

**Integrated Biological and Behavioral
Surveillance Survey (IBBS) among Men who
have Sex with Men (MSM) in the Kathmandu
Valley**

Round III – 2009

**ASHA Project
Family Health International /Nepal
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ASHA
Advancing Surveillance, Policies, Prevention,
Care and Support to Fight HIV/AIDS



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ABBREVIATIONS

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
CREHPA	-	Center for Research on Environment Health and Population
Activities		
CT	-	Chlamydia Trachomatis
DIC	-	Drop-in-Center
DNA	-	Deoxyribonucleic Acid
ELISA	-	Enzyme Linked Immuno Assays
EPP	-	Estimated Population Proportion
EQA	-	External Quality Assessment
FHI	-	Family Health International
FSW	-	Female Sex Worker
HIV	-	Human Immuno-Deficiency Virus
IBBS	-	Integrated Biological and Behavioral Surveillance Survey
IC	-	Information Centre
ID	-	Identification Number
IDU	-	Injecting Drug User
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-Governmental Organization
NHRC	-	Nepal Health Research Council
NPHL	-	National Public Health Laboratory
NRL	-	National Reference Laboratory
OE	-	Outreach Educator
PE	-	Peer Educator
PHSC	-	Protection of Human Subjects Committee
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 Sciences
STD	-	Sexually Transmitted Disease
STI	-	Sexually Transmitted Infection
TPPA	-	Treponema Pallidum Particle Agglutination
USAID	-	United States Agency for International Development
VCT	-	Voluntary Counseling and Testing

EXECUTIVE SUMMARY

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

This report documents the findings of the third round of the IBBS conducted among 400 men who have sex with men (MSM) in the Kathmandu Valley. As in the previous round of the IBBS among the same group, the respondent-driven sampling (RDS) methodology was adopted to recruit the respondents for the study. RDS, which is one of the most effective methodologies to reach 'hard to reach groups', is a relatively new adaptation of chain referral sampling, where subsequent respondents are recruited by previous respondents through their network of acquaintances.

This survey was conducted primarily to determine the prevalence of HIV and STIs (syphilis, chlamydia trachomatis (CT) and neisseria gonorrhoea (NG)) 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 in the valley. At the same time, it has sought to analyze trends through the comparison of data on selected variables obtained from the first, the second and the third rounds of the IBBS.

A structured questionnaire (Annex 2) was used to collect information on sexual behavior, HIV/AIDS awareness, as well as the socio-demographics of the respondents. Randomly selected study participants were enrolled in the study 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, CT and NG. The survey was carried out through one centrally-located study center at Jamal in the Kathmandu Valley. Biological samples were collected only after a pre-test counseling session and the study participants were provided syndromic treatment for STI-related problems after being examined by a health assistant. HIV and syphilis test results were provided later at STD/AIDS and Training Services (SACTS), CruiseAids and Parichaya Samaj Voluntary Counseling and Testing (VCT) Centers along with post-test counseling delivered by experienced counselors.

For the purpose of analysis, MSWs (male sex workers) and non-MSWs (non-sex workers) have been collectively defined as MSM. These two categories have been presented separately and the variables which showed marked differences between these two groups have been commented on.

Finally, in this round of IBBS, although the sample was drawn using RDS method, data analysis is not done using the Respondent Driven Sampling Analysis Tools (RDAST) software. The study team analyzed the data on the network size reported in the survey, which is one of the key data needed for adjusting the sample proportions, and decided

not to go for RDSAT analysis. The network size was asked twice in the questionnaire, which leads to substantial difference in reported network size that could not be reconciled and lead to substantial differences in prevalence estimates. Technical experts from FHI/Nepal and FHI Asia Pacific Regional Office (APRO) also were consulted while making this decision. In this perspective the sampling methodology used in the survey may be considered as "convenient sample obtained using RDS methodology".

Below is a short summary of the findings of this study:

STI/HIV/AIDS Prevalence

HIV prevalence among MSM in the Kathmandu Valley in 2009 is 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%). Moreover 1.5 percent of MSM had active syphilis, while 2.5 percent had a history of syphilis. Overall, 12.5 percent of MSM had anal NG with a relatively high prevalence among MSWs (18.5%) than non-MSWs (9.4%). In the same way, anal CT was also high among MSWs (11.1%) than non-MSWs (1.9%). The prevalence of urethral CT and urethral NG was comparatively lower than other STIs (2.5% and 0.8% respectively).

Socio-demographic Characteristics

MSM in the Kathmandu Valley are mostly young. The majority of respondents were below the age of 30 years (79.3% MSWs and 78.9% non-MSWs) with one in ten (12.5%) below 20 years of age (8.9% MSWs and 14.3% non-MSWs). Twenty-five percent of MSM were currently married. Not much difference was noticed in the marital status of MSWs and non-MSWs (77.8% of MSWs and 73.6% non-MSWs were unmarried). However, of those who were currently married, more MSWs (23.3%) than non-MSWs (2.9%) were married to a male partner.

A relatively low proportion of MSM (22.5%) reported living with a regular partner. Among those living with a regular partner, most non-MSWs lived with female partners (69.8%), whereas the majority of the MSWs' regular partners were male (64.9%).

Almost 43 percent of MSM had attended School Leaving Certificate (SLC) or a higher level of studies. Around four percent of MSM were illiterate, while 6.8 percent could read and write but had no formal schooling. Six in ten MSM (65.3%) had lived away from home in the past 12 months.

While 25.9 percent of MSWs relied on exchanging sex with a male partner for money as their main source of income, 24.9 percent of non-MSWs relied on wage labor.

Use of Alcohol and Drugs

The majority of MSM (80.9%) had consumed alcohol in the last month. At the same time, 38.8 percent of MSM also had used drugs in the past year. More non-MSWs

(44.9%) than MSWs (26.7%) had done drugs in the year preceding the survey and the most common drugs used by them (98.7%) was marijuana, locally called *ganja*.

Sexual Behavior, Type of Partner and Condom Use

MSM reported having their first sexual encounter at a fairly young age. Six in ten (61.3%) had sex before the age of 17. More MSM (59.3%) had their first sexual experience with a male partner than with a female partner (40.8%). More MSWs than non-MSWs had their sexual debut both before the age of 17 (82.2% MSWs and 50.6% non-MSWs) and with a male partner (89.6% MSWs and 43.8% non-MSWs). All the MSM had sexual contact with a male in the year preceding the survey, 49 percent of them had also maintained sexual relations with a female partner in the same period. Overall, 35.5 percent of MSM had sold sex at least once before the survey. 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, 85.8 percent had practiced anal sex in the past month; while 71.8 percent had oral as well as anal sex in the past month. Mostly MSWs had performed receptive roles while non-MSWs had mostly performed insertive role in anal as well as oral sex in the past month.

Overall, consistent condom use was highest with a paid female sex partner (78.8%) and lowest with a non-paying female sex partner (40%) in the month preceding the survey. The majority of the respondents (94.8%) could get condoms whenever necessary, and 76.6 percent of those who had obtained their last condom from various sources had got it free of cost.

Almost nine in ten MSM (86.8%) had used lubricants before the survey, while 53.3 percent of those who had heard of branded/specially made lubricants had used it consistently in the past month.

STI and HIV/AIDS Awareness

Overall, 9.3 percent of MSM could not correctly name any symptom of STIs in men. Reportedly 22.5 percent had experienced at least one symptom of STI in the past year.

Eighty-three percent of MSM (84.4% MSW and 82.7% 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, 64.3 percent of MSM 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').

Eighty-three percent of the respondents were aware of a confidential HIV test facility. Moreover, 62.8 percent of MSM had taken an HIV test before the survey. Among them, 67.7 percent had taken the test within the year preceding the survey. A higher proportion of MSWs (83.7%) than non-MSWs (52.1%) had taken up HIV testing. Around two-thirds of both MSWs (65.9%) and three-fourths of non-MSWs (75.5%) perceived themselves to be at little or no risk of contacting HIV. At the same time, 34.1 percent of

MSWs and 23.8 percent non-MSWs perceived that they had a high or medium risk of getting HIV.

Exposure to HIV/AIDS Related Programs

In the past year, seventy-eight percent of MSM had met peer/outreach educators, 54.5 percent had visited a drop-in center (DIC), and 47.5 percent had participated in at least one HIV/STI awareness program/community event. VCT centers had been visited by 43.8 percent at least once. A relatively smaller proportion of them (24.8%) had visited an STI clinic in the year preceding the survey. More MSWs than non-MSWs were exposed to or had participated in these activities.

CHAPTER -1.0: INTRODUCTION

1.1 Background

The HIV situation in Nepal is categorized as a concentrated epidemic with the estimated prevalence among the general population being below one percent, and more than 30 percent among some groups identified as 'most at-risk populations' (MARPs). According to the National Center for AIDS and STD Control (NCASC) estimates, there were about 70,000 people, including children and adults, infected by HIV in Nepal in 2007. As of May 2009, a cumulative total of 13,885 HIV infections, including 2,384 cases of AIDS, have been reported in the country (NCASC, May 14, 2009). Although the reporting system of HIV/AIDS cannot actually measure the prevalence rate of infection because of under-reporting and reporting delays, it does indicate which sub-groups of the population are most affected.

The National HIV/AIDS Strategy 2006/2011 has identified several MARPs and proposes effective strategies and targeted intervention programs for these groups. The Integrated Biological and Behavioral Surveillance Survey (IBBS) among these MARPs is conducted regularly as a part of the National Surveillance Plan to inform the development of the strategy and the National HIV/AIDS Action Plan. 'Men who have Sex with Men' (MSM) have been identified as a core risk group because of their high-risk sexual behavior with low levels of condom use and a high turnover of both male and female partners. According to Blue Diamond Society, a non-government organization (NGO) working with MSM in Nepal, the number of MSM in the country is on the rise (CREHPA/SACTS/FHI 2005) and low levels of awareness about HIV increases exposure to the disease whilst preventing those who are living with the virus from seeking treatment. A number of intervention strategies are underway to promote HIV/AIDS awareness at a larger scale among the MSM population.

The first round of the IBBS among MSM in Kathmandu Valley was conducted in 2004 and showed a 4.8 percent HIV prevalence among MSWs and 3.6 percent among MSM (CREHPA/SACTS/FHI 2005). The survey also indicated that over half of the MSWs (54%) and one in five (19%) MSM were exposed to at least one form of STI. The second round of the IBBS conducted in 2007 showed a 3.3 percent HIV prevalence among MSM in the Kathmandu Valley, with 3.4 percent among non-MSWs and 2.9 percent among MSWs. Additionally, it was found that 19.4 percent of MSWs and 16.4 percent of non-MSWs were exposed to at least one form of STI. This report outlines the findings of the third round of the IBBS among MSM in the Kathmandu Valley.

1.2 Objectives

In line with the objectives of the previous rounds of the IBBS, this third round of the survey was also undertaken primarily to determine the prevalence of HIV and STIs (syphilis, chlamydia trachomatis (CT) and neisseria gonorrhoea (NG)) among MSM in the Kathmandu Valley and to assess their HIV/STI-related risk behavior, including their sexual practices. The survey also aimed to measure their exposure to the intervention programs targeted at MSM in the valley. At the same time, the survey

sought to analyze trends through the comparison of data on selected variables obtained from the first, the second and the third rounds of the IBBS. The information in this report is aimed at helping to design timely intervention strategies and monitor HIV prevalence among the target population.

CHAPTER -2.0: DESIGN AND METHODOLOGY

2.1 Study Population

This study was conducted among MSM who are considered one of the core groups for the transmission of HIV/STI infection. MSM from the three districts of Kathmandu, Lalitpur and Bhaktapur were eligible for inclusion in the study.

For the purposes of this study the participants were divided into two sub-groups: MSWs and non-MSWs. MSWs 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.'*

Non-MSWs 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.'*

All randomly selected participants were screened to make sure they met the criteria for the study.

2.1.1 Sample Size and Sampling Design

As in the previous rounds a total of 400 MSM (135 MSWs and 265 non-MSWs) from the three districts of Kathmandu, Lalitpur and Bhaktapur were included in the study. The respondent-driven sampling (RDS) methodology, which is a relatively new adaptation of the chain-referral sampling, was used to recruit participants to the study. In RDS the sampling process begins with the selection of a set of people in the target population who serve as 'seeds'. After participating in the study, each seed was provided with three recruitment coupons, which they use to recruit other people they know in their networks.

The RDS, unlike the 'snowball' method, attempts to overcome biases such as masking, volunteerism and over-sampling of groups with large networks and thus gives unbiased estimates of population parameters (Heckathorn, 1997) hence providing more representative samples. Since it relies on social networks, RDS has the potential to reach individuals who are not easily accessible such as MSM, injecting drug users (IDUs), male sex workers (MSWs) and female sex workers (FSWs).

In RDS, the sampling frame is created based on information collected from the participants during the sampling process itself. This information includes (1) who recruited whom; (2) the relationship of the participant to the recruiter (RDS population estimates are based on an assumption that the recruiter and the participant know each other); (3) the participants' personal network sizes (network size is used to estimate the average network size by different sample characteristics such as gender, race/ethnicity and age).

Since RDS population estimates are based on the recruiter and recruit knowing one another, the RDS design includes the means to encourage participants to recruit

those they already know. This involves offering rewards for recruiters and making recruitment rights scarce through quotas, so that recruitment is not wasted on strangers (Ramirez-Valles et. al., 2005).

2.1.2 Seeds and Recruitment

In line with the RDS methodology, the study team, in consultation with facilitators from Paricyaya Samaj and Cruiseaids, first recruited a total of four MSM as 'seeds'. It was decided that seeds selected to initiate the recruitment process should be as diverse as possible; seeds were heterogeneous in age, ethnicity and MSM type. These seeds were informed about study protocol and procedures and were encouraged to recruit other eligible individuals from their social networks randomly to participate in the study. Thus the first wave of participants recruited for the study was brought in by seeds.

After their recruitment in the survey, each seed received three recruitment coupons which they passed to their peers. These peers who were eligible to take part in the study were given three coupons each. In this way the recruitment process continued until 400 MSM were recruited. Each coupon was uniquely coded in order to link recruiters and recruits. The coupon ID numbers were carefully recorded in each questionnaire.

Of the four seeds, one completed 10 waves, one 12, one seven, and one seed generated eight waves (Annex - 4). RDS theory requires a minimum of six waves of recruitment for equilibrium, which implies that in this survey, respondents sufficiently represented the population being sampled.

Since RDS allows for a dual incentive system to induce recruitment, each participant received NRs. 100 (equivalent to \$1.30) for the participation into the study and another NRs. 50 (equivalent to \$0.60) for each individual they recruited. A participant could have received up to NRs. 250 (equivalent to \$3.30) for successfully recruiting three peers into the study.

Failure to meet the study criteria resulted in 45 MSM being turned down. Among them, 24 did not meet the study criteria, six refused to give anal swabs, one was too afraid of the blood test, and one was not feeling well. There were four MSM who did not have enough time to take part in the interview, while nine came with the card but said they were not MSM.

2.2 Study Process

A quantitative research approach was adopted for the study. Structured questionnaires were used to collect behavioral data relating to sexual behavior, sex partners, and use of condoms among MSM as well as demographic and social characteristics.

In order to draw up a comparative analysis of behavioral changes over the years, the same questions asked during the previous rounds were repeated. Initially, the questionnaires were developed based on the *Guidelines for Repeated Behavioral*

Surveys in Populations at Risk of HIV (FHI, 2000). In each round few new questions are added as per the national need.

Before starting the interview, all those coming with the referral cards were informally asked certain screening questions relating to the general behavior of MSM, and their sexual partners to ensure that they meet the definitions of MSW or non-MSW. The questions were asked as a part of rapport building process and the facilitators from Parichaya Samaj and Cruiseaids assisted the study team in the screening process.

A centrally-located study center was established at Jamal in Kathmandu. In the previous round of IBBS conducted among MSM also one study centers was in the same location. There were separate rooms for each activity, such as receiving the respondents, individual interviews, clinical examinations and blood, urine and anal swab sample collection. Two facilitators from Parchaya Samaj and Cruiseaids were present at the study site to facilitate the study process.

Since the study was conducted at one centre, there was hardly any possibility for duplication or repeated interviews of the same MSM. Nevertheless, the study team asked each participant several questions to make sure this was the first time they had participated in the study. Such questions included queries relating to their experience of having undergone any blood tests, the part of the body from where the blood was taken, their experience of HIV testing or testing for other diseases, meeting with New ERA staff and peer educators, and possession of an ID card with the study number.

The fieldwork started on March 12, 2009 and was completed on April 21, 2009.

2.2.1 Recruitment and Training of Research Team

When selecting field researchers, priority was given to those who had been involved in similar studies of HIV prevalence in the past. Their commitment to respect respondents' privacy was also considered important.

Before data collection started, a one-week intensive training program was organized for the study team. The training session familiarized the team with the study objectives, the characteristics of the target groups, rapport-building techniques, the contents of the questionnaire, consent form, oral informed & witnessed consent taking process and the overall study process. The training session also included theory and practical classes on pre-test counseling and questionnaire administration. Role plays that attempted to be as true to the actual field situation as possible were carried out. This allowed for the discussion of potential problems that could be faced while approaching MSM, and possible ways for overcoming such problems.

Representatives from Parichaya Samaj and Cruiseaids trained the study team on the general attitudes of MSM and the best approaches to take when working with them. The training also explained and clarified the definition of informed consent.

2.2.2 Ethical Review

The research was conducted in compliance with both ethical and human rights standards. These standards included participants' anonymity as well as pre- and post-test counseling.

As this study was done with individuals who are often stigmatized, ethical as well as technical approvals was obtained from Family Health International's ethical review body, the Protection of Human Subjects Committee (PHSC) and the Nepal Health Research Council (NHRC) prior to the fieldwork. The study protocols were carefully reviewed and approved by these organizations. Verbal consent was obtained from all the participants in a private setting and was witnessed by a third person before the interview and clinical tests were performed (Annex – 6).

No personal identifiers were collected. All the respondents were provided with a unique identification (ID) number written on a plastic-coated card. The same number was marked on the questionnaire, the medical records, and on all biological specimens collected from that particular respondent. This card was also used for the distribution of the test results. Only those participants who produced the card were provided test results of HIV and Syphilis with post-test counseling by a qualified counselor.

The study team maintained the confidentiality of the data collected throughout the survey. The interviewer regularly submitted the completed questionnaires to the field supervisor on the day of each interview. The supervisor kept these questionnaires in separate locked cabinets where no one except the supervisor had access to the information collected. The supervisor then transported the questionnaires to New ERA at regular intervals. In the New ERA office at Kathmandu, the questionnaires were kept in a locked coding room where only authorized data coding and data entry staff had access to individual questionnaires.

2.2.3 Clinical and Laboratory Procedures

Clinical Procedures

The study participants were clinically checked for STI-related symptoms by a health assistant who also filled in a checklist with the information provided by the respondents (Annex - 5). They provided symptomatic treatment to the respondents in accordance with the National STI Case Management Guidelines. Over-the-counter medicines such as paracetamol, alkalising agents and vitamins were given as necessary.

Collection, Storage and Transportation of Samples

1) 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. Blood samples for testing HIV/syphilis were drawn from a vein from each of the study participants using a 5ml disposable syringe and were stored in a sterile glass tube labeled with the respondent's ID number. The blood sample was placed in a centrifuge to separate the blood cells from the serum. Serum samples were stored in the deep fridge compartment of the refrigerator at the study site at 2°C to 8°C. The survey period witnessed long hours of power cuts. However, sufficient numbers of ice packs were

stored in the deep fridge compartment to ensure that proper temperature was maintained for storing the samples. The health assistant as well as the team leader constantly monitored the temperature in the thermometer kept in the compartment and recorded them in the log book. Each sample was labeled with the ID number of the study participant. The specimens were transported to the SACTS laboratories in Kathmandu in a cold box every day. The serum samples were stored at a temperature of -12°C to -20°C at the SACTS laboratory.

II) Urine and 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 collected. The participant collected urine in a sterile plastic universal urine container, a 20 ml screw cap tube.

The urine container was stored at room temperature and sent to National Reference laboratory (NRL) on the same day where it was stored in two different aliquots at minus 86°C.

Anal swabs were also collected from all MSM by the health assistant. The anal swab was collected by 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.

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 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 NRL in an upright position every day.

Laboratory Methods

Syphilis was tested using BD. Micro-Vue Rapid Plasma Regain (RPR) card test. All the samples negative for RPR were recorded as negative. All positive samples for RPR were further tested with serial serum dilution up to 64 times and the test record was recorded with dilution factor. All the RPR positive serums were also tested by Treponema Pallidum Particle Agglutination (TPPA) test using Serodia TPPA as a confirmatory test.

