Integrated Biological and Behavioral Surveillance (IBBS) Survey among Female Sex Workers in Kathmandu Valley, Nepal

Round IV - 2011

June 2011







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LIST OF ABBREVIATION

AIDS	_	Acquired Immuno-Deficiency Syndrome
ASHA	-	
		HIV/AIDS
CAC	-	Community Action Center
CWC	-	Community Welfare Center
DIC	-	Drop-in-Centre
FHI	-	Family Health International
FSWs	-	Female Sex Workers
HIV	-	Human Immuno-Deficiency Virus
IBBS	-	Integrated Biological and Behavioral Surveillance Survey
ID	-	Identification Number
IDUs	-	Injecting Drug Users
IEC	-	Information, Education and Communication
IHS	-	Integrated Health Service
MARPs	-	I
NCASC	-	National Centre for AIDS and STD Control
NGO	-	Non-Governmental Organization
NHRC	-	Nepal Health Research Council
NPHL	-	National Public Health Laboratory
OEs	-	Outreach Educators
PEs	-	Peer Educators
PHSC	-	Protection of Human Subjects Committee
RPR	-	Rapid Plasma Reagin
SLC	-	School Leaving Certificate
SPSS	-	Statistical Package for the Social Sciences
STI	-	, , , , , , , , , , , , , , , , , , ,
STEP Nej		Society for Empowerment –Nepal
TPPA		Treponema Pallidum Particle Agglutination
VCT		Voluntary Counseling and Testing for HIV
WHO		0
WATCH	-	Women Acting Together for Change
USAID	-	United States Agency for International Development

EXECUTIVE SUMMARY

This is the fourth round of the IBBS survey conducted among 593 Female Sex Workers (FSWs) - of whom 355 were establishment-based and 238 street-based. The survey covered the entire Kathmandu Valley, including the Kathmandu, Bhaktapur, and Lalitpur districts. The fieldwork for the survey was carried out from January 16 to March 6, 2011. The survey was undertaken primarily to track the trend of HIV infection and syphilis in FSWs and to understand sexual behaviors among FSWs in the Kathmandu Valley. Information on the socio-demographic, sexual behavior, pregnancy history and use of family planning devices, drug use and exposure to STI/HIV/AIDS awareness programs was collected through a structured questionnaire, while the prevalence of HIV and syphilis was tested via blood samples. Syphilis was tested using the Rapid Plasma Reagin (RPR) test card. HIV was detected by using the Determine HIV 1/2 test as a first test to detect antibodies against HIV, the Uni-Gold test as a second test, and the SD Bioline HIV 1/2 test as a tie breaker test as per the VCT guideline of National Centre for AIDS and STD Control (NCASC).

Key Findings

Prevalence of HIV and STIs

Out of the 593 respondents who participated in the survey, 10 of them (1.7%) were infected with HIV. The prevalence was only seen in street-based FSWs. Syphilis history (RPR+ve with RPR titre < 1:8) was 2.5 percent (10/238 of the street-based FSWs and 5/355 of the establishment-based FSWs) and active syphilis (RPR+ve with RPR titre \geq 1:8) was 0.7 percent (4/238) among street based FSWs. Active syphilis was not detected among any of the establishment based FSWs.

Socio-Demographic Characteristics

The age of the FSWs in the Kathmandu Valley ranged from 16 to 48 years with a median age of 23 years. The average age of establishment-based respondents was lower than the street-based respondents. The majority (84.3%) of the respondents were born outside the Kathmandu Valley.

Thirty-one percent of the FSWs from Kathmandu Valley were illiterate with a higher proportion of the street-based (41.2%) compared to the establishment-based FSWs (24.2%) being illiterate. Marriage at an early age was a prevalent practice, as 85.3 percent of the married respondents had first been married between the ages of 11-19. A large proportion (75.7%) of FSWs was married before the survey. Percentage of married was higher among the street-based FSWs (84.9%) compared to their establishment-based counterparts (69.6%). Overall, 52.4 percent of the respondents were currently married that means they were with their husbands.

