6	20	7.0	20	7.0
Total	12	13.6	76	86.4	3	3.4	85	96.6	6	3.0	191	97.0	197	100.0	285	100.0	285	100.0
How often did you use condom while you had vaginal, oral or anal sex with non-paying female sex partner in the last month																		
Always	1	4.8	7	33.3			8	38.1			22	34.4	22	34.4	30	35.3	30	35.3
Most of the time	1	4.8	1	4.8			2	9.5	1	1.6	12	18.8	13	20.3	15	17.6	15	17.6
Sometimes			3	14.3			3	14.3			10	15.6	10	15.6	13	15.3	13	15.3
Never			8	38.1			8	38.1			19	29.7	19	29.7	27	31.8	27	31.8
Total	2	9.5	19	90.5			21	100.0	1	1.6	63	98.4	64	100.0	85	100.0	85	100.0
How often did you use condom while you have had anal sex with a one-time male client in the last month?																		
Always	11	10.5	77	73.3	3	2.9	85	81.0							88	83.8	88	83.8
Most of the time			11	10.5			11	10.5							11	10.5	11	10.5
Sometimes			2	1.9			2	1.9							2	1.9	2	1.9
Never			4	3.8			4	3.8							4	3.8	4	3.8
Total	11	10.5	94	89.5	3	2.9	102	97.1							105	100.0	105	100.0
How often did you use condom while you have had anal sex with regular male/meti client in the last month?																		
Always	13	13.3	71	72.4	3	3.1	81	82.7							84	85.7	84	85.7
Most of the time	1	1.0	11	11.2			12	12.2							12	12.2	12	12.2
Never			2	2.0			2	2.0							2	2.0	2	2.0
Total	14	14.3	84	85.7	3	3.1	95	96.9							98	100.0	98	100.0
How often did you use condom while you have had vaginal or anal sex with female clients in the last month?																		
How often did you use condom while you have had anal sex with paying male sex partners in the last month?																		
Always	3	10.0	20	66.7			23	76.7			38	73.1	38	73.1	61	74.4	61	74.4
Most of the time			5	16.7			5	16.7			9	17.3	9	17.3	14	17.1	14	17.1
Sometimes											4	7.7	4	7.7	4	4.9	4	4.9
Never			2	6.7			2	6.7			1	1.9	1	1.9	3	3.7	3	3.7
Total	3	10.0	27	90.0			30	100.0			52	100.0	52	100.0	82	100.0	82	100.0
How often did you use condom while you have had vaginal or anal sex with paying female sex partners in the last month?																		
Always			2	100.0			2	100.0			11	84.6	11	84.6	13	86.7	13	86.7
Sometimes											1	7.7	1	7.7	1	6.7	1	6.7
Never											1	7.7	1	7.7	1	6.7	1	6.7
Total			2	100.0			2	100.0			13	100.0	13	100.0	15	100.0	15	100.0