On the basis of titre of RPR, all the specimens with RPR/TPPA-positive results were divided into two categories.

- TPPA-positive with RPR-negative or RPR-positive with titre < 1:8 were classified as showing a history of syphilis
- TPPA-positive with RPR titre of 1:8 or greater were classified as showing a current syphilis requiring immediate treatment

HIV antibody screening was performed using serial testing approach. All the serum samples were tested using Determine HIV 1/2 (Abbott Japan Co. Ltd.) as a first test to detect antibodies against HIV. If the first test was negative, no further test was conducted, but if the first test was positive, a second test was performed using Uni-

Gold (Trinity Biotech, Dublin, Ireland). In case of a tie between the first two tests, a third test was performed using SD Bioline HIV 1/2 (Standard Diagnostics, Inc., Kyonggi-do, South Korea) as a tie-breaker test. The testing protocol is based on the National VCT Guidelines of Nepal revised by NCASC in 2007. The interpretation of the test results was as follows:

- First test negative = negative
- First + second test positive = positive
- First test positive + second test negative + third test positive = positive
- First test positive + second test negative + third test negative = negative

Roche Amplicor kit was used for processing and extraction of usable specimen for detection of NG and CT. The extracted specimen was divided in three aliquots (one for further analysis, one for back up and the last one for external quality control). The specimen was then amplified (PCR) using Roche Amplicor Amplification kit to make the replication of NG/CT DNA. After amplification the ELISA detection procedure was followed separately for NG and CT using Roche Amplicor Detection Kit NG and Roche Amplicor Detection kit CT separately. The detection method went along with internal control kit of NG and CT which contributed substantially for validation of test performed and interpretation.

2.3 Study Management

The study was conducted under the leadership of NCASC, Ministry of Health and Population, Government of Nepal. The NHRC reviewed the study protocols and the study instruments and provided its approval to the study. The overall management of the study was carried out by New ERA in collaboration with STD/AIDS Counseling and Training Services (SACTS) while FHI/USAID Nepal provided technical support. SACTS was responsible for setting up the laboratory in the field site, providing training to the lab technician, supervising and collecting specimen samples, maintaining cold chain, conducting HIV and syphilis testing at their laboratory and also ensuring that EQA (External Quality Assessment) tests were performed using prescribed test kits and testing approach at National Public Health Laboratory (NPHL). New ERA's responsibility was to design the research methodology (including the sampling method), prepare the questionnaire, recruit and train survey team, collect data, transport the samples to the laboratories maintaining a proper temperature, analyze the collected information and coordinate and monitor the distribution the test results to the study participants with post-test counseling. National Reference Laboratory provided training on collection of urine and anal swabs and carried out NG and CT testing on these samples while NPHL performed EQA test on 10 percent sample of the total serum collected for HIV and Syphilis.

The New ERA study team was made up of a team leader, a research coordinator, two research officers, two research assistants, a senior counselor and the field teams. The field team consisted of two research assistants, eight supervisors/interviewers, two health assistants, two lab technicians, and two runners. One facilitator from Cruiseaids and one from Parichaya Samaj were also part of the field team.

2.4 Constrains to the fieldwork

The long hours of load shedding scheduled during fieldwork posed some problem in using the electronic centrifuge machine to separate the serum from the blood sample in the lab. To overcome the problem, both auto and manual centrifuge machines were installed at the study site. Icepacks were also stored in the fridge to maintain the required temperature for storing the samples.

2.5 Quality Control

Quality control was strictly maintained throughout the process of specimen collection, handling and testing. All the tests were performed using internal controls. These controls were recorded with all the laboratory data. For quality control assurance, a 10 percent sample of the total serum collected (all positive samples and randomly selected negative samples to make 10% of total sample) was submitted to the NPHL to test for HIV and syphilis. The same test kit and testing protocols were used in NPHL for quality assurance. At the same time 10 percent of urine and swab samples were sent to Y R Gaitonde Centre for AIDS Research and Education (YRG CARE), Chennai, India for EQA test for CT and NG. The center is a FDA, NABL, ISO accredited laboratory for infectious diseases in India.

To ensure the quality of data, New ERA and FHI officials supervised the fieldwork regularly. Research Assistants and Field Supervisors were responsible for ensuring that the project was carried out according to protocol on a day-to-day basis. Field supervisors reviewed all the completed questionnaires. Any inconsistencies in the responses were clarified through discussions with the concerned interviewer later the same day.

2.6 Post-Test Counseling and Test Results Distribution

Once the clinical tests were over, the participants were informed about the location and operating hours of the nearest site where they could collect the test results. Those who displayed their ID cards were provided HIV and syphilis test results with post-test counseling by a trained counselor at Parichaya Samaj, Cruiseaids or the SACTS VCT centers. Trained counselors delivered the results to the participants in a private setting followed by a counseling session which focused on high-risk behavior and other aspects of STIs and HIV. The counselors read the test results by opening the sealed envelope in front of the respondents. However, the written copy of the test result was also provided to those MSM who asked for it.

Post-test counseling and individual report dissemination was completed between March 27- May 08, 2009 at the above VCT centers. Out of 400 MSM who tested for HIV, 179 (44.8%) came to collect the test results (Annex 7). A small provision for reimbursement of transportation costs might have persuaded more MSM to visit the VCT centers to collect the test results.

2.7 Data Management and Analysis

The completed questionnaires were thoroughly checked for any inconsistencies before the data was entered into a computer using FoxPro software. A double-entry

approach was used to minimize errors during the data entry. Finally, in this round of IBBS, although the sample was drawn using RDS method, data analysis is not done using the RDATA software. The study team analyzed the data on the network size reported in the survey, which is one of the key data needed for adjusting the sample proportions, and decided not to go for RDATA analysis. The network size was asked twice in the questionnaire, which leads to substantial difference in reported network size that could not be reconciled and lead to substantial differences in prevalence estimates. Technical experts from FHI/Nepal and FHI APRO also were consulted while making this decision. In this perspective the sampling methodology used in the survey may be considered as "convenient sample obtained using RDS methodology".

Simple statistical tools, such as frequency distribution, percentages, range, proportion and mean and median were used to analyze the results of the survey. Epi Info 6 software was used to measure the statistical significance of the relationship between HIV and STI infection and some of the selected explanatory variables. Clinical and behavioral data were merged in order to examine the relationship between the participants' HIV status, socio-demographic characteristics, injecting practices and sexual behaviors.

As in the previous rounds of survey reports, for the purposes of analysis, MSWs and non-MSWs collectively have been defined as 'MSM'. Both of these categories have been presented separately throughout the report but only variables which showed marked differences between these two groups have been commented on.

For the key selected variables trend analysis also is done using the data from previous rounds of IBBS.

CHAPTER - 3.0: HIV/STI PREVALENCE

This chapter deals with the prevalence of HIV/STI among MSM in the Kathmandu Valley. It also describes the relationship between HIV and STI prevalence with some of the selected variables.

3.1 HIV/STI Prevalence

Of the 400 MSM, 3.8 percent were HIV positive. MSWs had a slightly higher prevalence of HIV than non-MSWs — 5.2 percent (7 out of 135) MSWs and three percent (8 out of 265) non-MSWs were tested HIV positive.

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 21.5 , with a significantly high percentage among MSWs (31.9%) than non-MSWs (16.2%).

Table 3.1: HIV and STI Prevalence among MSM

STI infection	MSW		Non-MSW		MSM	
	N=135	%	N=265	%	N=400	%
HIV	7	5.2	8	3.0	15	3.8
Active syphilis	4	3.0	2	0.8	6	1.5
Syphilis history	6	4.4	4	1.5	10	2.5
Anal-CT	15	11.1	5	1.9	20	5.0
Anal-NG	25	18.5	25	9.4	50	12.5
Urethral-CT	1	0.7	9	3.4	10	2.5
Urethral-NG	1	0.7	2	0.8	3	0.8
Any One STI*	43	31.9	43	16.2	86	21.5

*Note: Any one STI include HIV, Current Syphilis, Anal CT & NG and urethral CT & NG.
Anal CT means CT Test based on anal swab samples. Similarly anal-NG means NG test based on anal swab sample

The prevalence of active syphilis was three percent among MSWs and 0.8 percent among non-MSWs. Likewise, more MSWs had a history of syphilis (4.4%) compared to non-MSWs (1.5%).

Five percent of MSM had anal CT, with a relatively higher prevalence among MSWs than non-MSWs (11.1 percent and 1.9 percent respectively). Nearly 13 percent of MSM in the Kathmandu Valley had anal NG, with a 9.4 percent prevalence among non-MSWs and 18.5 percent among MSWs.

Urethral CT and urethral NG were detected in 2.5 percent and 0.8 percent among MSM respectively. The difference in prevalence of NG between MSWs and Non-MSWs is not large and significant, but in urethral CT non-MSWs have higher prevalence (3.4%) compared to MSWs (0.7%).

3.2 Relationship Between Socio-Demographic Characteristics and HIV/STIs

This section examines the relationship between socio-economic characteristics and HIV as well as the prevalence of at least one STI.

HIV and STIs follow a similar pattern: MSM who were more than 25 years had a significantly higher prevalence of HIV than younger MSM (6.8% compared with 1.3%). Similarly, the prevalence of at least one STI was also higher among MSM over 25 years of age than their younger counterparts (22.2 compared with 15.6). The difference in STI, however, is not statistically significant.

Table 3.2: Relationship between Socio-Demographic Characteristics and HIV and STI Prevalence

Socio-demographic characteristics	HIV			STI		
	N	%	P Value	N	%	P Value
Age						
Below 25 years (n=224)	3	1.3	<0.01	35	15.6	>0.05
25 years and above (n=176)	12	6.8		39	22.2	
Currently married						
Yes (n=100)	5	5.0	>0.05	25	25.0	>0.05
No (n=300)	10	3.3		49	16.3	
Literacy status						
Illiterate/literate/no schooling (n=42)	2	4.8	>0.05	13	31.0	<0.05
Formal schooling (n=358)	13	3.6		61	17.0	
Total (N = 400)	15	3.8	-	74	18.5	-

Although HIV prevalence also differs slightly with the marital and literacy status of the respondents, the relation is not statistically significant.

Moreover, the prevalence rate of at least one STIs is significantly higher among illiterate MSM and those who had not attended school (31%) than those who had received formal schooling (17%).

3.3 Relationship between Sexual Behavior and HIV/STI Prevalence

Table 3.3 examines the relationship between sexual behavior and the prevalence of HIV/STIs among MSM. The association between HIV and STI infection and risk behavior needs to be examined with caution. Current sexual behaviors may not necessarily be related to the HIV/STI status of the MSM as they could have changed their behavior recently, or after being diagnosed with HIV/STI. Their current sexual behavior may not be responsible for their present HIV/STI status.

No significant association was noticed between the sexual behavior of MSM and HIV prevalence. However, a slightly higher proportion of older MSM, those who had sold sex to a male partner at least once, and those who had oral as well as anal sex with a male partner in the past month were HIV-positive than their other counterparts (Table 3.3).

On the other hand, there are some sexual behavior of MSM which reveals a significant association with the prevalence of other STIs. MSM who had sold sex before had a significantly higher prevalence of other STI (26.8%) than those who had never had sex in exchange for money (14%). On the contrary, MSM who had followed unsafe sexual practices such as buying sex with a paid male sex partner and a female sex partner, selling anal sex to male clients, having oral and anal sex with a male partner in the past month had a significantly lower prevalence of STIs than other MSM who had not followed such sexual behavior (Table 3.3). As mentioned above, it is important to note here that this trend reflects the current

sexual behavior of MSM, which may have been different before and changed recently.

Table 3.3: Relationship between Sexual Behavior and HIV and STI Prevalence

Sexual behavior	HIV			STI		
	N	%	P Value	N	%	P Value
Age at first sex						
8 – 16 (n=245)	11	4.5	>0.05	52	21.2	>0.05
17 – 20 (n=132)	4	3.0		17	12.9	
21 – 32 (n=23)	0	0.0		5	21.7	
Ever had sex with a male in exchange for money						
Yes (n=142)	7	4.9	>0.05	38	26.8	<0.01
No (n=258)	8	3.1		36	14.0	
Vaginal /anal/oral sex with women and anal/oral sex with male in the past year						
Any type of sex with female in past year (n=196)	7	3.6	>0.05	29	14.8	>0.05
Anal/oral sex with only male partner in the past year (n=204)	8	3.9		45	22.1	
Bought sex from male in the past month						
Yes (n=76)	1	1.3	>0.05	6	7.9	<0.01
No (n=324)	14	4.3		68	21.0	
Bought sex from female in the past month						
Yes (n=33)	0	0.0	>0.05	1	3.0	<0.01
No (n=367)	15	4.1		73	19.9	
Sold anal sex to male in the past month						
Yes (n=107)	5	4.7	>0.05	32	29.9	<0.01
No (n=293)	10	3.4		42	14.3	
Oral and anal sex with male in the past month						
Yes (n=287)	11	3.8	>0.05	65	22.6	<0.01
No (n=113)	4	3.5		9	8.0	
Oral or anal sex with male in the past month						
Yes (n=349)	14	4.0	>0.05	68	19.5	>0.05
No (n=51)	1	2.0		6	11.8	
Oral sex with one time or regular client in the past month						
Yes (n=97)	5	5.2	>0.05	31	32.0	<0.01
No (n=303)	10	3.3		43	14.2	
Total (N=400)	15	3.8	-	74	18.5	-

3.4 Relationship Between STIs and HIV

Table 3.4 explores the relationship between the prevalence of STIs and HIV. MSM with STIs were slightly more likely to be HIV-positive (4.1%) than those who did not have an STI (3.7%) although the difference is not statistically significant.

Table 3.4: Relationship between HIV and STI Prevalence

STI prevalence	Total Sample	HIV- positive	% HIV
	N	N	
Any STI	74	3	4.1
No STI	326	12	3.7
Untreated Syphilis	6	1	16.7
Anal Gonorrhea	50	2	4.0
Anal Chlamydia	20	1	5.0
Urethral Gonorrhea	3	2	66.7
Urethral Chlamydia	10	2	20.0

Notably, two out of three MSM (66.7%) who were diagnosed with urethral gonorrhea were HIV-positive. At the same time, two out of 10 MSM (20%) with urethral chlamydia and one of the six MSM (16.7%) with untreated syphilis were HIV-positive, indicating a potential relationship between such STIs and HIV.

CHAPTER – 4.0: SOCIO-DEMOGRAPHIC CHARACTERISTICS OF MSM

This chapter discusses the demographic and social characteristics of the MSM in the Kathmandu Valley.

4.1 Socio-Demographic Characteristics

Self Categorization

The usual classification of MSM is largely based on their perceived sexual roles. 'ta', 'meti/meta', 'dohori', and 'pinkyta' 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, 44.3 percent of the MSM said they regarded themselves as men, 22.8 percent as *meti* and 9.3 percent as *ta*. Around eight percent each of them preferred to be referred to as homosexual and bisexual (Table 4.1).

Table 4.1: Self-categorization

Preferred identity	N = 400	%
Prefer to be identified as: (on the basis of sexual orientation)		
Men	177	44.3
Meta/Meti	91	22.8
Ta	37	9.3
Homosexual	35	8.8
Bisexual	33	8.3
Gay	14	3.5
Others	13	3.3
Prefer to be identified as: (on the basis of gender identity)		
Male	254	63.5
Third gender	142	35.5
Female	4	1.0

Respondents were asked how they would identify themselves from gender perspective; 35.5 percent of MSM considered themselves to be third gender, while 63.5 percent said they were males (Table 4.1).

Among those 142 MSM who identified themselves as third gender, 53.5 percent called themselves *meta/met*i and 14.8 percent called themselves 'dohoris' as per their sexual roles (Annex - 8).

Table 4.2: Birthplace and Currently Living District

General information	MSW		Non-MSW		MSM	
	N=135	%	N=265	%	N=400	%
Birth place						
Eastern Region	30	22.2	38	14.3	68	17.0
Central Region	79	58.5	174	65.7	253	63.3
Western Region	16	11.9	29	10.9	45	11.3
Mid-Western Region	5	3.7	12	4.5	17	4.3
Far-Western Region	4	3.0	11	4.2	15	3.8
Out of Nepal	1	0.7	1	0.4	2	0.5
Currently living district						
Lalitpur	4	3.0	17	6.4	21	5.3
Bhaktapur	2	1.5	11	4.2	13	3.3
Kathmandu	129	95.6	237	89.4	366	91.5
Duration of living in present location						
Since birth	29	21.5	67	25.3	96	24.0
<=5 years	46	34.1	98	37.0	144	36.0
> 5 years	60	44.4	100	37.7	160	40.0

Six in 10 of the MSM (63.3%) were born in the central region. The majority of them were currently living in Kathmandu Valley (91.5%). Twenty-four percent of the MSM were born in the Kathmandu Valley while 40 percent moved to the valley five or more years ago. Thirty-six percent were relatively new, having moved to the Kathmandu Valley less than five years ago.

The MSM who participated in this survey were quite young with their median age being 24 years. Seventy-nine percent were less than 30. Not much difference was noticed in the age characteristic between MSW and non-MSW groups. Overall, 12.5 percent of MSM were adolescents of 16 to 19 years, this comprised 8.9 percent of MSWs and 14.3 percent of non-MSWs.

Table 4.3: Demographic Characteristic

Demographic Characteristics	MSW		Non-MSW		MSM	
	N=135	%	N=265	%	N=400	%
Age of respondent						
16 – 19	12	8.9	38	14.3	50	12.5
20 – 24	57	42.2	117	44.2	174	43.5
25 – 29	38	28.1	54	20.4	92	23.0
30 – 34	17	12.6	21	7.9	38	9.5
35 – 39	5	3.7	19	7.2	24	6.0
40 or above	6	4.4	16	6.0	22	5.5
Median age	24		24		24	
Current marital status						
Yes	30	22.2	70	26.4	100	25.0
No	105	77.8	195	73.6	300	75.0
Sex of married partner	N=30	%	N=70	%	N=100	%
Male/meti	7	23.3	2	2.9	9	9.0
Female	22	73.3	68	97.1	90	90.0
Both (Male/Meti and female)	1	3.3	0	0.0	1	1.0
Currently living with regular sex partner	N=135	%	N=265	%	N=400	%
Yes	37	27.4	53	20.0	90	22.5
No	98	72.6	212	80.0	310	77.5
Sex of regular partner	N=37	%	53	%	N=90	%
Male	24	64.9	16	30.2	40	44.4
Female	13	35.1	37	69.8	50	55.6

Twenty-five percent of the MSM were currently married. Ninety percent of them were married to a female partner. On the other hand, nine percent (23.3% MSWs and 2.9% non-MSWs) were married to male partners. One MSW (3.3%) was married to a male/*meti* as well as a female partner at the time of the survey.

The majority of respondents (77.5%) did not have a regular sex partner at the time of the survey. Among those who lived with a regular partner, 55.6 percent of the MSM lived with a woman. More MSWs had a male regular partner (64.9%) than non-MSWs (30.2%).

Over two-fifths of the MSM (42.5%) had passed SLC or a higher level of studies and 30.8 percent of them had passed the secondary level. Little difference was noticed between MSWs and non-MSWs with regard to their literacy status. However, while 4.9 percent of non-MSWs had never been to a formal school but could read and write, twice as many MSWs (10.4%) reported that they had been to a formal school and could read and write.

Four in ten of the MSM (42.5%) belonged to the Brahmin, Chhetri or Thakuri castes, while around three in ten (25.8%) were from the mongoloid ethnic community

(Rai/Limbu/Gurung/Tamang/Magar). Sixteen percent belonged to the Newar community. While not much difference was noticed in the caste/ethnicity composition between MSWs and non-MSWs, a relatively larger proportion of MSWs (18.5%) represented different Terai castes compared to non-MSWs (6.4%).

Table 4.4: Social Characteristics

Social characteristics	MSW		Non-MSW		MSM	
	N=135	%	N=265	%	N=400	%
Education						
Illiterate	7	5.2	8	3.0	15	3.8
Literate, no schooling	14	10.4	13	4.9	27	6.8
Primary	21	15.6	44	16.6	65	16.3
Secondary	42	31.1	81	30.6	123	30.8
SLC and Above	51	37.8	119	44.9	170	42.5
Ethnic/caste group						
Brahmin /Chhetri/Thakuri	45	33.3	125	47.2	170	42.5
Rai/Limbu/ Gurung/ Tamang /Magar	37	27.4	66	24.9	103	25.8
Newar	22	16.3	42	15.8	64	16.0
Terai Caste	25	18.5	17	6.4	42	10.5
Other hill caste	6	4.4	15	5.7	21	5.3
Religion						
Hindu	105	77.8	223	84.2	328	82.0
Buddhist	20	14.8	24	9.1	44	11.0
Christian	8	5.9	14	5.3	22	5.5
Others	2	1.5	4	1.5	6	1.5
Lived away from home in the past 12 months						
Yes	94	69.6	167	63.0	261	65.3
No	41	30.4	98	37.0	139	34.8

Eighty-two percent of the MSM were Hindus, 11 percent were Buddhists while 5.5 percent were Christians.