Child Birth and Use of Family Planning Devices

Eighty-one percent of the respondents who were or had been married had given birth to a child; 14.9 percent (67/449) had experienced at least one miscarriage; and 40.1 percent (180/449) had terminated/aborted pregnancies.

Among the different family planning devices available, all of the respondents had heard of condoms. Additionally, 87 percent of the respondents had been using some form of family planning device to delay or avoid pregnancy at the time of the survey. The majority of them (86.4%) had been using condoms.

Sexual Behavior

The mean age of the FSWs in Kathmandu valley at the time of their first sexual intercourse was 16 years. Around 71 percent of the respondents had had their first sexual contact at the age of 15-19. There were some (20.4%) who had had their first sexual contact at the even earlier age of 11-14.

The mean number of months for which the respondents were involved in the sex trade was 30 months, with 40.3 percent of them having entered the sex trade in the last 12 months preceding the survey interview data, indicating that new sex workers are entering the business at a fast rate. A higher proportion of establishment-based FSWs (43.4%) versus street-based FSWs (35.7%) joined the sex industry in the last 12 months.

Sex Workers and Their Clients

The sex workers have clients who visit them on regular basis and also those who come to them occasionally. The number of the respondents' clients per day ranged from one to six clients, with the mean number being 1.6 clients per day. While 58.7 percent of them reportedly entertained one client per day, 15 percent of them had three or more clients on average per day. The survey findings show that the street-based sex workers were more likely to see more clients than those based in establishments.

A large proportion of FSWs (62.7%) reported that they worked as a sex worker for four to seven days a week. The clients of the respondents belonged to a wide variety of professions. Overall, 61.7 percent of sex workers reported that businessmen visited them most frequently as clients. Service Holder/officer/doctor; Policeman/army man; Transport worker/driver; Contractors; Foreign employee and Migrant/industrial worker/wage laborer are some other frequtly visiting clients reported by FSWs

Condom Use with Different Partners

All of the FSWs knew about male condoms, 82.6 percent of the respondents had used a condom with their last clients. Use of condom with the last client in 2011 has significantly increased since the 2004 survey especially among establishment based sex workers.

Furthermore, the condom using practice of FSWs in the sexual relations that took place in the past year reveal that 74.6 percent of FSWs had used condoms consistently with regular clients, 73.4 percent with clients, 76.9 percent with 'other' partners but only 11.6 percent with non-paying regular sex partners. Thus, the survey findings have shown that consistent condom use was lowest with non-paying regular partners. Common reasons cited by both street and establishment-based FSWs for not using condoms with all partners were the partner's objection and/or because they had used other contraceptives. Not much variation was noticed between street-based FSWs and establishment-based FSWs regarding condom using practices with different partners.

Condom use with client, regular clients and 'other' partners has increased significantly over the years. FSWs reporting consistent condom use with clients had reached to 73.4 percent in 2011, from 56.6 percent in 2004. Similarly, consistent condom use with regular clients had increased up to 74.6 percent in 2011 from 62.5 percent in 2004; the trend shows significant improvement especially among establishment based sex workers. Consistent condom use with partners other than spouses, male friends or clients also showed an increasing trend from 58.5 percent in 2006 to 76.9 percent in 2011. However, consistent condom use with non-paying regular partner decreased significantly from 18.1 percent in 2004 to 11.6 percent in 2011

Knowledge of HIV/AIDS

Knowledge of HIV and AIDS among FSWs in the Kathmandu valley was universal, only two of the total 593 respondents had not heard about HIV/AIDS. The most common sources of information for those that had heard of HIV/AIDS were television (89.7%), radio (87.5%), NGO staff (83.8%), and friends/relatives (83.6%).

The proportion of sex workers who reported that they were aware of **A** (abstinence from sex), **B** (being faithful to one partner or avoiding multiple sex partners), and **C** (consistent condom use or use of a condom during every sexual act) as HIV preventive measures were 59.6 percent, 80.5 percent, and 88.7 percent, respectively. Overall, 47.7 percent of the respondents correctly identified all three **A**, **B**, and **C** as HIV preventative measures. Furthermore, among the respondents, 88.8 percent knew that a healthy-looking person can be infected with HIV (**D**), 44.0 percent of them identified that a person cannot get HIV from a mosquito bite (**E**), and 80.5 percent knew that one cannot get HIV by sharing a meal with an HIV-infected person (**F**). Overall, however, only 30.4 percent of the respondents were aware of all the five major indicators - **BCDEF.** This percentage was so low mainly because of the low correct knowledge on "mosquito bite".