Overall, 65.3 percent of the MSM (63% non-MSWs and 69.6 percent MSWs) had lived away from home for one month or longer in the past year.

4.2 Monthly Income of the MSM and Sources of Income

Respondents came from a variety of occupational backgrounds, ranging from farmers to civil servants. In total, 21.8 percent of the MSM relied on wage labor as their main source of income, whilst 17.5 percent were employed by private companies. One in ten of the MSM were students (12.8%), were employed as peer/outreach educators (PEs/OEs) (12%), or ran their own business (12%).

Table 4.5: Occupational Background

Type of major occupation	MSW		Non-MSW		MSM	
	N=135	%	N=265	%	N=400	%
Occupation type						
Labor/Wage labor	21	15.6	66	24.9	87	21.8
Private company staff	22	16.3	48	18.1	70	17.5
Student	9	6.7	42	15.8	51	12.8
PE/OE	34	25.2	14	5.3	48	12.0
Businessman	4	3.0	44	16.6	48	12.0
Sex worker	35	25.9	0	0.0	35	8.8
Unemployed	3	2.2	18	6.8	21	5.3
Driver	2	1.5	10	3.8	12	3.0
Police	2	1.5	7	2.6	9	2.3
Restaurant employee	1	0.7	5	1.9	6	1.5
Other civil servant	0	0.0	4	1.5	4	1.0
Military	0	0.0	3	1.1	3	0.8
Farmer	1	0.7	1	0.4	2	0.5

Others	1	0.7	3	1.1	4	1.0
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Notably, only 25.9 percent of MSWs cited sex work as their main source of income. More MSWs (25.2%) than non-MSWs (5.3%) were employed as PEs/OEs while more non-MSWs (24.9%) than MSWs (15.6%) were wage laborers. Likewise, 15.8 percent of non-MSWs were students compared to 6.7 percent of MSWs who were students, while 16.6 percent of non-MSWs were businessmen compared to just three percent of the same occupational background amongst MSWs.

The income of the respondents in the month preceding the survey showed a huge variation, (NRs 500- NRs 1,25000) with one non-MSW reporting to have earned NRs. 1, 25000 in the previous month. However, the median income of MSWs in the month preceding the survey was higher (NRs 9,000) than non-MSWs (NRs. 7,000). Ten percent of MSM made less than NRs. 3,000 and 32.3 percent earned between NRs. 3,001 and NRs. 6,000. Twenty-four percent MSM had made more than NRs 10,000; more MSWs (31.9%) than non-MSWs (19.6%) reported doing so.

Table 4.6 : Source of Income and Number of Dependents

Income and no. of dependents	MSW		Non-MSW		MSM	
	N=135	%	N=265	%	N=400	%
Last months income in NRs.						
<=3000	6	4.4	34	12.8	40	10.0
3001- 6000	37	27.4	92	34.7	129	32.3
6001- 10000	49	36.3	87	32.8	136	34.0
> 10000	43	31.9	52	19.6	95	23.8
Median income in NRs.		9,000		7,000		7,000
Source of last month's income*						
Salaried job	70	51.9	98	37.0	168	42.0
Sex work	108	80.0	0	0.0	180	27.0
Wage labor	23	17.0	72	27.2	95	23.8
Money from family	20	14.8	66	24.9	86	21.5
Own business	7	5.2	54	20.4	61	15.3
Other work	1	0.7	3	1.1	4	1.0
Total no of dependents						
None	65	48.1	135	50.9	200	50.0
1 - 2	33	24.4	51	19.2	84	21.0
3 - 4	28	20.7	62	23.4	90	22.5
5 - 6	9	6.7	11	4.2	20	5.0
7 +	0	0.0	6	2.3	6	1.5
Amount paid by last client (in NRs.)						
40 - 100	17	12.6	NA	NA	NA	NA
101 - 400	43	31.9	NA	NA	NA	NA
401 - 1000	58	43.0	NA	NA	NA	NA
1001 - 5000	17	12.6	NA	NA	NA	NA

*Note: Because of multiple answers, percentages add up to more than 100.

NA- Not applicable for non-MSWs

Eighty percent of the MSWs mentioned that their last month's income was from sex work. In addition they had also received salary from their jobs (51.9% MSWs and 37 percent non-MSWs) and had been paid for working as wage laborers (17% MSWs and 27.2% non-MSWs). More non-MSWs (24.9%) than MSWs (14.8%) were sent money by their families in the month preceding the survey.

Fifty percent of MSM did not have any dependents to look after. Twenty-one percent of the MSM had 1-2 dependents, while 29 percent of them had to take care of more than two dependents. The prices charged by MSWs to their clients varied from NRs. 40 to NRs. 5,000. Forty-three percent of them had been paid between NRs. 401 to NRs. 1000, while 31.9 percent had received between NRs. 101 and NRs. 400 from their last clients.

MSWs' paying partners were from different professional backgrounds. Forty-three percent of MSWs reported that their clients were mostly police/military men, while 38.5 percent and 36.3 percent said that their clients were mostly students and businessmen (Annex - 9).

CHAPTER - 5.0: USE OF ALCOHOL AND DRUGS

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 and alcohol consumption by MSM in the Kathmandu Valley.

5.1 Use of Alcohol

The majority of the respondents (83.8%) had consumed alcohol at least once: this included a slightly higher proportion of non-MSWs (86.8%) than MSWs (77.8%). The majority of these respondents had consumed alcohol even in the month preceding the survey. Among them, 38.5 percent had consumed alcohol at least once a week, while 17.3 percent had done so every day in the past month. Little difference was noticed in alcohol consumption practice between MSWs and non-MSWs. Moreover, 44.8 percent of respondents had consumed alcohol the last time they had sex; this included 43 percent of non-MSWs and 48.6 percent of MSWs (Table 5.1).

Table 5.1: Alcohol Consumption

Consumption of alcohol	MSW		Non-MSW		MSM	
	N=135	%	N=265	%	N=400	%
Ever consumed alcohol						
Yes	105	77.8	230	86.8	335	83.8
No	30	22.2	35	13.2	65	16.3
Consumption of alcohol in last month	N=105	%	N=230	%	N=335	%
Every day	16	15.2	42	18.3	58	17.3
Three-four times a week	30	28.6	54	23.5	84	25.1
At least once a week	42	40.0	87	37.8	129	38.5
Did not drink alcohol in the last month	17	16.2	47	20.4	64	19.1
Consumption of alcohol during last sex	N=105	%	N=230	%	N=335	%
Alcohol consumed	51	48.6	99	43.0	150	44.8
Alcohol not consumed	54	51.4	131	57.0	185	55.2

5.2 Use of Drugs

Overall, 38.8 percent of the MSM had used drugs in the last year. A relatively higher proportion of non-MSWs (44.9%) than MSWs (26.7%) reported doing so. Marijuana, locally known as *ganja*, was the most popular drug, used by 98.7 percent of respondents. Other oral/inhaled drugs used by the respondents are listed in Table 5.2. However, only a few respondents (1.3%) had injected illicit drugs in the past year.

Table 5.2: Use of Drugs

Use of drugs	MSW		Non-MSW		MSM	
	N=135	%	N=265	%	N=400	%
Used drugs in the past year						
Yes	36	26.7	119	44.9	155	38.8
No	99	73.3	146	55.1	245	61.3
Types of drug used in the past year *	N=36	%	N=119	%	N=155	%
Marijuana (Ganja)	36	100.0	117	98.3	153	98.7
Chares	3	8.3	19	16.0	22	14.2
Oral tablet	5	13.9	15	12.6	20	12.9
Glue/Dendrite	0	0.0	3	2.5	3	1.9
Heroin	0	0.0	2	1.7	2	1.3
Brown Sugar	0	0.0	2	1.7	2	1.3
Injected drugs in the past year	N=135	%	N=265	%	N=400	%
Yes	2	1.5	3	1.1	5	1.3
No	133	98.5	262	98.9	395	98.8

*Note: Because of multiple answers, percentages add up to more than 100.

CHAPTER - 6.0: SEXUAL BEHAVIOR, TYPE OF PARTNER AND CONDOM USE

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

6.1 First Sexual Contact

Six in ten MSM (61.3%) first had sex between the ages of 8-16 years. Notably, 82.2 percent of MSWs had their first sexual contact at the age of 8-16 years compared to 50.6 percent of non-MSWs. It is also important to note that a relatively high proportion of MSWs (89.6%) had their first sexual experience with a male partner than non-MSWs (43.8%).

Overall, 35.5 percent of MSM reported ever having sex with a male partner in exchange for money. Not all of these were MSWs: seven non-MSWs (2.6%) also had at least one sexual contact in return for money until the date of the survey, but had stopped doing so more than one year before.

Table 6.1: Sexual Behavior & Sex Partners

Sexual behavior	MSW		Non-MSW		MSM	
	N=135	%	N=265	%	N=400	%
Age at first sexual intercourse						
8 – 16	111	82.2	134	50.6	245	61.3
17 – 20	23	17.0	109	41.1	132	33.0
21 – 30	1	0.7	22	8.3	23	5.8
Median	-	14.0	-	16.0	-	16.0
Mean	-	14.2	-	16.7	-	15.9
First sex partner						
Male	121	89.6	116	43.8	237	59.3
Female	14	10.4	149	56.2	163	40.8
Ever had sex with a male in exchange for money						
Yes	135	100.0	7	2.6	142	35.5
No	0	0.0	258	97.4	258	64.5
Age at first sex with a male in exchange for money	N=135	%	N=7	%	N=142	%
8 – 16	35	25.9	1	14.3	36	25.4
17 – 20	63	46.7	3	42.9	66	46.5
> 20 (21 – 55)	37	27.4	3	42.9	40	28.2
Mean	-	19.5	-	23.6	-	19.7
Median	-	19.0	-	20.0	-	19.0
Time of last sex with male/in exchange for money	N=135	%	N=7	%	N=142	%
Within last 7 days	88	65.2	0	0.0	88	62.0
8 – 15 days before	15	11.1	0	0.0	15	10.6
16 – 30 days before	3	2.2	0	0.0	3	2.1
31 – 60 days before	12	8.9	0	0.0	12	8.5
60 days – 1year before	17	12.6	0	0.0	17	12.0
> 1year before	0	0.0	7	100.0	7	4.9

Around one-fourth of the MSM (25.4%) had sold sex for the first time between the ages of 8-16 years. The median age for starting to exchange sex for money was 19 years among MSWs and 20 years among non-MSWs. Around 47 percent of those

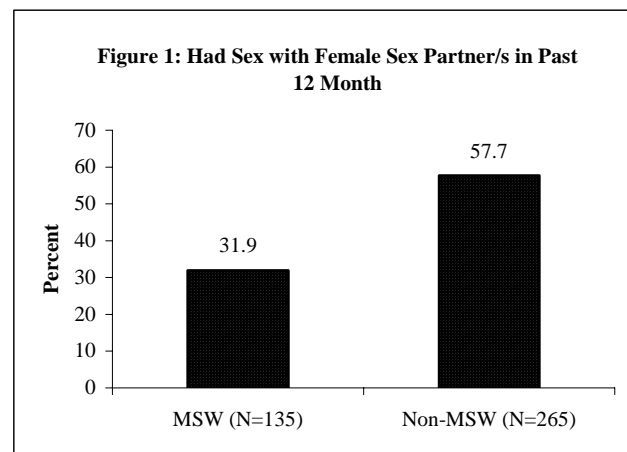
who had sex with a male partner in exchange for money were 17 to 20 years old at the time of their first such sexual contact.

A total of 78.5 percent of MSWs had last exchanged sex for money in the month preceding the survey. Among them, 65.2 percent had sold sex in the past week. While 8.9 percent of MSWs had had sex in exchange for money 1-2 months before the survey, 12.6 percent of them had done so over 2 months prior to the survey.

6.2 Sex Partners of MSM

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 interview.

While all of the study participants had had sex with a male partner in the past year, 49 percent of them had sexual contact with female partners too. A larger proportion of non-MSWs (57.7%) than MSWs (31.9%) have had sexual contact with female partner in the past year (Figure 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. Seventy-five percent of the MSM who participated in the survey had had sex with a non-paying male partner in the last month, while 22.5 percent had also sex with a non-paying female sex partner in the last month. The mean number of non-paying male sex partners was 5.5 compared to the mean of 0.4 non-paying female sex partners in the past month (Table 6.2).

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. On average, both groups had about five male non-paying partners in the last month.

Paying Partners

The paying partners of MSWs were categorized as one-time paying partners and regular paying partners. On average, the MSWs had 9 one-time paying and 11.1 regular paying male sex partners in the past month. While 29.6 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, 33.3 percent had more than five one-time paying male sex partners while 40.7 percent of them had more than five regular paying sex partners in the month preceding the survey (Table 6.2).

Table 6.2: Number of Different Types of Sex Partners in the Past Month

Number of different sex partners	MSW		Non-MSW		MSM	
	N=135	%	N=265	%	N=400	%
Number of non-paying male sex partner						
None	29	21.5	72	27.2	101	25.3
One	30	22.2	55	20.8	85	21.3
Two – Five	42	31.1	78	29.4	120	30.0
> Five	34	25.2	60	22.6	94	23.5
Mean	-	5.6	-	5.4	-	5.5
Number of non-paying female sex partner						
None	115	85.2	195	73.6	310	77.5
One	15	11.1	47	17.7	62	15.5
> One	5	3.7	23	8.7	28	7.0
Mean	-	0.2	-	0.4	-	0.4
Number of one-time paying male sex partner						
None	40	29.6	NA	NA	NA	NA
One	16	11.9	NA	NA	NA	NA
Two – Five	34	25.2	NA	NA	NA	NA
> Five	45	33.3	NA	NA	NA	NA
Mean	-	9.0	NA	NA	NA	NA
Number of regular paying male sex partner						
None	36	26.7	NA	NA	NA	NA
One	8	5.9	NA	NA	NA	NA
Two – Five	36	26.7	NA	NA	NA	NA
> Five	55	40.7	NA	NA	NA	NA
Mean	-	11.1	NA	NA	NA	NA
Number of paid male sex partners						
None	126	93.3	198	74.7	324	81.0
One	0	0.0	16	6.0	16	4.0
> One	9	6.7	51	19.2	60	15.0
Mean	-	0.4	-	1.2	-	0.9
Number of paid female sex workers as sex partners						
None	129	95.6	238	89.8	367	91.8
One	2	1.5	8	3.0	10	2.5
> One	4	3.0	19	7.2	23	5.8
Mean	-	0.2	-	0.2	-	0.2

NA- Not applicable for non-MSWs

Paid Sex Partners

Nineteen percent of MSM had paid for sex with male partners, while 8.3 percent of them had paid for sex with female partners in the past month. Comparatively, more non-MSWs than MSWs had paid for sex (Table 6.2).

On average, non-MSWs had 1.2 paid male sex partners and 0.2 paid female sex partners in the past month, while MSWs had 0.4 paid male sex partners and 0.2 female sex partners in the past month.

In total, 15 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, 5.8 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 - 10.

6.3 Anal and Oral Sex Partners

The predominant sex practice among MSM is anal sex, followed by oral sex. Overall, 85.8 percent of MSM had practiced anal sex and 73.3 had performed oral sex in the past month. At the same time, 71.8 percent of MSM had performed both oral and anal sex in the month preceding the survey. A higher proportion of MSWs (85.2%) than non-MSWs (64.9%) had performed such sexual acts in the past month.

Table 6.3: Type of Sexual Contact with Male Partners in the Past Month

Sexual activities in past month	MSW		Non-MSW		MSM	
	N=135	%	N=265	%	N=400	%
Anal sex with male						
Yes	130	96.3	213	80.4	343	85.8
No	5	3.7	52	19.6	57	14.3
Oral sex with male						
Yes	115	85.2	178	67.2	293	73.3
No	20	14.8	87	32.8	107	26.8
Anal and Oral sex with male in the past month						
Yes	115	85.2	172	64.9	287	71.8
No	20	14.8	93	35.1	113	28.3

The MSWs had anal sex with different type sex partners in the past month, namely, non-paying males (77%), one-time paying males (69.7%), paying regular males (73.4%) and paid males (6.6%) (Table 6.4).

On the other hand, the anal sex partners of non-MSWs in the past month consisted of non-paying male partners (70.2%) and paid male partners (24.5%)

The respondents mostly had more than one male anal sex partner in the previous month (Table 6.4).

Table 6.4: Number of Different Types of Anal Sex Partners in the Past Month

Anal sex with different sex partners	MSW		Non-MSW		MSM	
	N=135	%	N=265	%	N=400	%
Number of non-paying male anal sex partner						
None	31	23.0	79	29.8	110	27.5
One	30	22.2	61	23.0	91	22.8
More than One	74	54.8	125	47.2	199	49.7
Number of one time paying male anal sex partner						
None	41	30.4	NA	NA	NA	NA
One	16	11.9	NA	NA	NA	NA
More than One	78	57.8	NA	NA	NA	NA
Number of paying regular male anal sex partner						
None	36	26.7				
One	9	6.7	NA	NA	NA	NA
More than One	90	66.7	NA	NA	NA	NA
Number of paid male anal sex partner						
None	126	93.3	200	75.5	326	81.5
One	1	0.7	17	6.4	18	4.5
More than One	8	5.9	48	18.1	56	14.0

NA- Not applicable for non-MSWs

MSWs also had oral sex with (a) one-time paying male (62.2%) and (b) regular paying male (63.7%) partners in the past month. Around five in ten MSWs had oral sex with more than one regular partner (50.3%) and one-time paying (57%) partner

in the past month. Besides, 40.7 percent of them had also performed sexual activities other than oral/anal penetration to bring their partners to orgasm.

Table 6.5: Oral Sex with Different Paying Partners in the Past Month

Oral sex with different sex partners	MSW		Non-MSW		MSM	
	N=135	%	N=265	%	N=400	%
Number of one time paying regular male oral sex partner						
No one	51	37.8	NA	NA	NA	NA
One	16	11.9	NA	NA	NA	NA
More than One	68	50.3	NA	NA	NA	NA
Number of paying regular male oral sex partner in the past months						
No one	49	36.3	NA	NA	NA	NA
One	9	6.7	NA	NA	NA	NA
More than One	77	57.0	NA	NA	NA	NA
Brought one time or regular paying male sex partner to orgasm without penetration						
Didn't have paying partner	28	20.7	NA	NA	NA	NA
Yes	55	40.7	NA	NA	NA	NA
No	52	38.5	NA	NA	NA	NA

NA- Not applicable for non-MSWs

6.4 Types of Sex Role with Sex Partners

In this study, MSM 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 6.6: Sexual Role in the Past Month

Sexual role in the past month	MSW		Non-MSW		MSM	
	N=135	%	N=265	%	N=400	%
Role performed in anal sex						
All receptive	89	65.9	19	7.2	108	27.0
All insertive	15	11.1	153	57.7	168	42.0
Equally insertive and receptive	17	12.6	20	7.5	37	9.3
Mostly receptive	8	5.9	8	3.0	16	4.0
Mostly insertive	1	0.7	13	4.9	14	3.5
Didn't have anal sex in the last months	5	3.7	52	19.6	57	14.3
Role performed in oral sex						
All receptive	79	58.5	20	7.5	99	24.8
All insertive	10	7.4	118	44.5	128	32.0
Equally insertive and receptive	14	10.4	23	8.7	37	9.3
Mostly receptive	9	6.7	7	2.6	16	4.0
Mostly insertive	3	2.2	10	3.8	13	3.3
Didn't have oral sex in the last months	20	14.8	87	32.8	107	26.8

Type of Anal Sex Act: Forty-two percent of the respondents had performed exclusively insertive anal sex, whilst 27 had performed an exclusively receptive role. One in ten (14.3%) had not been engaged in anal sex in the past month, while 9.3 percent had performed both insertive and receptive sexual roles in the past month.

Comparatively, more non-MSWs than MSWs (57.7% non-MSWs and 11.1% MSWs) had performed an exclusively insertive role, while more MSWs than non-MSWs (65.9% MSWs and 7.2% 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 27 percent of MSM reported not being involved in oral sex in the last month. While 32 percent had performed exclusively insertive oral sex and 24.8 percent had performed only a receptive role, 9.3 percent of

respondents were engaged in both insertive and receptive oral sex in the past month.

As in anal sex, more non-MSWs than MSWs (44.5%, non-MSWs and 7.4% MSWs) had played insertive roles and more MSWs than non-MSWs (58.5% MSWs and 7.5% non-MSWs) had performed receptive roles in oral sex in the month preceding the survey.

6.5 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. Fifty-two percent of MSM have had their first sexual intercourse with a non-paying male partner, while 35.5 percent had a non-paying female as their first sex partner. A relatively larger proportion of MSWs (74.8%) than non-MSWs (40.4%) had had their first sexual contact with a non-paying male partner. On the other hand, more non-MSWs (48.3%) had their first sexual encounter with a non-paying female partner than MSWs (10.4%).

Overall, 59.3 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 (68.3%) while most MSWs last sexual encounter was with male clients (51.1%).

Table 6.7: First and Last Sex Partners

Sex partner	MSW		Non-MSW		MSM	
	N=135	%	N=265	%	N=400	%
First sex partner						
Non paying male partner	101	74.8	107	40.4	208	52.0
Non paying female partner	14	10.4	128	48.3	142	35.5
Male client	20	14.8	2	0.8	22	5.5
Paid female partner	0	0.0	21	7.9	21	5.3
Paid male sex partner	0	0.0	7	2.6	7	1.8
Last sex partner						
Non paying male partner	56	41.5	181	68.3	237	59.3
Male client	69	51.1	0	0.0	69	17.3
Non paying female partner	6	4.4	43	16.2	49	12.3
Paid male partner	1	0.7	26	9.8	27	6.8
Paid female partner	3	2.2	14	5.3	17	4.3
Female client	0	0.0	1	0.4	1	0.3
Last anal sex male partner						
Non paying male partner	59	43.7	221	83.4	280	70.0
Male client	74	54.8	0	0.0	74	18.5
Paid male partner	2	1.5	44	16.6	46	11.5

Female partners, non-paying, paying as well as paid by the respondents, were the last sex partners for 16.9 percent of MSM. More non-MSWs (21.9%) than MSWs (6.6%) had their last sexual encounter with a female partner (Table 6.7).

Seventy percent of the respondents had their last act of anal intercourse with a non-paying male partner; this included 83.4 percent of non-MSWs and 43.7 percent of MSWs. About 55 percent of MSWs had their last anal sex act with a male client. Additionally, 16.6 non-MSWs had their last anal sex act with a paid male partner, compared to 1.5 percent of MSWs who had paid for their last act of anal sex.

6.6 Condom Use Behavior of MSM

This section deals with condom using behavior among MSM. Six of the 400 (1.5%) MSM had never used condom, this included one MSW and 5 non-MSWs.

Table 6.8 shows condom use at sexual debut and during the last sex act with either a male or female partner. Twenty-three percent of MSM had used condom at their first sexual debut. However, more MSM (71.3%) had used condom in their last sexual contact. About 75 percent MSWs had used condoms during last sex compared to 69.4 percent non-MSWs reporting so.

Table 6.8: Condom Use with First and Last Sex Partners

Use of condom	MSW		Non-MSW		MSM	
	N=135	%	N=265	%	N=400	%
Used condom in first sex						
Yes	14	10.4	78	29.4	92	23.0
No	120	88.9	187	70.6	307	76.8
Don't know/Can't recall	1	0.7	0	0.0	1	0.3
Used condom in last sex						
Yes	101	74.8	184	69.4	285	71.3
No	34	25.2	81	30.6	115	28.7
Used condom in last anal sex with male						
Yes	103	76.3	198	74.7	301	75.3
No	32	23.7	67	25.3	99	24.7

Three types of sex practices anal, oral and vaginal, with different partners were reported by the respondents. Table 6.9 depicts the condom use behavior of MSM during their last act of sex with different type 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 paid male sex partners (100%) and the lowest was during sex with non-paying male sex partners (75.5% each).

The majority of MSWs had also used a condom the last time they had anal sex with one-time paying male sex partners (90.4%) and regular paying male sex partners (86.9%). Overall, 75.5 percent of MSWs had used a condom with their last non-paying male anal sex partner in the month preceding the survey.

Of the 20 MSWs who had had sex with non-paying female sex partners, 10 (50 %) had used a condom the last time they had sex with them. At the same time, three of the six MSWs (50%) who had sex with paid female sex partners in last month had used condoms.

Table 6.9: Use of Condom in the Last Sex with Different Sex Partners

Use of condom with different sex partners	MSW		Non-MSW		MSM	
	N	%	N	%	N	%
Used condom in the last anal sex with non-paying male sex partner	N=106	%	N=193	%	N=299	%
Yes	80	75.5	146	75.6	226	75.6
No	26	24.5	47	24.4	73	24.4
Used condom in the last anal sex with one time paying male sex partner	N=94	%	N=65	%	N=74	%
Yes	85	90.4	NA	NA	NA	NA
No	9	9.6	NA	NA	NA	NA
Used condom in the last anal sex with regular paying male sex partner	N=99	%				
Yes	86	86.9	NA	NA	NA	NA
No	13	13.1	NA	NA	NA	NA
Used condom in the last anal sex with paid male sex partner	N=9	%	N=65	%	N=74	%
Yes	9	100.0	52	80.0	61	82.4
No	0	0.0	13	20.0	13	17.6
Used condom in the last vaginal/anal/oral sex with non-paying female sex partner	N=20	%	N=70	%	N=90	%
Yes	10	50.0	36	51.4	46	51.1
No	10	50.0	34	48.6	44	48.9
Used condom in the last sex with paid female sex partner in the last month	N=6	%	N=27	%	N=33	%
Yes	3	50.0	23	85.2	26	78.8
No	3	50.0	4	14.8	7	21.2

NA- Not applicable for non-MSWs

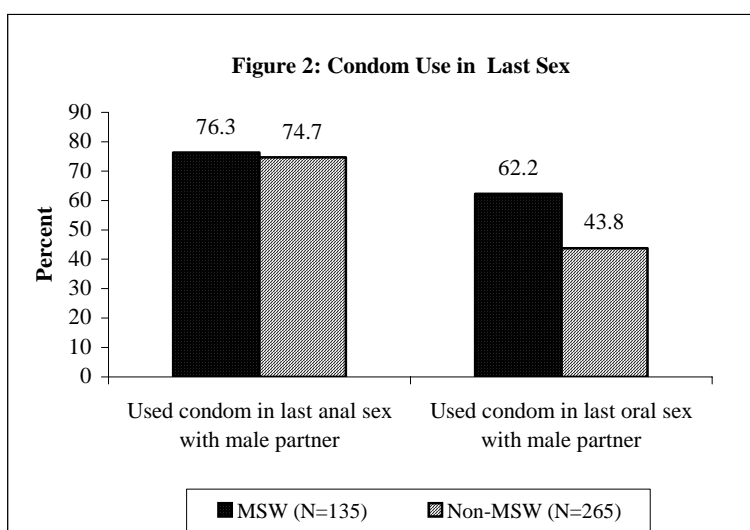
Non-MSWs and Condom Use in the Last Act of Sex

Overall, condom use in the last act of anal sex was higher with paid male sex partners (80%) than with non-paying male sex partners (75.6%). Condom use with non-paying female sex partners was comparatively low, with 51.4 percent using condoms the last time they had sex with them; a relatively higher proportion (85.2%) had used a condom the last time they had sex with a paid female partner (Table 6.9).

As these findings indicate, MSWs as well as non-MSWs had mostly used condoms with male and paid partners than with their non-paying female partners, which put their wives or girlfriends at risk of contracting HIV and STIs.

Overall, 75.3 percent of the MSM had used a condom when they had last anal sex with their male sex partner (76.3% MSWs and 74.7% non-MSWs).

However, only 50 percent of the MSM had used a condom the last time they had oral sex with their male partners. More MSWs (62.2%) than non-MSWs (43.8%) had used a condom in the last act of oral sex. Figure 2.



6.6.1 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 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.

Table 6.10: Consistent Use of Condom with Different Sex Partners in Past Month

Consistent use of condom with different sex partners	MSW		Non-MSW		MSM	
	N	%	N	%	N	%
Used condom with non-paying male anal sex partner	N=104	%	N=186	%	N=290	%
Always	68	65.4	121	65.1	189	65.2
Not always	36	34.6	65	34.9	101	34.8
Used condom with one time paying male anal sex partner	N=94	%				
Always	80	85.1	NA	NA	NA	NA
Not always	14	14.9	NA	NA	NA	NA
Used condom with regular paying male anal sex partner	N=99	%				
Always	75	75.8	NA	NA	NA	NA
Not always	24	24.2	NA	NA	NA	NA
Used condom with paid male anal sex	N=9	%	N=65	%	N=74	%
Always	9	100.0	48	73.8	57	77.0
Not always	0	0.0	17	26.2	17	23.0
Used condom in vaginal/oral/anal sex with non-paying female sex partner	N=20	%	N=70	%	N=90	%
Always	10	50.0	26	37.1	36	40.0
Not always	10	50.0	44	62.9	54	60.0
Used condom with paid female sex partner	N=6	%	N=27	%	N=33	%
Always	3	50.0	23	85.2	26	78.8
Not always	3	50.0	4	14.8	7	21.2

NA- Not applicable for non-MSWs

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 male partners. The consistent use of condoms was lowest at 50 percent for each for non-paying female sex partner and paid female sex partner. Around eight in ten MSWs (85.1%) had used condoms consistently with one-time paying male partners, while around seven in ten (75.8%) had consistently used condoms with regular paying male partners in the past month. Additionally, 65.4 percent of MSWs had been consistent condom users with non-paying male anal sex partners in the month preceding the survey (Table 6.10).

Non-MSWs and Consistent Condom Use in Past Month

Partner-wise, 85.2 percent of non-MSWs had used condoms consistently with paid female partners, compared to 73.8 percent of them who had used condoms consistently with paid male anal sex partners in the past month. At the same time, 65.1 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 (37.1%) in the past month (Table 6.10).

6.6.2 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 (32.3%) were carrying condoms with them at the time of the interview. The majority of MSM (94.8%) 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 (5%) were: shop/pharmacy was closed (60%) or too far away (25%); feeling awkward buying a condom (25%); not wanting to carry a condom around with them (40%).

Table 6.11: Condom Possession and its Availability

Condom accessibility	MSW		Non-MSW		MSM	
	N	%	N	%	N	%
Can identify male condom	N=135	%	N=265	%	N=400	%
Yes	135	100.0	265	100.0	400	100.0
No	0	0.0	0	0.0	0	0.0
Possess a condom at the time of interview	N=135	%	N=265	%	N=400	%
Yes	66	48.9	63	23.8	129	32.3
No	69	51.1	202	76.2	271	67.8
Can have condom whenever necessary	N=135	%	N=265	%	N=400	%
Yes	129	95.6	250	94.3	379	94.8
No	6	4.4	14	5.3	20	5.0
Don't need one	0	0.0	1	0.4	1	0.3
Reason for not being able to have condom when needed*	N=6	%	N=14	%	N=20	%
Shops/Pharmacy closed at night	1	16.7	11	78.6	12	60.0
Don't want to carry condom	2	33.3	6	42.9	8	40.0
Shops/Pharmacy too far away	0	0.0	5	35.7	5	25.0
Feel awkward buying condom	3	50.0	2	14.3	5	25.0
Cost is high	0	0.0	1	7.1	1	5.0
Received condom from an outreach service, drop-in centre or sexual health clinic	N=135	%	N=265	%	N=400	%
Yes	129	95.6	200	75.5	329	82.3
No	6	4.4	65	24.5	71	17.8
Source of last obtained condom	N=135	%	N=265	%	N=400	%
Cruiseaids	54	40.0	52	19.6	106	26.5
Pharmacy	12	8.9	73	27.5	85	21.3
BDS fieldworkers	20	14.8	42	15.8	62	15.5
Friends	6	4.4	44	16.6	50	12.5
Parichaya Samaj	25	18.5	17	6.4	42	10.5
BDS drop-in-center	13	9.6	14	5.3	27	6.8
Health facilities	3	2.2	6	2.3	9	2.3
Shops	0	0.0	6	2.3	6	1.5
Sexual partner	1	0.7	2	0.8	3	0.8
Bar/guest house/hotel	0	0.0	1	0.4	1	0.3
Never used condom	1	0.7	5	1.9	6	1.5
Others	0	0.0	3	1.1	3	0.8
Price paid for last condom (in NRs.)	N=134	%	N=260	%	N=394	%
Free	122	91.0	180	69.2	302	76.6
Re 1	0	0.0	6	2.3	6	1.5
Rs.2-5	7	5.2	41	15.8	48	12.2
Rs. 6-10	4	3.0	28	10.8	32	8.1
Rs. 11or more	1	0.7	5	1.9	6	1.5
Most preferred condom brand	N=135	%	N=265	%	N=400	%
Cobra	31	23.0	82	30.9	113	28.3
Number one	36	26.7	64	24.2	100	25.0
Condom distributed by Ministry of Health	23	17.0	25	9.4	48	12.0
Jodi	18	13.3	29	10.9	47	11.8
Panther	5	3.7	22	8.3	27	6.8
Kamsutra	9	6.7	12	4.5	21	5.3
Skinless	7	5.2	11	4.2	18	4.5
Dhaal	1	0.7	6	2.3	7	1.8
Others	5	3.7	5	1.9	10	2.5
Don't remember/Don't Know	0	0.0	9	3.4	9	2.3

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

Overall, 82.3 percent MSM (95.6% MSWs and 75.5% 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, 26.5 percent of MSM had received it from Cruiseaids, 21.3 percent had bought it from a pharmacy, while another 15.5 percent got it from Blue Diamond Society (BDS) field staff. Others had obtained their most recent condom from friends, from Parichaya Samaj, the BDS drop-in center and other sources as listed on Table 6.11.

While 76.6 percent of MSM had received their last condom free of cost, 12.2 percent had paid Rs. 2-5, and 8.1 percent had paid Rs 6-10 for one condom. Notably, a larger proportion of MSWs (91%) 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.

6.7 Use of Lubricant

Overall, 86.8 percent of the MSM had used lubricant at least once during anal sex and 96.5 percent of them had used it during their last act of anal sex. More MSWs (97.8%) than non-MSWs (81.1%) had ever used lubricant, while more than 95 percent of both the types of respondent had used it the last time they had sex. The most common lubricant used by them was water based lubricants (74.1%) , distributed by organizations providing services to MSM like Cruiseaids, Parichaya Samaj and Blue Diamond Society.

The majority of respondents (85.6%) had used condoms with lubricant during their last act of anal sex; this included 89.4 percent of MSWs and 83.3 percent of non-MSWs.

The MSM were asked if they have heard about specially made lubricant (branded lubricant) for use with condoms. Eighty-three percent of the MSM had heard of such lubricant and 61.7 percent could cite the brand name. Comparatively, more MSWs (73.1%) than non-MSWs (54.5%) had heard of branded lubricant. Black Cobra was the most recalled brand name.

Over one-half of those MSM (53.3%) who had heard of specially made lubricant had used them in anal sex consistently during last month. A higher percentage of MSWs (69.2%) had used lubricants with condoms than non-MSWs (43.1%).

Forty-five percent of those who had never used lubricants or did not use lubricant consistently stated they did not consider the use of lubricants necessary. A higher proportion of non-MSWs (51.8%) than MSWs (28.6%) gave this response. Unavailability in the market (21.4%) and lack of knowledge on where to find it (20.5%) were other obstacles mentioned by the respondents (Table 6.12).

The majority of MSM (91.7%) who used lubricant reported that it decreased pain/inflammation during sexual contact. At the same time, 70.4 percent also perceived that use of lubricant decreased the risk of condom breakage while 31.6 percent mentioned that they could avoid HIV transmission with the use of lubricant.

Table 6.12: Use of Lubricant

Use of lubricant	MSW		Non-MSW		MSM	
	N	%	N	%	N	%
Ever used lubricant in anal sex	N=135	%	N=265	%	N=400	%
Yes	132	97.8	215	81.1	347	86.8
No	3	2.2	50	18.9	53	13.3
Types of lubricant used in the last anal sex	N=132	%	N=215	%	N=347	%
Water based lubricant **	112	84.8	145	67.4	257	74.1
Saliva	11	8.3	35	16.3	46	13.3
Oil	4	3.0	20	9.3	24	6.9
Cream/lotion	1	0.8	3	1.4	4	1.2
Antiseptic/antibiotic cream	1	0.8	2	0.9	3	0.9
Others	0	0.0	1	0.5	1	0.3
Did not used lubricant in the last sex	3	2.3	9	4.2	12	3.5
Used condom with lubricant in the last anal sex	N=132	%	N=215	%	N=347	%
Yes	118	89.4	179	83.3	297	85.6
No	14	10.6	36	16.7	50	14.4
Heard of lubricant that is specially used with condom	N=135	%	N=265	%	N=400	%
Yes	130	96.3	202	76.2	332	83.0
No	5	3.7	63	23.8	68	17.0
Know brand name of lubricant	N=130	%	N=202	%	N=332	%
Yes, can say the brand name	95	73.1	110	54.5	205	61.7
No, can't say the brand name	35	26.9	92	45.5	127	38.3
Brand Name of lubricant*	N=95	%	N=110	%	N=205	%
Black Cobra	61	64.2	72	65.5	133	64.9
Water Based lubricant**	16	16.8	26	23.6	42	20.5
Number One	14	14.7	5	4.5	19	9.3
KY Jelly	5	5.3	5	4.5	10	4.9
Zycolin	3	3.2	1	0.9	4	2.0
Johnson & Johnson	1	0.7	2	0.8	3	0.8
Others	1	1.1	1	0.9	2	1.0
Frequency of use of special lubricant with condom in anal sex in the past month	N=130	%	N=202	%	N=332	%
Every time	90	69.2	87	43.1	177	53.3
Sometimes or Never	35	26.9	82	40.6	117	35.3
Did not have anal sex in the past month	5	3.8	33	16.3	38	11.4
Reasons for occasional or no use of lubricant*	N=35	%	N=82	%	N=117	%
Did not consider it necessary	10	28.6	43	51.8	53	44.9
Unavailability in the market	13	37.1	12	14.6	25	21.4
Did not know where to obtain it	5	14.3	19	23.2	24	20.5
Used other cream	6	16.7	7	8.5	13	11.0
Felt awkward to purchase	1	2.9	9	11.0	10	8.5
Enough lubricant in condom	2	5.7	6	7.2	8	6.8
High price	1	2.9	4	4.9	5	4.3
Not aware of such product	0	0.0	1	1.2	1	0.9
Others	9	25.7	9	11.0	18	15.4
Purpose of using lubricant*	N=120	%	N=133	%	N=253	%
To decrease pain/inflammation	119	99.2	113	85.0	232	91.7
To decrease the risk of condom breakage	92	76.7	86	64.7	178	70.4
To avoid HIV/AIDS infection	46	38.3	34	25.6	80	31.6
To increase sexual drive	21	17.5	31	23.3	52	20.6
Others	2	1.7	2	1.5	4	1.6

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

** 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.

6.8 Problems in Using Condom and Lubricant

While the majority of condom users (80.7%) did not face any problem while using lubricant with condoms, some MSM mentioned that they encountered certain problems like irritation/burning sensation (15.3%), condom slippage (1.7%) and condom breakage (1.4%) while using lubricant with condoms (Table 6.13).

Table 6.13 Problem Encountered in Using Lubricant with Condom

Problem encountered in using lubricant with condom	MSW		Non-MSW		MSM	
	N	%	N	%	N	%
Types of problem encountered in using lubricant*	N=132	%	N=215	%	N=347	%
No problem	89	67.4	191	88.8	280	80.7
Irritation/burning sensation	33	25.0	20	9.3	53	15.3
Condom slippage	5	3.8	1	0.5	6	1.7
Condom breakage	4	3.0	1	0.5	5	1.4
Others	5	3.8	4	1.9	9	2.6
Condom broke during sex in the past month	N=135	%	N=265	%	N=400	%
Yes	43	31.9	37	14.0	80	20.0
No	85	63.0	164	61.9	249	62.3
Didn't use condom in the last 30 days	7	5.2	64	24.2	71	17.8
Perceived reason for condom breakage*	N=43	%	N=37	%	N=80	%
Improper use of condom	33	76.8	29	78.4	62	77.5
Forceful penetration	5	11.6	2	5.4	7	8.8
Less lubricant in condom	3	7.0	1	2.7	4	5.0
Used less lubricant	1	2.3	2	5.4	3	3.8
Others	2	4.7	3	8.1	5	6.3
Don't know/can't remember	0	0.0	2	5.4	2	2.5
Preferred place for buying condom and lubricant*	N=135	%	N=265	%	N=400	%
Pharmacy	122	90.4	249	94.0	371	92.8
Shop	34	25.2	65	24.5	99	24.8
Paan shop	17	12.6	22	8.3	39	9.8
Cruiseaids	20	14.8	11	4.2	31	7.8
BDS field workers	7	5.2	13	4.9	20	5.0
Parichaya Samaj	14	10.4	5	1.9	19	4.8
BDS drop-in-center	3	2.2	10	3.8	13	3.3
Hotel/bar/guest house	4	3.0	1	0.4	5	1.3
Friends/sexual partner	0	0.0	4	1.5	4	1.0
Others	4	3.0	2	0.8	6	1.5

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

Twenty percent of the respondents have had condom breakage during sexual contact in the last month. Most of the respondents (77.5%) perceived that the breakage was caused by improper use of the condom.