The trend analysis of comprehensive knowledge shows that knowledge of ABC has significantly decreased since 2006 (55.2% in 2006, 58.4% in 2008 and 47.6% in 2011) which is because of drop in awareness level of '**A**'. Awareness of all of BCDEF has remained stable around 30 percent since 2006.

Exposure to STI/HIV/AIDS Awareness Programs

The majority of the respondents (83.8%) had met or interacted with peer educators/outreach educators (PEs/OEs) from different organizations. About 34 percent of FSWs from Kathmandu Valley had visited a drop-in center (DIC), around 44 percent had visited an STI clinic, and 53.5 percent of the FSWs had visited Voluntary Counseling and Testing (VCT) centers. However, only 9.3 percent of the respondents had ever participated in any HIV/AIDS prevention/awareness programs. The practice of visiting an STI clinic and a VCT center has significantly improved over the years amongst the FSWs in Kathmandu Valley. STI clinic visit increased to 43.8% in 2011 from 28% in 2006 and VCT visit increased to 53.5% in 2011 from 8.2% in 2006.

Stigma/Discrimination against People Living with HIV/AIDS

It was noted that the majority of the respondents were willing to take care of any of their HIV positive male relative (92.4%) or a female relative (93.9%) at their home if necessary. However, 66.3 percent of FSWs said that if a family member had HIV they would keep it confidential and would rather not talk about it.

Violence Faced

The survey findings have found that the street-based FSWs are more likely to face different forms of violence compared to those based in establishments since a higher proportion of street-based versus establishment-based FSWs were subjected to objectionable activities like forced or nonconsensual sex (27.3% street based and 18.3% establishment-based), were physically assaulted (21% street based and 15.8% establishment based), or had clients perform objectionable activities (34% street-based and 26.2% establishment-based).

CHAPTER 1.0: INTRODUCTION

1.1 Background

Nepal is defined as a country with a 'concentrated epidemic' of HIV. In Nepal, the risk of HIV infection is higher among injecting drug users (IDUs), Men who have Sex with Men (MSMs), female sex workers (FSWs) and labor migrants who work in Indian cities where HIV prevalence among FSWs is high. In 2009, the National Centre for AIDS and STD Control (NCASC) had estimated about 63,528 people living with HIV in Nepal of whom 3,544 were children (NCASC, 2010). The HIV epidemic in Nepal is largely driven by sex work.

The number of FSWs in Nepal is estimated at 32,137 (NCASC, 2010). Sex workers are considered one of the major groups that work as source of STIs and HIV infection to the general population, mainly as a result of unprotected sex with their clients and other sex partners who work as a 'bridge group'.

NCASC is conducting IBBS among the most at-risk populations (MARPs) on a regular basis since 1999. Surveys are under the National HIV/AIDS Surveillance Plan of NCASC. USAID and FHI have been providing the technical support for conducting these surveys This is the fourth round of IBBS surveys of FSWs in the Kathmandu Valley. The first round was conducted in 2004 followed by consecutive rounds in 2006 and 2008. The results from the previous rounds have shown no significant change in HIV prevalence among FSWs in the Kathmandu Valley and it was more or less stable around 2 percet (2% in 2004, 1.4% in 2006, and 2.2% in 2008). However, syphilis infection among FSWs has decreased significantly over the years, from 6 percent in 2004 to one percent in 2008 in the Kathmandu Valley.