The majority of the respondents (92.8%) preferred to buy condoms and lubricants from a pharmacy whilst shops were the next preferred suppliers of condoms for 24.8 percent of them.

CHAPTER -7.0: KNOWLEDGE OF STIs AND HIV/AIDS

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.

7.1 Level of Knowledge of STIs

The majority of the MSM (90.8%) mentioned that they were aware of at least one of the STI symptoms. However, 9.3 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 (12.5%) than MSWs (3%).

Table 7.1: Awareness of STI and Reported STI Symptoms in the Past Year

Knowledge of STI	MSW		Non-MSW		MSM	
	N=135	%	N=265	%	N=400	%
Aware of at least one male STI symptoms						
Yes	131	97.0	232	87.5	363	90.8
No	4	3.0	33	12.5	37	9.3

Most of the MSM (86.8%) cited genital ulcers as an STI symptom. The other most commonly cited symptoms were genital discharge (73.5%), burning during urination (51%), and itching in genital area (34.3%).

More MSWs than non-MSWs could name STI symptoms in males. For instance, a larger proportion of MSWs cited genital discharge (94.1% MSWs and 83% non-MSWs), genital ulcers/sores (88.1% MSWs and 66% non-MSWs) and burning while urinating (65.2 MSWs and 43.8 non-MSWs) as a STI symptoms. Other symptoms were also cited by more MSWs than non-MSWs (Table 7.2).

Table 7.2: Knowledge of Symptoms of STIs

Perceived symptoms of male STIs	MSW		Non-MSW		MSM	
STI symptom	N=135	%	N=265	%	N=400	%
Genital Ulcers/Sore	127	94.1	220	83.0	347	86.8
White discharge/discharge of pus/Dhatu flow from penis	119	88.1	175	66.0	294	73.5
Burning while urinating	88	65.2	116	43.8	204	51.0
Itching in genital areas	52	38.5	85	32.1	137	34.3
Anal ulcer/sore	40	29.6	29	10.9	69	17.3
Swelling in groin areas	25	18.5	28	10.6	53	13.3
Anal discharge	14	10.4	8	3.0	22	5.5
Weakness/weight loss	5	3.7	11	4.2	16	4.0
High temperature/fever	4	3.0	9	3.4	13	3.3
Mouth ulcer/sore	4	3.0	3	1.1	7	1.8
Others	7	5.2	11	4.2	18	4.5
STI symptoms not known	4	3.0	33	12.5	37	9.3
Number of known male STI symptoms						
None	4	3.0	33	12.5	37	9.3
One symptom	3	2.2	14	5.3	17	4.3
Two symptoms	23	17.0	64	24.2	87	21.8
Three symptoms	28	20.7	88	33.2	116	29.0
Four symptoms	42	31.1	45	17.0	87	21.8
Five symptoms	26	19.3	17	6.4	43	10.8
Six symptoms	9	6.7	4	1.5	13	3.3

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

Overall, 29 percent of the respondents could cite three STI symptoms while 21.8 percent each of them could name two and four STI symptoms respectively (Table 7.2).

The MSM were then asked if they had ever experienced symptoms such as genital discharge, genital ulcers/sores in the past year. Overall, 22.5 percent of the MSM said that they have had genital discharge, while 15.5 percent said they had experienced genital ulcers/sores in the past year (Table 7.3). Anal ulcers/sores were reported by 6.8 percent of the MSM. A relatively larger proportion of MSWs (15.6%) than non-MSWs (2.3%) had anal ulcers/sores in the past year. Likewise, symptoms such as genital discharge/penile ulcers/sores were reportedly experienced by more MSWs (25.9%) than non-MSWs (20.8%). On the other hand, more non-MSWs (17.7%) than MSWs (11.1%) have had genital ulcers/sores in the past year.

Table 7.3: Reported STI Symptom and Treatment in the Past 12 Months

STI symptoms experienced and treatment sought	MSW		Non-MSW		MSM	
	N	%	N	%	N	%
STI symptom experienced in the past 12 months*	N=135	%	N=265	%	N=400	%
Genital discharge or anal/penis ulcer/sores	35	25.9	55	20.8	90	22.5
Genital ulcer/sores	15	11.1	47	17.7	62	15.5
Urethral discharge	5	3.7	9	3.4	14	3.5
Anal ulcer/sores	21	15.6	6	2.3	27	6.8
Anal discharge	5	3.7	3	1.1	8	2.0
Never had STI symptoms in the past 12 months	100	74.1	210	79.2	310	77.5
First step taken after experiencing STI symptoms	N=35	%	N=55	%	N=90	%
Received treatment from hospital	5	14.3	9	16.4	14	15.6
Received treatment from Pharmacy	0	0.0	10	18.2	10	11.1
Received treatment from Cruiseaids	6	17.1	4	7.3	10	11.1
Used medicine at home	2	5.7	8	14.5	10	11.1
Received treatment from private doctor/clinician	4	11.4	3	5.5	7	7.8
Received treatment from Parichaya Samaj	5	14.3	2	3.6	7	7.8
Received treatment from BDS clinic	3	8.6	1	1.8	4	4.4
Received treatment from SACTS	3	8.6	0	0.0	3	3.3
Did nothing	7	20.0	18	32.7	25	27.8
Used any medicine to cure STI before approaching a doctor or a pharmacy	N=26	%	N=29	%	N=55	%
Yes	1	3.8	1	3.4	2	3.6
No	25	96.2	28	96.6	53	96.4
Days waited for seeking treatment for last experienced STI symptom	N=26	%	N=29	%	N=55	%
1 day	1	3.8	3	10.3	4	7.3
2-7 days	9	34.6	16	55.2	25	45.5
8-30 days	13	50.0	7	24.1	20	36.4
More than 30 days	2	7.7	3	10.3	5	9.1
Did not seek treatment	1	3.8	0	0.0	1	1.8
Amount spent for the treatment of last STI symptom (including doctor' fee and other medical expenses)	N=26	%	N=29	%	N=55	%
Free of cost	13	50.0	2	6.9	15	27.3
Rs. 5-90	2	7.7	10	34.5	12	21.8
Rs. 91-200	4	15.4	3	10.3	7	12.7
Rs. 201-4000	7	26.9	14	48.3	21	38.2
Mean amount spent for treatment (in NRs)	-	386	-	294	-	338

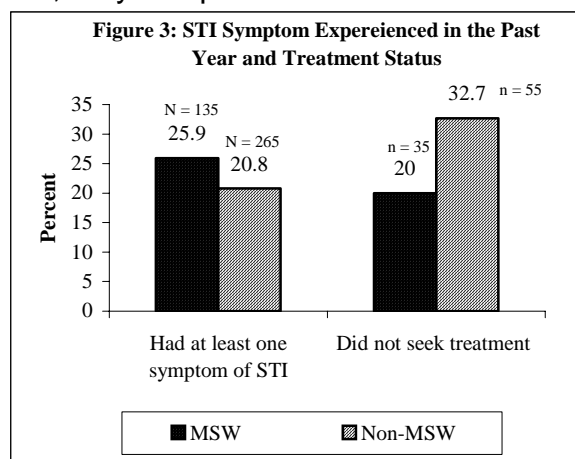
*Note: Percentages add up to more than 100 because of multiple responses

Around 16 percent of those who had sought treatment had gone to a hospital, while 11.1 percent each of the respondents had sought treatment from a pharmacy or from Cruiseaids, and had used medicine that was available at home. A relatively higher proportion of MSWs than non-MSWs had sought treatment from different centers

and clinics while a larger proportion of non-MSWs than MSWs had been to a pharmacy and hospital and had used medicine available at home for treatment (Table 7.3).

Of those who went to a doctor or pharmacy/clinic, 3.6 percent reported using self medication and 52.8 percent had waited up to one week before seeking treatment. More than a quarter of MSM (27.3%) received the treatment free of cost. While 50 percent of MSWs had accessed free treatment, only 6.9 percent of non-MSWs had been able to do so. On average, NRs. 338 was spent on the treatment. The range of cost for treatment varied from NRs.5 to NRs. 4,000.

As seen in Figure 3, 25.9 percent of MSWs and 20.8 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, 27.8 percent had never sought any treatment; this included more non-MSWs (32.7%) than MSWs (20%).



7.2 Knowledge about HIV/AIDS

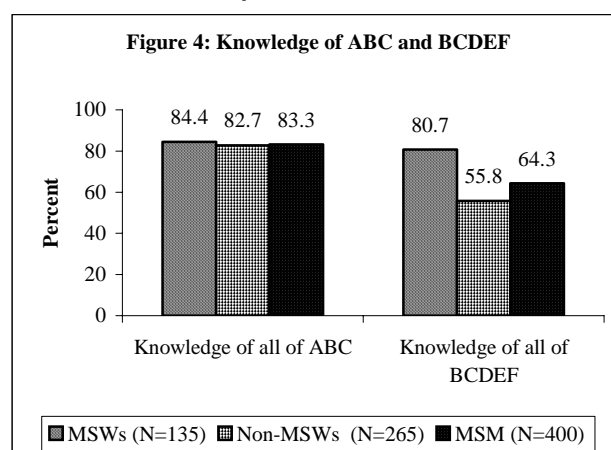
Respondents were asked about measures to prevent HIV/AIDS. Their understanding of the major HIV/AIDS prevention measures was assessed, including abstinence from sex (A); being faithful to one sex partner (B); and consistent condom use (C). Nearly all of them knew that consistent use of condoms (99.5%) and being faithful to one partner (97.8%) will reduce the risk of HIV/AIDS. Eight in ten (84.5%) stated abstinence from sexual contact was one of the ways of preventing HIV.

Table 7.4: Knowledge about Preventing HIV/AIDS

Knowledge of six major indicators on HIV/AIDS	MSW		Non-MSW		MSM	
	N=135	%	N=265	%	N=400	%
HIV transmission can be avoided through:						
A Abstinence from sexual contact	116	85.9	222	83.8	338	84.5
B Monogamous sexual contact	134	99.3	257	97.0	391	97.8
C Consistent condom use during each sex	134	99.3	264	99.6	398	99.5
Perception on HIV transmission:						
D A healthy-looking person can be infected with HIV	128	94.8	252	95.1	380	95.0
E A person can not get HIV virus from mosquito bite	114	84.4	161	60.8	275	68.8
F HIV is not transmitted while sharing a meal with an HIV infected person	128	94.8	243	91.7	371	92.8

Additionally, nine in ten respondents knew that a healthy-looking person can be infected with HIV (D: 95%); and HIV can not be transmitted while sharing meal with an HIV-infected person (F: (92.8%). However, a relatively smaller proportion of MSM (68.8 %) agreed that a person cannot get the HIV virus from a mosquito bite (E) (84.4% MSWs and 60.8% non-MSWs).

Overall, 83.3 percent of MSM were aware of all three major modes of transmission, i.e. 'ABC'(84.4% MSWs and 82.7% non-MSWs). On the other hand, 64.3 percent of them were aware of all of the five ways –BCDEF- by which one can protect oneself against HIV and ways in which it cannot be transmitted (80.7% MSWs and 55.8% non-MSWs) (Figure 4).



More MSWs (70.4%) than non-MSWs (51.3%) knew someone living with HIV/AIDS or who had died of an AIDS-related illness. When asked about the type of relationship they shared with such individuals, 47.4 percent of MSWs and 25 percent non-MSWs said they were close friends and 8.4 percent of MSWs and 19.9 percent of non-MSWs said they were relatives. One half of the MSM (50.6%) had heard/seen such people but did not have any relationship with them (Table 7.5).

Table 7.5: Knowledge on Ways of HIV/AIDS Transmission

Statements related to HIV/AIDS	MSW		Non-MSW		MSM	
	N=135	%	N=265	%	N=400	%
Know a person who is infected with HIV or who has died of AIDS	95	70.4	136	51.3	231	57.8
Relation shared with the person who is infected with HIV or has died of AIDS	N=95	%	N=136	%	N=231	%
Close relative	8	8.4	27	19.9	35	15.2
Close friend	45	47.4	34	25.0	79	34.2
No relation	42	44.2	75	55.1	117	50.6
Awareness on HIV/AIDS	N=135	%	N=265	%	N=400	%
Can reduce the risk of HIV by using condom correctly in every time of anal sex	135	100.0	263	99.3	398	99.5
Using a previously used needle/syringe may transmit HIV	134	99.3	264	99.6	398	99.5
Blood transfusion from an infected person to the other transmit HIV	134	99.3	263	99.3	397	99.3
Holding an HIV infected person's hand does not transmit HIV	133	98.5	255	96.2	388	97.0
HIV may be transmitted from a pregnant woman infected with HIV/AIDS to her unborn child	121	89.6	235	88.7	356	89.0
A woman with HIV/AIDS can transmit the virus to her new-born child through breastfeeding	113	83.7	168	63.4	281	70.3
A pregnant woman can reduce the risk of transmission of HIV to her unborn child by:	N=121	%	N=235	%	N=356	%
Taking medicine (ART therapy)	55	45.5	90	38.3	145	40.7
Taking advice from doctor/health personnel	32	26.4	47	20.0	79	22.2
Cannot do anything	0	0.0	5	2.1	5	1.4
Others	1	0.8	3	1.3	4	1.0
Don't know	33	27.3	90	38.3	123	34.6

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 (99.5%) and that injecting with a previously used needle (99.5%) and having a blood transfusion from an HIV-positive person (99.3%) will transmit the virus. They also knew that holding an HIV infected person's hand does

not transmit HIV (97%). However, a comparatively lower proportion of MSWs (63.4%) than non-MSWs (83.7%) believed that a woman with HIV/AIDS can transmit the virus to her newborn child through breastfeeding.

Eighty-nine percent of respondents were also aware about the risk of pregnant women with HIV/AIDS transmitting the virus to their children in the womb. Among those who were aware of the risk, 40.7 percent knew about antiretroviral therapy.

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. Eighty-three percent of the MSM (90.4% MSWs and 79.3% non-MSWs) knew about the existence of a confidential HIV testing facility in their community. Among these, more MSWs (83.7%) than non-MSWs (52.1%) had ever taken an HIV test. The majority of both MSWs (87.6%) and non-MSWs (78.3%) had taken up the test voluntarily, while others had been asked to test for HIV. Ninety-six percent of them (98.2% MSWs and 94.2% non-MSWs) had received their HIV test results. Most of those who had been tested (96%) had been given counseling at the time of the HIV test.

Table 7.6: Perception on HIV Testing

HIV test	MSW		Non-MSW		MSM	
	N	%	N	%	N	%
Confidential HIV testing facility available in the community	N=135	%	N=265	%	N=400	%
Yes	122	90.4	210	79.3	332	83.0
No	13	9.6	55	20.7	68	17.0
Ever had an HIV test	N=135	%	N=265	%	N=400	%
Yes	113	83.7	138	52.1	251	62.8
No	22	16.3	127	47.9	149	37.2
Reason for taking HIV test	N=113	%	N=138	%	N=251	%
Took voluntarily	99	87.6	108	78.3	207	82.5
Because it was Required	14	12.4	30	21.7	44	17.5
Received HIV test result	N=113	%	N=138	%	N=251	%
Yes	111	98.2	130	94.2	241	96.0
No	2	1.8	7	5.1	9	3.6
No Response	0	0.0	1	0.7	1	0.4
Received counseling at the time of HIV test	N=113	%	N=138	%	N=251	%
Yes	113	100.0	128	92.8	241	96.0
No	0	0.0	10	7.2	10	4.0
Time of most recent HIV test	N=113	%	N=138	%	N=251	%
Within Last 12 months	88	77.9	82	59.4	170	67.7
More than 12 months ago	25	22.1	56	40.6	81	32.3

Two-thirds (67.7%) of MSM had their most recent HIV test within the last one year (77.9% MSWs and 59.4% non-MSWs). Others had been tested more than one year before.

7.4 Attitudes towards HIV/AIDS

The stigma associated with HIV/AIDS increases the impact of HIV on the patient as well as on the most at-risk population (MARF). 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 6.4.

The majority of the respondents were ready to take care of an HIV-positive male relative (98.5% MSWs and 98.1% of non-MSWs) or an HIV-positive female relative (97% MSWs and 98.1% of non-MSWs) in their homes if necessary. On the other hand, around six in ten MSM (61.5% MSWs and 59.2 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 (99.3% MSWs and 97% non-MSWs) said that they would readily buy food from an HIV-positive vendor. An equally high proportion of them (97% MSWs and 95.1% non-MSWs) also agreed that unless very sick, people with HIV/AIDS should be allowed to continue in their jobs.

When asked about the health care needs of HIV-positive patients, 61.5 percent of MSWs and 64.9 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 37 percent of MSWs and 33.2 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 7.7).

Table 7.7: Attitudes towards HIV/AIDS

Perception on HIV/AIDS	MSW		Non-MSW		MSM	
	N=135	%	N=265	%	N=400	%
Willing to take care of an HIV positive male relative at home						
Yes	133	98.5	260	98.1	393	98.3
No	2	1.5	4	1.5	6	1.5
Don't know	0	0.0	1	0.4	1	0.3
Willing to take care of an HIV positive female relative at home						
Yes	131	97.0	260	98.1	391	97.8
No	4	3.0	4	1.5	8	2.0
Don't know	0	0.0	1	0.4	1	0.3
Would prefer to hide the HIV – positive status of a family member						
Yes	83	61.5	157	59.2	240	60.0
No	52	38.5	107	40.4	159	39.8
Don't know	0	0.0	1	0.4	1	0.3
Would buy supplies from HIV infected shop keeper						
Yes	134	99.3	257	97.0	391	97.8
No	1	0.7	7	2.6	8	2.0
Don't know	0	0.0	1	0.4	1	0.3
Believe that an HIV infected person who is not so sick should be allowed to continue his/her job						
Yes	131	97.0	252	95.1	383	95.8
No	4	3.0	12	4.5	16	4.0
Don't know	0	0.0	1	0.4	1	0.3
Believe that an HIV infected person should be provided equal, more or less health care compared to other person with chronic disease						
Equal	83	61.5	172	64.9	255	63.8
More	50	37.0	88	33.2	138	34.5
Less	2	1.5	4	1.5	6	1.5
Don't know	0	0.0	1	0.4	1	0.3

7.5 Perceived Risk of HIV

After assessing their awareness about HIV/AIDs, the respondents were asked what measures they had adopted to avoid getting HIV. In response, 83 percent of MSWs and 66.8 percent of non-MSWs mentioned that they have been consistently using condoms. A smaller proportion of them also pointed out that they had not shared needles (18.8%), had taken no precautionary measures (11.5%) and had sex only with faithful partners (10.3%).

Table 7.8: Risk Perception and Reason for Such Perception

Risk perception and underlying reasons	MSW		Non-MSW		MSM	
	N	%	N	%	N	%
Measures adopted to avoid getting HIV*	N=135	%	N=265	%	N=400	%
Always used condom	112	83.0	177	66.8	289	72.3
Not shared needles	28	20.7	47	17.7	75	18.8
Not taken any such measures	8	5.9	38	14.3	46	11.5
Have sex only with faithful sex partner	14	10.4	27	10.2	41	10.3
Use condom sometimes/most of the times	7	5.2	19	7.2	26	6.5
Do not have many sexual partners	4	3.0	18	6.8	22	5.5
Not received untested blood	6	4.4	11	4.2	17	4.3
Use new shaving blade	3	2.2	11	4.2	14	3.5
Use lubricant	9	6.7	1	0.4	10	2.5
Use condom correctly	6	4.4	2	0.8	8	2.0
Use condom with lubricant	6	0.0	0	0.0	6	1.5
Others	3	2.2	4	1.5	7	1.8
Risk perception level	N=135	%	N=265	%	N=400	%
High risk	5	3.7	9	3.4	14	3.5
Medium risk	41	30.4	54	20.4	95	23.8
Little or no risk	89	65.9	200	75.5	289	72.4
Don't know	0	0.0	2	0.8	2	0.5
Reason for considering self at risk of HIV*	N=46	%	N=63	%	N=109	%
Use condom irregularly	16	34.8	22	34.9	38	34.9
Frequently engaged in anal sex	24	52.2	13	20.6	37	33.9
Condom broke during sex	18	39.1	18	28.6	36	33.0
Have many sexual partners	22	47.8	10	15.9	32	29.4
Don't use condom	1	2.2	12	19.0	13	11.9
Have high risk job	7	15.2	2	3.2	9	8.3
Have shared needle with others	0	0.0	1	1.6	1	0.9
Have STI symptom	1	2.2	2	3.2	3	2.8
Others	3	6.5	4	6.3	7	6.4
Reason for perceiving self at little or no risk*	N=89	%	N=200	%	N=289	%
Always use condom	71	79.8	133	66.5	204	70.6
Never share injections	26	29.2	45	22.5	71	24.6
Partners are healthy	7	7.9	42	21.0	49	17.0
Have sex with faithful partner	8	9.0	37	18.5	45	15.6
Partners are clean	5	5.6	26	13.0	31	10.7
Have tested for HIV	7	7.9	13	6.5	20	6.9
Condom broke during sex	8	9.0	5	2.5	13	4.5
Have only one sexual partner	2	2.2	9	4.5	11	3.8
Use condom correctly	3	3.4	8	4.0	11	3.8
Self in good health	2	2.2	7	3.5	9	3.1
Use condom most of the times	4	4.5	4	2.0	8	2.8
Use lubricant all the time	5	5.6	2	1.0	7	2.4
Have few/limited sexual partner	1	1.1	5	2.5	6	2.1
Have not received other's blood	2	2.2	3	1.5	5	1.7
Do not use other's shaving blade	1	1.1	0	0.0	1	0.3
Others	4	4.5	6	3.0	10	3.5

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

An effort was also made to understand whether or not the MSM perceived them to be at risk of HIV infection. Around seven in ten respondents (65.9% of MSWs and 75.5% of non-MSWs) perceived themselves to be at little or no risk of contracting HIV. At the same time 23.8 percent of them (30.4% MSWs and 20.4% non-MSWs) thought that they were at medium risk while around three percent of both MSWs and 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 irregular use of condoms (34.9%), frequent anal sex (33.9%), condom breakage during sexual contact (33%) and having multiple partners (29.4%). A relatively larger proportion of MSWs than non-MSWs cited some of these underlying reasons for their risk perception (Table 7.8).

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 (79.8% MSWs and 66.5% non-MSWs). However, there were some respondents (7.9% MSWs and 21% 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 (5.6% MSWs and 13% non-MSWs).

7.6 Physical/Sexual Violence against MSM

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, ten percent of the MSM had been beaten up, 16.3 percent had been forced to have sex, 21.3 percent had been blackmailed, and 21 percent faced discrimination at work in the past year. More vulnerable are *dohoris/metis* whose feminine personality and behavior distinguish them from other MSM. Overall, 47.4 percent of them had ever faced different problems because of their sexual identity (54.9% MSWs and 27.9% non-MSWs).

Table 7.9: Personal Experience of Violence and Discrimination in the Past 12 Months

Subjected to Violence/Discrimination	MSW		Non-MSW		MSM	
	N	%	N	%	N	%
Was beaten up in the past 12 months	N=135	%	N=265	%	N=400	%
Yes	35	25.9	5	1.9	40	10.0
No	100	74.1	260	98.1	360	90.0
Was beaten up by*	N=35	%	N=5	%	N=40	%
Police	24	68.6	2	40.0	26	65.0
Hooligans	10	28.6	3	60.0	13	32.5
Sex partner	5	14.3	1	20.0	6	15.0
Military	2	5.7	0	0.0	2	5.0
Client	1	2.9	0	0.0	1	2.5
Others	4	11.4	0	0.0	4	10.0
Was forced to have sex in the past 12 months	N=135	%	N=265	%	N=400	%
Yes	44	32.6	21	7.9	65	16.3
No	91	67.4	244	92.1	335	83.8
People who forcefully had sex*	N=44	%	N=21	%	N=65	%
Sexual partner	9	20.5	17	81.0	26	40.0
Police	17	38.6	0	0.0	17	26.2
Hooligans	12	27.3	4	19.0	16	24.6
Client	5	11.4	0	0.0	5	7.7
Military	2	4.5	0	0.0	2	3.1
Others	5	11.4	0	0.0	5	7.7
Was blackmailed in the past 12 months	N=135	%	N=265	%	N=400	%
Yes	68	50.4	17	6.4	85	21.3
No	67	49.6	248	93.6	315	78.8
Faced discrimination at job or every day life in the past 12 months	N=135	%	N=265	%	N=400	%
Yes	60	44.4	24	9.1	84	21.0
No	75	55.6	241	90.9	316	79.0
Ever experienced any kind of problems due to sexual orientation (asked only to metis/dohoris)	N=113	%	N=43	%	N=156	%
Yes	62	54.9	12	27.9	74	47.4
No	45	39.8	23	53.5	68	43.6
No Response	6	5.3	8	18.6	14	9.0

*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 (25.9% of MSWs and 1.9% of non-MSWs), forced sex (32.6% of MSWs and 7.9% of non-MSWs), blackmailing (50.4% of MSWs and 6.4% of non-MSWs) and discrimination at job or daily life (44.4% of MSWs and 9.1% of non-MSWs) in the past year (Table 7.9).

The police, sexual partners and hooligans are the main offenders. Two-thirds of the MSM (65%) who were beaten up in the last 12 months, were beaten up by the police, and one-third (32.5%) by hooligans. MSWs were particularly vulnerable to forced sex by police (38.6%) and hooligans (27.3%), whereas non-MSWs were more likely to be assaulted by their sex partners (81%).

CHAPTER - 8.0: EXPOSURE TO HIV/AIDS AWARENESS PROGRAMS

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 MARP 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.

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 8.1: Meeting/Interaction with Peer /Outreach Educator/Community Mobilizer/Community Educator

Exposure to PE/OE/CM/CE	MSW		Non-MSW		MSM	
	N	%	N	%	N	%
Met/discussed/ interacted with peer /outreach educators or community mobilizer /community educator in the last 12 months	N=135	%	N=265	%	N=400	%
Yes	127	94.1	185	69.8	312	78.0
No	8	5.9	80	30.2	88	22.0
Activities carried out with/by PE/OE/CM /CEs*	N=127	%	N=185	%	N=312	%
Discussion on how HIV/AIDS is/isn't transmitted	126	99.2	172	93.0	298	95.5
Discussion on how STI is/isn't transmitted	112	88.2	129	69.7	241	77.2
Demonstrated how to use condom correctly	76	59.8	91	49.2	167	53.5
Discussion on regular/non-regular use of condom	82	64.6	82	44.3	164	52.6
Received condom	60	47.2	101	54.6	161	51.6
Received lubricant	29	22.8	24	13.0	53	17.0
Discussion on MSM rights/human rights	11	8.7	11	5.9	22	7.1
Received IEC materials/Leaflet	9	7.1	7	3.8	16	5.1
Discussion on use of lubricant	8	6.3	3	1.6	11	3.5
Others	8	6.3	5	2.7	13	4.2
Organizations represented by PE/OE /CM/CEs*	N=127	%	N=185	%	N=312	%
Blue Diamond Society	59	46.5	92	49.7	151	48.4
Cruiseaids	84	66.1	85	44.9	169	44.2
Parichanya Samaj	53	41.7	45	24.3	98	31.4
CWC	2	1.6	3	1.6	5	1.6
Others	15	11.8	13	7.0	28	9.0
Name of organization not known	1	0.8	9	4.9	10	3.2
Number of Meetings with PE or OE or CM or CE in the past 12 months	N=127	%	N=185	%	N=312	%
Once	3	2.4	10	5.4	13	4.2
2-3 times	5	3.9	29	15.7	34	10.9
4-6 times	15	11.8	35	18.9	50	16.0
7-12 times	7	5.5	21	11.4	28	9.0
More than 12 times	97	76.4	90	48.6	187	59.9

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

Seventy-eight percent of the MSM had met PEs/OEs at least once in the past year. A relatively higher proportion of MSWs (94.1%) than non-MSWs (69.8%) had met PEs/OEs/CMs/CEs in the last year. In PE/OE meetings, respondents had mostly discussed HIV/AIDS transmission (95.5%) and STI transmission (77.2%). A little over one-half had been given a demonstration on using condoms correctly (53.5%), had been told about need to use condoms regularly (52.6%) and had also received condoms (51.6%). It is evident from Table 7.1 that the MSM (especially MSWs) meet PEs/OEs/CMs/CEs quite often, as 59.9 percent of the MSM had met with PEs/OEs/CMs/CEs more than 12 times in the past year (76.4% of MSWs and 48.6% of non-MSWs). There were a few MSM (2.4% of MSWs and 5.4% 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 (48.4%), Cruiseaids (44.2%), and Parichaya Samaj (31.4%).

8.2 Drop-in Centers

Out reach 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 8.2: Outreach Center Visiting Practices

DIC Visiting Practices	MSW		Non-MSW		MSM	
	N	%	N	%	N	%
Outreach center (DIC/IC/CC) visited in the last 12 months	N=135	%	N=265	%	N=400	%
Yes	106	78.5	112	42.3	218	54.5
No	29	21.5	153	57.7	182	45.5
Participated activities at DIC/IC/CC*	N=106	%	N=112	%	N=218	%
Collected condom	101	95.3	105	93.8	206	94.5
Took part in discussion on HIV transmission	83	78.3	46	76.8	169	77.5
Learnt correct ways of using condom	52	49.1	42	37.5	94	43.1
Collected lubricants	44	41.5	28	25.0	72	33.0
Watched film on HIV transmission	30	28.3	22	19.6	52	23.9
Played games	9	8.5	8	7.1	17	7.8
Was given IEC materials	14	13.2	1	0.9	15	6.9
Talked about STI transmission	6	5.7	3	2.7	9	4.1
Received training on HIV/AIDS	6	5.7	1	0.9	7	3.2
Accompanied a friend	3	2.8	1	0.9	4	1.8
Others	7	6.6	4	3.6	11	5.0
Name of organizations that run the visited DIC/IC/CC*	N=106	%	N=112	%	N=218	%
Cruiseaids	74	69.8	60	53.6	134	61.5
Blue Diamond Society	48	45.3	45	40.2	93	42.7
Parichaya Samaj	49	46.2	32	28.6	81	37.2
SACTS	5	4.7	6	5.4	11	5.0
CWC	1	0.9	4	3.6	5	2.3
CAC	1	0.9	1	1.9	2	0.9
Others	6	5.7	8	7.1	14	6.4
Number of Visits to the DIC/IC/CC in the past 12 months	N=106	%	N=112	%	N=218	%
Once	0	0.0	5	4.5	5	2.3
2-3 times	5	4.7	19	17.0	24	11.0
4-6 times	9	8.6	28	25.0	37	17.0

7-12 times	13	12.3	13	11.6	26	11.9
More than 12 times	79	74.5	47	42.0	126	57.8

*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 (94.5%) of those who visited a DIC/IC/CC in the last year had collected condoms from there, while 77.5 percent had taken part in discussions relating to HIV transmission at DICs. Moreover, 43.1 percent of them had learnt the correct way of using a condom and 33 percent had watched a film on HIV transmission.

Overall, DICs run by Cruiseaids were the most frequently visited DICs by the respondents participating in this survey (69.8% MSWs and 53.6% non-MSWs); followed by the Blue Diamond Society and Parichaya Samaj. MSWs were more likely to visit DICs than non-MSWs. MSWs also tend to visit DICs more often than non-MSWs. Nearly 75 percent of MSWs had visited a DIC more than 12 times in the past year, while among non-MSWs 42 percent had reported doing so.

8.3 STI Clinics

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.

About one-fourth (24.8%) of respondents had visited an STI clinic in the past year. Most of those who visited an STI clinic were physically examined (61.6%), had accompanied a friend (51.5%) and had given their blood sample for STI detection (30.3%). They were also informed about STI transmission, and use of condoms at the clinic.

Table 8.3: STI Clinic Visiting Practices

STI Clinic Visiting Practices	MSW		Non-MSW		MSM	
	N	%	N	%	N	%
Visited any STI clinic in the past 12 months	N=135	%	N=265	%	N=400	%
Yes	60	44.4	39	14.7	99	24.8
No	75	55.6	226	85.3	301	75.3
Participated activities at STI Clinic*	N=60	%	N=39	%	N=99	%
Physical examination conducted for STI detection	33	55.0	28	71.8	61	61.6
Accompanied a friend	40	66.7	11	28.2	51	51.5
Blood tested for STI detection	20	33.3	10	25.6	30	30.3
Discussed on how STI is/is not transmitted	14	23.3	8	20.5	22	22.2
Discussed on regular/non-regular use of condom	9	15.0	4	10.3	13	13.1
Others	2	3.3	2	5.1	4	4.0
Name of organization that run the visited STI Clinic	N=60	%	N=39	%	N=99	%
Cruiseaids	25	41.7	14	35.9	39	39.4
Parichaya Samaj	16	26.7	5	12.8	21	21.2
SACTS	10	16.7	5	12.8	15	15.2
Hospital	6	10.0	8	20.5	14	14.1
Blue Diamond Society	9	15.0	4	10.3	13	13.1
Pharmacy	0	0.0	8	20.5	8	8.1
Others	3	5.0	4	10.3	7	7.1
Number of visits to STI clinics in the past 12 months	N=60	%	N=39	%	N=99	%
Once	7	11.7	16	41.0	23	23.2

2-3 times	14	23.3	13	33.3	27	27.3
4-6 times	3	5.0	0	0.0	3	3.0
7-12 times	4	6.7	1	2.6	5	5.1
More than 12 times	32	53.3	9	23.1	41	41.4

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

The most visited STI clinics were run by Cruiseaids (39.4%). Some had also visited STI clinics run by Parichays Samaj (21.2%) and SACTS (15.2%). While 27.3 percent had visited an STI clinic 2 to 3 times in the past year, 23.2 percent of the MSM had visited such a clinic once. Moreover, 41.4 percent MSM had been to an STI clinic more than 12 times in the last year (Table 8.3). However percentage of MSWs visiting STI clinics more than 12 times in the past year (53.3%) was much higher compared to non-MSWs (23.1%).

8.4 VCT Centers

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

Overall, 43.8 percent of the MSM had visited a VCT center in the past year, with more MSWs (68.1%) than non-MSWs (31.3%). The majority of those who had been to a VCT center had received pre-HIV test counseling (94.3%), had given a blood sample for HIV testing (93.7%), had received the HIV test result (92.6%) and had received post-HIV test counseling (88%) here.

Table 8.4: VCT Visiting Practices

VCT Visiting Practices	MSW		Non-MSW		MSM	
	N	%	N	%	N	%
Visited VCT center in the past 12 months	N=135	%	N=265	%	N=400	%
Yes	92	68.1	83	31.3	175	43.8
No	43	31.9	182	68.7	225	56.3
Activities participated in at VCT Center*	N=92	%	N=83	%	N=175	%
Received pre HIV test counseling	87	94.6	78	94.0	165	94.3
Blood tested for HIV detection	87	94.6	77	92.8	164	93.7
Received HIV test result	87	94.6	75	90.4	162	92.6
Received post HIV test counseling	85	92.4	69	83.1	154	88.0
Received counseling on correct and consistent use of condom	60	65.2	44	53.0	104	59.4
Accompanied a friend	37	40.2	32	38.6	69	39.4
Received information on HIV/AIDS window period	50	54.3	18	21.7	68	38.9
Received condom/IEC materials	0	0.0	2	2.4	2	1.1
Name of the organization that run the visited VCT *	N=92	%	N=83	%	N=175	%
Cruiseaids	50	54.3	39	47.0	89	50.9
Parichaya Samaj	38	41.3	13	15.7	51	29.1
Blue Diamond Society	20	21.7	24	28.9	44	25.1
SACTS	17	18.5	13	15.7	30	17.1
Hospital	0	0.0	6	7.2	6	3.4
Others	1	1.1	5	6.0	6	3.4
Number of visits to VCT in the past 12 months	N=92	%	N=83	%	N=175	%
Once	10	10.9	27	32.5	37	21.1
2-3 times	23	25.0	30	36.1	53	30.3
4-6 times	10	10.9	5	6.0	15	8.6
7-12 times	0	0.0	3	3.6	3	1.7
More than 12 times	49	53.3	18	21.7	67	38.3

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

About one half of the MSM (50.9%) had visited a Cruiseaids VCT center, while 29.1 percent had been to Parichaya Samaj and 25.1 to the Blue Diamond Society 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 8.4)

8.5 Participation in HIV/AIDS Awareness Programs

Various government departments as well as non-government organizations have been involved in implementing HIV/AIDS 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 8.5: Participation in STI/HIV/AIDS Awareness Program

Participations in HIV/AIDS Awareness Programs	MSW		Non-MSW		MSM	
	N	%	N	%	N	%
Ever participated in HIV/AIDS awareness raising program or community events	N=135	%	N=265	%	N=400	%
Yes	105	77.8	113	42.6	218	54.5
No	30	22.2	152	57.4	182	45.5
Activities Participated in*	N=105	%	N=113	%	N=218	%
Street drama	31	29.5	21	18.6	52	23.9
AIDS day celebration	78	74.3	61	54.0	139	63.8
Condom day celebration	58	55.2	52	46.0	110	50.5
HIV/AIDS related training	71	67.6	39	34.5	110	50.5
Group discussion	57	44.3	34	30.1	91	41.7
HIV/AIDS related workshop	29	27.6	18	15.9	47	21.6
Gaijatra	20	19.0	11	9.7	31	14.2
Condom use demonstration	16	15.2	10	8.8	26	11.9
Talk program	4	3.8	6	5.3	10	4.6
Video show	2	1.9	1	0.9	3	1.4
Others	13	12.4	5	4.4	18	8.3
Name of the organizations that organized such activities*	N=105	%	N=113	%	N=218	%
Blue Diamond Society	53	50.5	41	36.3	94	43.1
Cruiseaids	53	50.5	34	30.1	87	39.9
Parichaya Samaj	45	42.9	20	17.7	65	29.8
School/collage	1	1.0	15	13.3	16	7.3
Government office/hospital	2	1.9	2	1.8	4	1.8
Others	11	10.5	19	16.8	30	13.8
Frequency of such participation in past 12 months	N=135	%	N=265	%	N=400	%
Did not participate in the past 12 months	35	25.9	175	66.0	210	52.5
Once	8	5.9	39	14.7	47	11.8
2-3 times	34	25.2	25	9.4	59	14.7
4-6 times	11	8.2	13	4.9	24	6.0
7-12 times	14	10.4	3	1.1	17	4.3
More than 12 times	33	24.5	10	3.8	43	10.7
Heard about Community Home Based Care Program (CHBC)	N=135	%	N=265	%	N=400	%
Yes	77	57.0	55	20.8	132	33.0
No	58	43.0	210	79.2	268	67.0
Heard about Community Care Support and Treatment Program	N=135	%	N=265	%	N=400	%
Yes	89	65.9	82	30.9	171	42.8
No	46	34.1	183	69.1	229	57.3

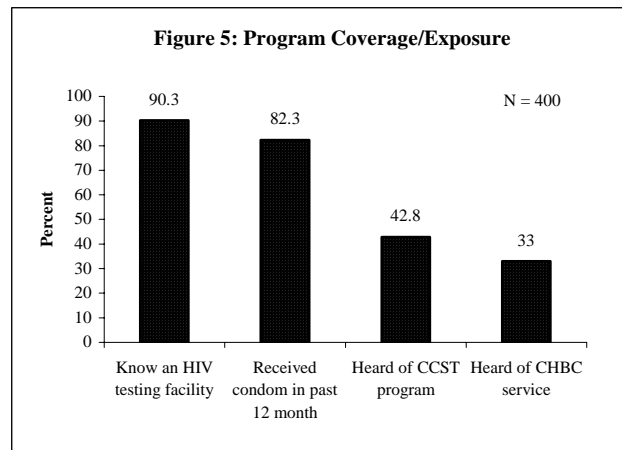
*Note: The percentages add up to more than 100 because of multiple responses.

Overall, 54.5 percent of the MSM had participated in at least one HIV/AIDS awareness raising program or similar event. Comparatively more MSWs (77.8%) than non-MSWs (42.6%) had taken part in these activities. Among them, many had participated in AIDS Day (74.3% MSWs and 54% of non-MSWs), Condom Day celebrations (55.2% MSWs and 46% non-MSWs), HIV/AIDS-related training (67.6% MSWs and 34.5% non-MSWs) and group discussions (44.3% MSWs and 30.1% non-MSWs). Others had participated in street drama, HIV/AIDS-related training and workshops and the *annual festival of Gai Jatra*.

Around four in ten MSM reported taking part in events organized by the Blue Diamond Society (43.1%) and Cruiseaids (39.9%). Almost 30 percent had also been part of Parichaya Samaj activities.

Fifteen percent of the MSM had taken part in such programs 2 to 3 times, while 11.8 percent had taken part just once in the past year. More than half of the MSM (52.5%) had not taken part in any of such activities/programs in the past year (25.9% MSWs and 66% non-MSWs). (Table 8.5)

Figure five further shows the exposure of the MSM to other program components. Overall, 90.3 percent knew of a facility where they could go for an HIV test whenever necessary, while 82.3 percent had received condoms from an outreach service, drop-in centre or sexual health clinic in the past year. 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.



Thirty-three percent of the MSM had heard about CHBC services provided to HIV-positive people, while 42.8 percent of them had heard of the CCST program.

CHAPTER - 9.0: A COMPARATIVE ANALYSIS OF SELECTED VARIABLES

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.

9.1 Socio Demographic Characteristic

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 9.1: Socio-Demographic Characteristics of MSM by Surveyed Years

Socio-demographic characteristics	First round (2004)			Second round (2007)			Third round (2009)		
	SPSS (%)			RDS EPP (%)			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)
Age of respondent									
Below 25 years	59.0	60.7	60.3	56.1	55.7	57.3	51.1	58.5	56.0
25 years and above	41.0	39.3	39.7	43.9	44.3	42.7	48.9	41.5	44.0
Median age	24	24	24	24	24	24	24	24	24
Ethnic/caste group									
Brahmin /Chhetri/Thakuri	36.1	40.0	39.1	33.9	40.7	38.2	33.3	47.2	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
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/Chhetri/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.

9.2 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 9.2: Drug Injecting Practices of MSM by Surveyed Years

Drug injecting practice	First round (2004)			Second round (2007)			First round (2009)		
	SPSS (%)			RDS EPP (%)			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)
Injected drug during past year									
Yes	0.0	4.4	3.4	4.2	1.6	1.8	1.5	1.1	1.3
No	92.8	95.6	95.0	95.8	98.4	98.2	98.5	98.9	98.8
Don't remember	7.2	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0

9.3 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 9.3: Sexual Behavior of MSM by Surveyed Years

Sexual behavior	First round (2004)			Second round (2007)			Third round (2009)		
	SPSS (%)			RDS EPP (%)			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)
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
17 – 20 years	14.5	37.8	32.4	31.0	39.7	37.5	17.0	41.1	33.0
21 and above	4.8	9.8	8.7	6.2	12.1	11.0	0.7	8.3	5.8
Can't remember	1.2	0.4	0.6	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
First sexual contact person male or female									
Male	21.7	58.5	50.0	68.5	31.5	36.1	89.6	43.8	59.3
Female	78.3	41.5	50.0	31.5	68.5	63.9	10.4	56.2	40.8
Bought sex from male in the past month									
Yes	14.5	12.7	13.1	20.0	15.5	17.4	6.7	25.3	19.0
No	85.5	87.3	86.9	80.0	84.5	82.6	93.3	74.7	81.0
Bought sex from female in the past month									
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
No	28.9	NA	NA	17.8**	NA	NA	20.7	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.

9.4 Condom Use with Different 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 9.4: 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)		
	SPSS (%)			RDS EPP (%)			SPSS (%)		
	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
Always	57.4	39.3	44.3	71.8	70.9	70.1	65.4	65.1	65.2
Not always	42.6	60.7	55.7	28.2	29.1	29.9	34.6	34.9	34.8
With one time paying male anal sex partner	N=48			N=92			N=94		
Always	68.8	NA	NA	94.6**	NA	NA	85.1	NA	NA
Not always	31.2	NA	NA	5.4**	NA	NA	14.9	NA	NA
With regular paying male anal sex partner	N=36	NA	NA	N=101			N=99	NA	NA
Always	50.0	NA	NA	97.2	NA	NA	75.8	NA	NA
Not always	50.0	NA	NA	2.8	NA	NA	24.2	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
Always	58.3	47.1	50.0	100.0**	82.9**	89.3	100.0	73.8	77.0
Not always	41.7	52.9	50.0	0.0**	17.1**	10.7	0.0	26.2	23.0
With non-paying female sex partner	N=15	N=63	N=78	N=28	N=86	N=114	N=20	N=70	N=90
Always	40.0	14.3	19.2	69.2	33.8	33.0	50.0	37.1	40.0
Not always	60.0	85.7	80.8	30.8	66.2	67.0	50.0	62.9	60.0

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

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.

9.5 HIV and STI Prevalence

HIV prevalence among the MSM has not changed significantly throughout the three rounds of the survey. As seen in Table 8.5, 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 9.5: HIV and STI Prevalence among MSM by Surveyed Years

HIV prevalence	First round (2004)			Second round (2007)			Third round (2009)		
	SPSS (%)			RDS EPP (%)			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)
HIV	4.8	3.6	3.9	2.9	3.4	3.3	5.2	3.0	3.8
Active Syphilis	2.4	1.5	1.7	1.5**	2.3**	2.4	3.0	0.8	1.5
Syphilis History	14.5	7.3	8.9	3.0**	2.6**	2.8	4.4	1.5	2.5
Anal-CT	20.5	1.5	5.9	11.6	2.6	3.6	11.1	1.9	5.0
Anal-NG	12.0	3.6	5.6	8.3	8.1	8.1	18.5	9.4	12.5
Urethral-CT	1.2	2.2	2.0	0.7**	1.1**	0.5	0.7	3.4	2.5
Urethral-NG	1.2	2.2	2.0	0.0**	0.8**	0.3	0.7	0.8	0.8

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 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.

CHAPTER – 10: SUMMARY OF MAJOR FINDINGS AND RECOMMENDATIONS

10.1 General Findings

HIV prevalence among MSM in the Kathmandu Valley is 3.8 percent, while the overall prevalence rate of at least one STI is 21.5 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 79 percent being below the age of 30. Overall, 22.5 percent were living with a regular sex partner at the time of the survey. Of these 44.4 percent were living with a male partner while 55.6 percent with a female partner.

The predominant sex practice among MSM was anal sex, followed by oral sex. The majority of them (85.8%) had practiced anal sex in the past month while 71.8 percent had oral as well as anal sex in the past month. All of the study participants had sexual contact with a male in the past year while 49 percent of them had sex with a female partner too.

The 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 (40%).

Ninety-five percent of MSM could get condoms whenever necessary. Eighty-three percent of MSM had heard of lubricants that are made specially to be used with condoms. Among them, 53.3 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. More than three-fourths (77.5%) of them knew that such breakage had been caused due to the improper use of condoms.

Overall, 9.3 percent of MSM could not correctly name any symptom of STIs in men. On the other hand, 22.5 percent had experienced at least one symptom of STI in the past 12 months.

While 83.3 percent of MSM knew about 'ABC', 64.3 percent were aware of all of 'BCDEF' (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 can not get HIV from a mosquito bite and F: HIV is not transmitted while sharing meal with an HIV infected person).

Eighty-three percent of MSM knew about a confidential HIV testing facility in their community. However, only 62.8 percent had ever taken an HIV test. Among them, 67.7 percent had taken the test within the past year.

While 27.3 percent of MSM perceived themselves to be at *medium or high risk* of contacting HIV, 72.4 percent saw little or no such risk for themselves.

Seventy-eight percent of MSM had met peer/outreach educators while 54.5 percent had visited a drop-in center (DIC), 47.5 percent had participated in at least one HIV/STI awareness program/community event and 43.8 had visited a VCT center at least once in the past year. A relatively smaller proportion of them (24.8%) had visited an STI clinic in the year preceding the survey. MSM had mostly participated or visited programs run by Cruiseaids, the Blue Diamond Society and Parichaya Samaj.

10.2 Group Specific Findings on MSWs and Non-MSWs

MSWs had a slightly higher prevalence of HIV than non-MSWs, as 5.2 percent of 135 MSWs and three 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 (16.2%).

Twenty-five percent of MSM were currently married. While 23.3 percent MSWs were married to male partners, 2.9 percent of non-MSWs had been married to males.

While 4.9 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 8-16 years compared to 50.6 percent of non-MSWs reporting so. At the same time, a relatively higher proportion of MSWs (89.6%) had their first sexual experience with a male partner than non-MSWs (43.8%).

More non-MSWs (57.7%) than MSWs (31.9%) had sexual contact with female partners in the past year. At the same time, non-MSWs had mostly performed the insertive role (57.7%) while MSWs had mostly performed the role of receptive partner (65.9%) 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 (96.3%) than non-MSWs (76.2%) had heard of branded lubricants. Likewise, a higher percentage of MSWs (69.2%) than non-MSWs (43.1%) had used lubricants with condoms in each anal sex in the past month.

A higher proportion of non-MSWs (12.5%) than MSWs (3%) were unaware of any symptoms of male STIs. Among the different symptoms of STIs, a relatively larger proportion of MSWs (15.6%) than non-MSWs (2.3%) had anal ulcers/sores in the

past year. On the other hand, more non-MSWs (17.7%) than MSWs (11.1%) 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 Cruiseaids (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 90.4 percent of MSWs knew about the existence of a confidential HIV testing facility in their community, 79.3 percentage of non-MSWs knew about it. Among them more MSWs (83.7%) than non-MSWs (52.1%) had ever taken an HIV test.

More MSWs than non-MSWs had been subjected to physical/sexual violence such as beating (25.9% MSWs and 1.9% non-MSWs), forced sex (32.6% MSWs and 7.9% non-MSWs), blackmailing (50.4% MSWs and 6.4% non-MSWs) and discrimination at their job or in daily life (44.4% MSWs and 9.1% non-MSWs) in the past one year.

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.

10.3 Recommendations

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

The prevalence of anal NG and urethral CT has increased over the years, suggesting unsafe/unprotected sexual practices among MSM. Consistent condom use was relatively low with non-paying female partners both among MSWs (50%) and non-MSWs (37.1%) in the past month. 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. The study findings indicated that interventions can target locations like bus parks, cinema halls, temples and their surrounding areas, dance restaurants, discotheques which are frequented by the study groups.*

Data from the study indicate that a considerable proportion of MSM have their first sexual encounter at quite a young age (82.2% MSWs and 50.6% non-MSWs were less than 17 at time of their first sexual contact). *Specific education program activities that target school children, college students, youth, and adolescents should be designed to impart HIV/AIDS awareness and sex education. Information can be disseminated through printed as well as on line education materials.*

Seventeen percent of MSM were not aware of a confidential HIV testing facility being available in the valley. At the same time, 37.2 percent of the respondents had never tested themselves for HIV so far. *Client-friendly HIV counseling and testing facilities*

should be expanded further to cover more of the MSM population and they should also be made aware of the location and of the availability of such services.

PEs/OE/CM/CEs are good contact points to disseminate the necessary information and IEC materials to the target population, especially to MSWs. Seventy-eight percent of the respondents had met them at least once in the past year. *Outreach education programs should be continued and geographically expanded to cover more of the target population. Ongoing programs should be expanded geographically and capacity building of local NGOs should be focused on to increase access to more of target population.*

Some MSM were subjected to physical violence such as beating and forced sex, blackmailing 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 considered to cover unexposed MSM including clients of MSWs and non-MSWs. Different mediums of communications such as hotlines, websites, PEs/OEs, pamphlets, posters and radio/television could be used 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 who are HIV infected	3.8%	PMP/ASHA/ National /UNGASS
Percentage of Non-MSWs who are HIV infected	3.0%	PMP/ASHA/ National /UNGASS
Percentage of MSWs who are HIV infected	5.2%	PMP/ASHA/ National /UNGASS
Percentage of condom use by total MSM at last anal sex	75.3%	PMP/National/ UNGASS
Percentage of condom use by total MSWs at last anal sex	76.3%	PMP/National/ UNGASS
Percentage of condom use by total non-MSWs at last anal sex	74.7%	PMP/National/ UNGASS
Percentage of MSM reporting consistent condom use with their clients over the past 12 months	16.8%	PMP
Percentage of MSM who both correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV transmission	64.3%	PMP/National/ UNGASS
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)	85.8%	National
Percentage of MSM reached with HIV prevention programs (Knows where to receive HIV test and have received condoms)	77.3%	UNGASS
Percentage of MSM who received an HIV test in the last 12 months and who know their results	42.0%	UNGASS

ANNEX – 2: 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 in Kathmandu Valley - 2009 (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: ____/____/2066

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): "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".

Non -MSWs: "regardless of their identity or label if one male has had anal and/or oral sex with another male in the 12 months preceding the study and not sold sex to another male in the previous 12 months".

MSM under the age of 16 will not be included.

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: ____/____/2066

Checked by the supervisor: Signature: _____ Date: ____/____/2066

001. Has someone interviewed you from New ERA 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"/> (Write the completed years)	
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"/> (Write the grade completed)	
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 <i>Hijara</i> 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 <i>Hijara</i> 10 Others (Specify) _____ 96 Don't remember/know 98 No Response 99	

Q. N.	Questions	Coding Categories	Skip to
106.1	How do you identify yourself on the basis of gender (Only one answer)	<i>Tesro Lingi</i> 1 Man..... 2 Woman 3 Don't Know 98 No Response 99	
107	Are you currently married?	Yes..... 1 No 2 No response 99	108 108
107.1	Who is your married sex partner? (Multiple answer possible)	Male 1 Female..... 2 Others (Specify) 96	
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	201 201
113	How did you earn that money? (Record all. If the respondents says "work" or "my job" probe for whether formal salaried job or informal sector) (Multiple answer possible)	Sex work..... 1 Money from family 2 Salaried job..... 3 Own business 4 Wage labor 5 Other work (Specify) 96 Don't remember/know 98	

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

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	
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	
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="text"/> <input type="text"/> Weeks..... <input type="text"/> <input type="text"/> Months..... <input type="text"/> <input type="text"/> 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="text"/> <input type="text"/> 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="text"/> <input type="text"/> No one 0 Don't remember..... 98 No response 99	304
303	How often did you use condom while you had anal sex with non-paying male sex partner in the last month?	Always 1 Most of the time 2 Sometimes 3 Never 4 Don't remember 98 No response..... 99	
304	The last time you had anal sex with a non-paying male sex partner, did you use a condom?	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/Cafe..... 7 Temple..... 8 Bus Station 9 Public Toilets 10 Cinema Hall 11 Near Army barracks..... 12 Internet cafe..... 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 remember..... 98 No response 99	} 309
307	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 Most of the time 2 Sometimes 3 Never 4 Don't remember98 No response.....99	
308	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 remember 98 No response 99	

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 remember..... 98 No response 99	} 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"/> No-one 0 Don't remember..... 98 No response 99	
311	Did you ask them to use condoms?	All of them..... 1 Some of them 2 None of them 3 Don't remember98 No response99	
312	How often did you use condom while you have had anal sex with a one-time male client in the last month?	Always 1 Most of the time 2 Sometimes 3 Never 4 Don't remember98 No response.....99	
313	The last time you had anal sex with a one-time male client, did he use a condom?	Yes..... 1 No 2 Don't remember 98 No response 99	

Q. N.	Questions	Coding Categories	Skip to
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-one 0 Don't remember..... 98 No response 99	

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 remember..... 98 No response 99	} 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 on 0 Don't remember..... 98 No response 99	319
317	How often did you use condom while you have had anal sex with regular male/meti client in the last month?	Always..... 1 Most of the time 2 Sometimes 3 Never 4 Don't remember98 No response.....99	
318	The last time you had anal sex with a regular male/meti client, did you use a condom?	Yes..... 1 No 2 Don't remember 98 No response 99	
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-one 0 Don't remember..... 98 No response 99	
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 remember 98 No response 99	
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 response.....99	

Q. N.	Questions	Coding Categories	Skip to
322	Where did you meet your last male/meti client? (Regular or one time client)	Park 1 Discotheque..... 2 Restaurant 3 Dance Restaurant..... 4 Massage Parlor..... 5 Street 5 Pub/Cafe..... 7 Temple..... 8 Bus Station 9 Public Toilets 10 Cinema Hall 11 Near Army barracks..... 12 Internet /cafe 13 Sauna/Steam Bath..... 14 Swimming Pools 15 Home 16 Bhatti Pasal 17 Forest 18 Saloon 19 Shopping center 20 Others (Specify) _____ 96 Don't remember..... 98 No response 99	
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 Businessman 4 Laborer 5 Unemployed..... 6 Driver 7 Private office staff 8 Others (Specify) _____ 96 96 Don't know.....98 No response.....99	

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 remember..... 98 No response 99	} 327
325	How often did you use condom while you have had vaginal or anal sex with female clients in the last month?	Always 1 Most of the time 2 Sometimes 3 Never 4 Don't remember98 No response99	
326	The last time you had vaginal or anal sex with a female client, did you use a condom?	Yes..... 1 No 2 Don't remember 98 No response 99	

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 remember..... 98 No response 99	} 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 paid 0 Don't remember..... 98 No response 99	
329	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 remember98 No response99	
330	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	

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 remember..... 98 No response 99	} 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 remember 98 No response 99	
333	How often did you use condom while you have had vaginal or anal sex with paying female sex partners in the last month?	Always 1 Most of the time 2 Sometimes 3 Never 4 Don't remember 98 No response..... 99	
334.	With whom did you have the first sexual intercourse (vaginal or anal)? (Check with answer in Q 202)	Non-paying male partner 1 Non paying female partner 2 Male client..... 3 Female client 4 Paid male sex worker 5 Paid female sex worker (FSW) 6 Don't Know 98 No response 99	
335.	Did you use a condom in the first sexual intercourse?	Yes..... 1 No 2 Don't remember/don't know .. 98 No response 99	
336	With whom did you have the last sexual intercourse (anal or vaginal)?	Non-paying male partner 1 Non paying female partner 2 Male client..... 3 Female client 4 Paid male sex worker 5 Paid female sex worker (FSW) 6 Don't Know 98 No response 99	
337	Did you use a condom in the last sexual intercourse (anal or vaginal)?	Yes..... 1 No 2 Don't remember/don't know .. 98 No response 99	
338	Who was your last male anal sexual partner? (Check the answer given in Q 336)	Non-paying male partner 1 Male client..... 2 Paid male sex worker 3 No anal sexual intercourse in Last 12 months 4 Don't Know 98 No response 99	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 know .. 98	

Q. N.	Questions	Coding Categories	Skip to
		No response 99	
340	How many different sex partners you had in the last six months (count all types of partners: paid, not-paid, regular, one time among all male, female and <i>tesro lingis</i> also)	Number <input type="text"/> <input type="text"/> <input type="text"/> 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 Military2 Client3 Regular Partner.....4 Sexual Partner5 Hooligans group.....6 Others (Specify).....96 Don't remember98 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

Q. N.	Questions	Coding Categories	Skip to
407	Who were these people who forced you to have sex against your will? (Multiple answer possible)	Police.....1 Military2 Client3 Regular Partner.....4 Sexual Partner5 Hooligans group.....6 Others (Specify)_____96 Don't remember98 No response.....99	
408	In the past 12 months, have you been cheated /threatened because of your sexual behavior?	Yes..... 1 No 2 Don't remember98 No response.....99	
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?	Yes..... 1 No 2 Don't remember 98 No response 99	
410	Ask Metis only: Have you ever faced any problems because of your sexual identity?	Yes..... 1 No 2 Don't remember 98 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 Parchaya Samaj 9 Cruiseaids 10 Never received condom 11 Other (Specify) _____96 Don't know 98 No response99	505 505

Q. N.	Questions	Coding Categories	Skip to
504	How much did you pay for one piece of condom the last time you got one?	NRS <input type="checkbox"/> <input type="checkbox"/> Free 1 Don't know 98 No response 99	
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	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	513 513
509	Could you tell me the brand name of such a product?	Yes, (Name)..... 1 No 2 Don't remember98 No response.....99	
510	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 Don't remember98 No response.....99	512
511	Why do you sometimes not use or never use such special condom lubricant?	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	

Q. N.	Questions	Coding Categories	Skip to
		Don't remember 98 No response99	

Q. N.	Questions	Coding Categories	Skip to
512	<p>If the response is 4 in Q.N. 510 go to Q.N. 513</p> <p>For you, what are the purposes of using special lubricant with condoms during sex?</p> <p>(Multiple answers. DO NOT READ the possible answers)</p>	<p>Decrease pain/inflammation 1</p> <p>Increase sexual feeling/stamina 2</p> <p>So that condom would not break . 3</p> <p>Prevent HIV/AIDS transmission 4</p> <p>Other (Specify) _____</p> <p>_____96</p> <p>Don't know 98</p> <p>No response99</p>	
513	<p>Have you ever used lubricant when having anal sex?</p> <p>(Lubricants: Something to make your or your partner's penis slippery so it is easier to insert without pain)</p>	<p>Yes..... 1</p> <p>No 2</p> <p>Don't remember 98</p> <p>No response 99</p>	517
514	<p>What types of lubricant did you use during last anal sex?</p>	<p>Saliva/spit..... 1</p> <p>Oil 2</p> <p>Water based lube 3</p> <p>Antiseptic/antibiotic cream 4</p> <p>Ghee/butter 5</p> <p>Cream/lotion 6</p> <p>Other (Specify) _____</p> <p>.....96</p> <p>Don't know 98</p> <p>No response 99</p>	
515	<p>Were you using a condom that time?</p>	<p>Yes..... 1</p> <p>No 2</p> <p>Don't know 98</p> <p>No response 99</p>	
516	<p>Did you have any problems while using lubricants?</p>	<p>Condom slippage..... 1</p> <p>Irritation or burning sensation... 2</p> <p>Condom breakage..... 3</p> <p>No problem..... 4</p> <p>Other (Specify) _____</p> <p>.....96</p> <p>Don't know 98</p> <p>No response 99</p>	
517	<p>From which place would you like to buy condoms and lubricants?</p> <p>(Multiple answers. DO NOT READ the possible answers)</p>	<p>Shop..... 1</p> <p>Pharmacy/Medical hall..... 2</p> <p>Bar/Guest House/Hotel..... 3</p> <p>BDS drop-in center 4</p> <p>BDS field workers 5</p> <p>Parichaya Samaj 6</p> <p>CruiseAids 7</p> <p>Other (Specify) _____</p> <p>.....96</p> <p>Don't know 98</p> <p>No response99</p>	
518	<p>In the last month, was there such instance when your condom broke while you were using it?</p>	<p>Yes..... 1</p> <p>No 2</p> <p>Condom never used/didn't use</p>	601

Q. N.	Questions	Coding Categories	Skip to
		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 Heroin 1 2 Other (Specify) _____ 96	
605	Some people try injecting drugs using a syringe. Have you injected such drugs in the last 12 months	Yes..... 1 No 2 Don't remember/don't know .. 98 No response 99	

Q. N.	Questions	Coding Categories	Skip to
	DO NOT COUNT DRUGS INJECTED FOR MEDICAL PURPOSES OR TREATMENT OF AN ILLNESS		

Q. N.	Questions	Coding Categories	Skip to
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	Could you tell me about any symptoms of STIs in men? DO NOT READ OUT (Multiple responses possible)	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	Have you had a urethral discharge during the past 12 months?	Yes..... 1 No 2 Don't know 98 No response 99	
703	Have you had anal discharge during the last 12 months?	Yes..... 1 No 2 Don't know 98 No response 99	
704	Have you had a genital ulcer / sore during the past 12 months?	Yes..... 1 No 2 Don't know 98 No response 99	
705	Have you had an anal ulcer / sore during the past 12 months?	Yes..... 1 No 2 Don't know 98 No response 99	
706	Have you had genital ulcer / discharge / sore (penis and or anal) during the past 12 months (Check consistency with previous questions 702, 703, 704, 705 and 706)	Yes..... 1 No 2 Don't know 98 No response 99	801
707	What was the first thing you did when you had those symptoms? DO NOT READ OUT	Sought treatment from hospital1 Sought treatment from chemist2 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	801 801

Q.N.	Questions	Coding Categories	Skip to
		Took medicine available at Home 8 Nothing 9 Other (Specify) _____ 96 Don't remember/know..... 98 No response 99	801
708	Before going to see the doctor or the drug seller, did you take any drugs that you thought would treat your STI?	Yes..... 1 No 2 Don't know 98 No response 99	
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	901
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	

Q. N.	Questions	Coding Categories	Skip to
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	
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	819 819 819 819 819
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	821 822 822

Q. N.	Questions	Coding Categories	Skip to
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 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	
822.1	Do you know where you can go for HIV test?	Yes..... 1 No 2	
823	I don't want to know the result, but have <i>you</i> 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			
827	When did you have your HIV test?	Within past one year 1 One year before..... 2 Don't know 98 No response 99	
828	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	

Q. N.	Questions	Coding Categories	Skip to
		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 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 Cruiseaids..... 3 Others (Specify) _____ 96 Don't know 98	
1004	How many times have you been	Once 1	

Q. N.	Questions	Coding Categories	Skip to
	visited by PE, OE, CM and/or CE in the last 12 months?	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 Cruiseaids..... 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
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 Cruiseaids..... 3 SACTs 4 NFCC..... 5 CAC 6 Others (Specify)	

Q. N.	Questions	Coding Categories	Skip to
	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 Cruiseaids..... 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
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	

Q. N.	Questions	Coding Categories	Skip to
		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 Cruiseaids..... 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 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="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 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="text"/> <input type="text"/> <input type="text"/> 15-20 years old <input type="text"/> <input type="text"/> <input type="text"/> 21-30 years old <input type="text"/> <input type="text"/> <input type="text"/> 31-40 years old <input type="text"/> <input type="text"/> <input type="text"/> > 41 years old <input type="text"/> <input type="text"/> <input type="text"/> Don't know 98 No response 99	
1206	Again, among those guys, please try to estimate their number by religion:	Hindu <input type="text"/> <input type="text"/> Buddhist..... <input type="text"/> <input type="text"/> Muslim <input type="text"/> <input type="text"/> Christian..... <input type="text"/> <input type="text"/> Others (Specify) _____ <input type="text"/> <input type="text"/> 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	

Q. N.	Questions	Coding Categories			Skip to	
1208	<p>In the past 6 months, how often have you been to the following locations to meet male sexual partners:</p> <p>(Ask for all the items proposed and probe for other locations, as well)</p>	Park Discotheque Dance Restaurant Massage parlor Street Pub/Cafe Temple Bus Station Public Toilets Cinema Hall Near Army barracks Internet (chat room) Personal Add (web site) Personal Add (magazine or other) Sauna/Steam bath Swimming Pools Home Telephone Other (Specify) _____	Very Often 1	Often 2	Som e-time 3	Never 4
1209	<p>Please give me the names of the 3 mostly visited locations in Kathmandu Valley where you have been to contact male sexual partners in the past 6 months:</p>	_____ 1 _____ 2 _____ 3 Don't know98 No response99				

ANNEX – 3

Sample Size Formulae

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

n = required minimum sample size per survey round

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

P₁ = the estimated proportion at the time of the first survey.

P₂ = 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-α} = the Z-score corresponding to the level of significance

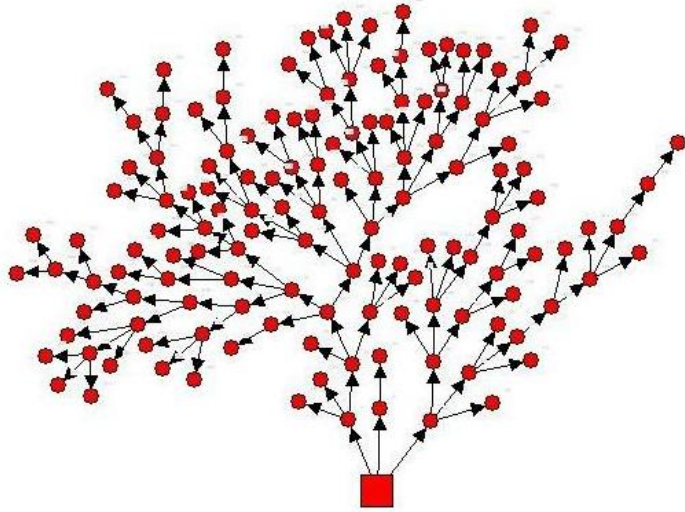
Z_{1-β} = the Z-score corresponding to the level of power

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

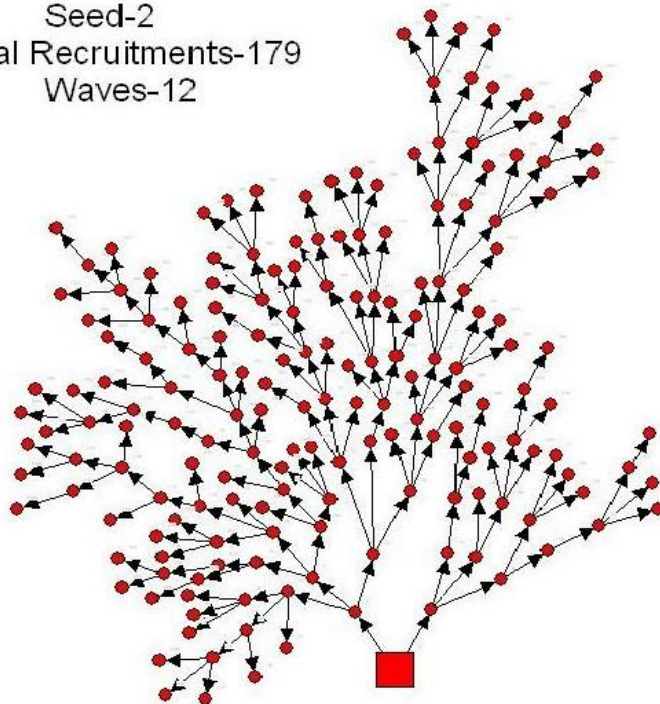
ANNEX -4

Respondent Driven Sampling Tree

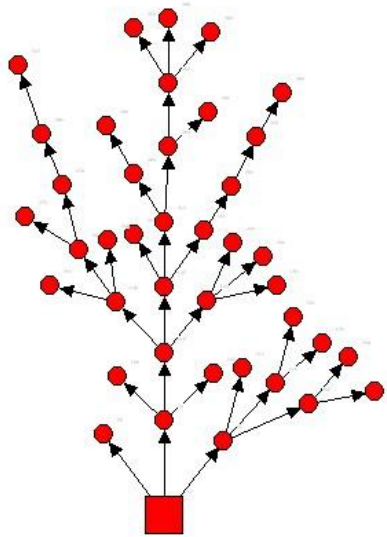
Seed-1
Total Recruitments-140
Waves-10



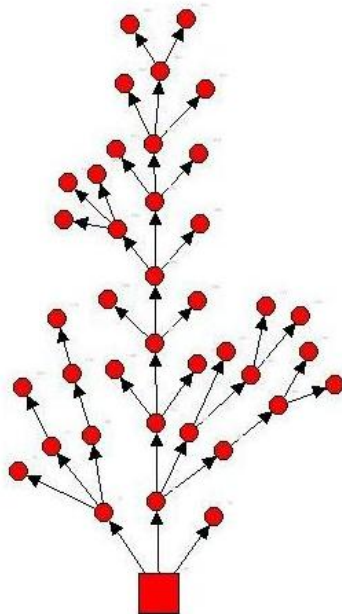
Seed-2
Total Recruitments-179
Waves-12



Seed-3
Total Recruitments-41
Waves-7



Seed-4
Total Recruitments-40
Waves-8



ANNEX – 5

Clinical/Lab Checklist

CONFIDENTIAL

**INTEGRATED BIO- BEHAVIORAL SURVEY (IBSS) AMONG MALE WHO HAVE
SEX WITH MALE IN KATHMANDU VALLEY
FHI/NEW ERA/SACTS – 2009**

Clinical/Lab Checklist

Respondent ID Number:

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

2066/___/___

Date:

Name of Clinician: _____

Name of Lab Technician: _____

(A) Clinical TEST

(B) Specimen collection

		<u>Yes</u>	<u>No</u>
Weight	: _____ Kg	1	2
	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	1	2
	Blood Collected for HIV & Syphilis	1	2
Pulse	: _____	1	2
	Date & place for post-test results given	1	2
Temperature	: _____ ° F	1	2
	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

Oral Informed Consent Form

Title: Integrated Biological and Behavioral Surveillance Survey among Men who have Sex with Men (MSM) in Kathmandu Valley 2009

Sponsor: ASHA Project- FHI/Nepal and USAID/Nepal

Principal Investigator/s: Satish Raj Pandey, FHI/Nepal
Laxmi Bilas Acharya, FHI/Nepal

Address: GPO Box 8803
Gopal Bhawan, Anamika Galli, Ward No4,
Baluwatar, Kathmandu, Nepal
Phone: +977 1 443 7173
FAX: +977 1 441 7475

Introduction

We are asking you to take part in research study to collect information on knowledge of human immunodeficiency virus (HIV)/ sexually transmitted infections (STIs), HIV/STI related risk behaviors, STI treatment practices and to measure the prevalence of HIV and STI among the populations like you. We want to be sure you understand the purpose and your responsibilities in the research before you decide if you want to be in it. Please ask us to explain any words or information that you may not understand. This discussion is the process needed before the study occurs. You will not be asked to sign this form; you only need to tell us whether you understand it and whether you agree to participate in this research. One person will explain you about the study and another person will witness the consent taking process. Both consent taker and the witness will sign the form.

Information about the Research

Study participants will be selected by a process in which individuals who have participated in the study invite others they know to participate. In total 400 men having sex with men including *tesro lingis* will be selected for interview from Kathmandu Valley. We will ask you some questions and then ask you to provide blood, anal swab and urine samples for HIV and STI test. We will draw 5-6 ml blood by 10 ml disposable syringe from your vein in your arm. Anal swab sample will be collected by inserting a cotton swab stick into the anus to a distance of about 2.5 cm into the anal canal and urine sample will be collected in a sterile plastic universal urine container.

You will have to spend about 45-60 minutes with us if you decide to participate in this research. We would like to inform that this is a research study and not health care provision service.

Possible Risks

The risk of participating in this study is the minor discomfort during blood drawing. Similarly, you may feel some discomfort while taking anal swab sample. Providing urine, blood and anal swab samples does not put you at any other risk. You may feel awkward answering some of the questions we ask. You are free not to answer such questions and also to stop participating in the research process at any time you want to do so. You might feel some mental stress after getting your test results. But you will get counseling before the samples are collected and after the test for HIV and STI through a qualified counselor. They will

provide information about STIs too and will also provide counseling for any mental stress you may have.

There may be some risk that people may see you associated with the study, either now or when you return for your test results. If you know the status of your HIV and other STI tests you may have some mental stress related to the treatment of STI and other related issues.

Possible Benefits

You will be provided with free treatment, if currently you have any STI symptoms. You will be given lab test results and made aware of how STI/HIV is transmitted and how it can be prevented and controlled. If your STI tests are positive for the curable sexual infection such as syphilis and you have not been already treated for this, you will be offered free treatment. Although we do not provide HIV treatments service, we will give you information about HIV treatment service providers and refer you to them if necessary. If you go to the government ART sites/hospitals, they provide free services. You will also be provided with information on safer sex with the help of which you may reduce the risk of being infected by or infecting your sexual partners. The information we obtain from this research will help to plan strategies to control and prevent further spread of HIV/AIDS and other sexually transmitted diseases.

At the time of sample collection the study team members will give you the detailed address of the place and the dates where you can hear your test results of STI and HIV. Test result will be given by a qualified counselor with pre and post test counseling. Test results can only be obtained by presenting the study ID card with your code number on it. If you do not have the ID card when you return for the test results we cannot give you the results because we will not be able to recognize you without the study ID card.

If You Decide Not to Be in the Research

You are free to decide whether or not to take part in this research. Your decision will not affect in any way in the health services you are seeking now and you would normally receive.

Confidentiality

We will protect information collected about you and your taking part in this study to the best of our ability. We will not ask your name or any other identifiers. A court of law could order medical records shown to other people, but that is unlikely. We will not ask you to put your name on this form, but only ask you mention verbally (with spoken words) whether or not you want to participate in this study.

Payment

We will not give you anything for your participation but you will be given, condom and reading materials about STI/HIV/AIDS as compensation for your participation in the research. Moreover, we will provide you a fixed amount of Nepalese Rupees (NRs.) 100.00 (approximately, US\$1.50) after completing the study requirements to cover the local transportation you may use to come to the study center for interview and for providing biological sample and an additional NRs. 50.0 (US\$ 0.70) for each successful referral of peers for the study. You may refer up to three peers or friend.

Leaving the Research

You may leave the research at any time. If you do, it will not change the healthcare you normally receive from the study clinic.

If you have a questions about the study

If you have any questions about the research, call:

Satish Raj Pandey, ASHA project - FHI/Nepal, Baluwatar, Kathmandu, Phone: 01-4437173;
OR

Siddhartha Man Tuladhar, New ERA, Kalopool, Kathmandu, Phone: 01-4413603; **OR**

Laxmi Bilas Acharya, ASHA project - FHI/Nepal, Baluwatar, Kathmandu, Phone: 01-4437173

We will not be able to pay for care for injuries that occur as a result of the study.

Your Rights as a Participant

This research has been reviewed and approved by the Institutional Review Board of Family Health International and Nepal Health Research Council (NHRC). If you have any questions about how you are being treated by the study or your rights as a participant you may contact **Satish Raj Pandey**, Family Health International (FHI), Baluwatar, Kathmandu, Phone: 01-4437173 and/or Mr. David Borasky, Protection of Human Subjects Committee, PO Box 13950, Research Triangle Park, NC 27709, USA, phone number: [International Access Code]-1-919-405-1445, e-mail: dborasky@fhi.org.]

VOLUNTEER AGREEMENT

I was present while the benefits, risks and procedures were read to the volunteer. All questions were answered and the volunteer has agreed to take part in the research.

Signature of witness

Date

I certify that the nature and purpose, the potential benefits, and possible risks associated with participating in this research have been explained to the above individual.

Signature of Person Who Obtained Consent

Date

ANNEX - 7

Participation in Post Test Counseling

Date	Counseling center	Expected client	Client counseled		Client with HIV+		Client with HIV-	
			N	%	N	%	N	%
27March -08 May, 2009	CruiseAids	250	96	38.4	1	1.0	95	99.0
27March -08 May, 2009	SACTS	81	19	23.5	0	0.0	19	100.0
27March - 08 May, 2009	Parichaya Samaj	69	23	33.3	1	4.4	22	95.6
Total		400	138	34.5	2	1.5	136	98.5

ANNEX – 8

Self Categorization by 'Third Gender' on the Basis of Their Sexual Orientation/Behavior

Self categorization	N=142	%
Meta/meti	76	53.5
Bisexual	21	14.8
Homosexual	14	9.9
Third Gender	13	9.2
Ta	10	7.0
Men	6	4.2
Gay	2	1.4

ANNEX – 9

Common Professional Background of Paying Partners

Professional background of clients	MSW	
	N=135	%
Police/military	58	43.0
Student	52	38.5
Business	49	36.3
Labor	41	30.4
NGOs/private office staff	30	22.2
Civil servant	27	20.0
Driver	24	17.8
Unemployed	15	11.1
Sex work	6	4.4
Others	6	4.4
Don't know	2	1.5

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

ANNEX - 10

Sites Visited to Meet Sex Partners in Past Six Months

Meeting Points	MSW (N=135)			Non-MSW (265)			MSM (400)		
	Very often	Often	Sometimes	Very often	Often	Sometimes	Very often	Often	Sometimes
	%	%	%	%	%	%	%	%	%
Park	32.6	29.6	27.4	22.6	33.6	27.9	26.0	32.3	27.8
Street	28.9	45.2	23.7	18.9	39.2	30.2	22.3	41.3	28.0
Telephone	40.0	33.3	14.1	18.5	27.2	32.1	25.8	29.3	26.0
Home	20.0	34.8	36.3	18.1	27.5	30.6	18.8	30.0	32.5
Discotheque	4.4	16.3	37.0	1.1	1.9	20.0	2.3	6.8	25.8
Bus park	6.7	25.2	40.7	6.0	14.3	35.5	6.3	18.0	37.3
Dance/dohari restaurant	4.4	15.6	33.3	1.9	3.4	19.6	2.8	7.6	24.3
Public toilet	3.0	10.4	29.6	2.3	5.3	16.6	2.5	7.0	21.0
Temple	2.2	13.3	42.2	0.0	8.3	26.4	0.8	10.0	31.8
Massage parlor	0.0	1.5	8.9	0.8	0.4	7.9	.5	0.8	8.3
Pub/café	1.5	5.2	25.2	1.1	3.0	14.3	1.3	3.8	18.0
Cinema hall	3.7	6.7	45.9	0.8	5.3	29.8	1.8	5.8	35.3
Near army barrack	3.0	13.3	24.4	0.4	1.5	8.3	1.3	5.5	13.8
Internet (chat room)	5.9	6.7	15.6	2.3	3.8	7.9	3.5	4.8	10.5
Personal address (web site)	2.2	6.7	12.6	0.8	1.1	4.2	1.3	3.0	7.0
Personal address (newspaper or others)	0.0	0.7	6.7	0.0	0.8	4.9	0.0	0.8	5.5
Sauna steam bath	0.0	0.0	8.9	0.0	0.0	2.6	0.0	0.0	4.8
Swimming pools	0.0	2.2	20.0	0.0	1.1	7.2	0.0	1.5	11.5
Jungle	2.2	1.5	5.9	1.5	4.2	1.5	1.8	3.3	3.0
Hotel/lodge/guesthouse	0.0	0.7	0.7	0.4	1.9	1.5	0.3	1.5	1.3
Others	3.7	4.4	1.5	0.4	1.9	2.3	1.5	2.8	2.0