1.2 Overview of Integrated Biological and Behavioral Surveillance Survey

Behavioral surveillance is the systematic and ongoing collection of data about diseases or risk behaviors related to health conditions, with the purpose of correlating trends in behavior with changes in disease over time. In biological surveillance, biological samples are collected and tested for HIV and other related illnesses (S Navadeh, www.hiv.ir). IBBS survey is a repeated cross-sectional surveys conducted to monitor the trend in HIV/STI prevalence and to assess behavioral information from the target groups. In Nepal, the NCASC has aimed to track trends in HIV prevalence and STI-related awareness, and risk behaviors among most at risk populations (MARPs) including injecting drug users, migrant workers, female sex workers, men who have sex with men, and wives of migrant laborers. A standardized format of the questionnaire is used for each group which is repeated in the following rounds of survey to explore behavioral changes over time.

1.3 Objectives of the Survey

As in the previous rounds, the general objective of the survey was to collect and analyze data on behavioral correlates of HIV and STIs among FSWs in the Kathmandu Valley. The survey was conducted with the following objectives:

Primary Objectives

- a. To track the trend in the prevalence of syphilis and HIV infection among FSWs in the Kathmandu Valley.
- b. To assess the sexual behaviors related to HIV among FSWs in Kathmandu Valley.

Secondary Objectives

- a. To estimate the knowledge of HIV/STIs as well as assess the sexual and injecting behaviors among FSWs in Kathmandu Valley.
- b. To explore associations between risk behaviors and infections with HIV or syphilis among FSWs in Kathmandu Valley.
- c. To estimate the prevalence of STI syndromes among FSWs in Kathmandu Valley.

CHAPTER 2.0: METHODOLOGY

2.1 Implementation of the Study

Under the technical support of the USAID funded ASHA Project, the survey was carried out by New ERA in collaboration with Intrepid Nepal. New ERA was responsible for the overall management of the survey and carried out the fieldwork for data collection using prefinalized survey tools in coordination with ASHA Project and the NCASC. New ERA was also responsible for analyzing the data and writing the survey report. Intrepid Nepal, on the other hand, was responsible for setting up the laboratory in the field sites, providing training to lab technicians, supervising and collecting blood samples, and conducting HIV and syphilis testing. The survey was conducted in close collaboration with many organizations working with FSWs like STEP Nepal (Society for Empowerment- Nepal), Community Action Center (CAC), and Nari Chetna Samaj (SWAN) in the Kathmandu Valley.

The Nepal Public Health Laboratory (NPHL) performed the external quality assurance (EQA) test on the 10 percent of samples sent to them by Intrepid Nepal.

2.2 Survey Population and Survey Area

The survey was conducted among FSWs, who are one of the high-risk sub-populations identified in Nepal. The definition of the FSWs used in the survey was: *Women aged 16 years and above reporting having been paid in cash or kind for sex with a male within the last 6 months*. This definition is being used since the first round of IBBS surveys in Kathmandu and other sites of Nepal.

The two types of populations sampled in the survey were (i) street-based and (ii) establishment-based FSWs. They were defined as follows in the survey:

Street-based FSWs: FSWs aged 16 years and above who solicit their clients from the street, roads, squatter settlements, premises of garment factories, and small liquor stalls/bhatti pasals.

Establishment-based FSWs: FSWs aged 16 years and above who are based in establishments like hotels, lodges, restaurants, massage parlors, discotheques, and guest houses and solicit their clients from there.

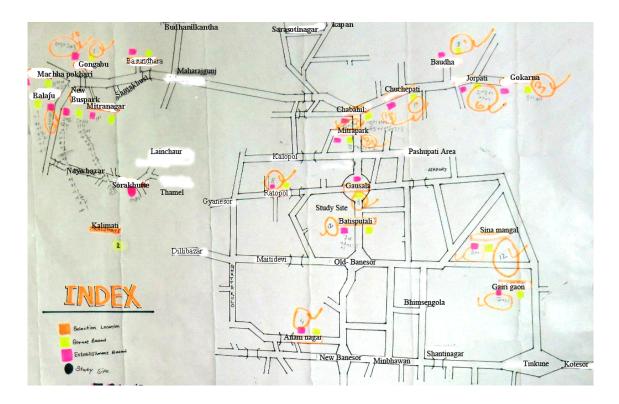
As in the previous rounds, this round's survey area also covered the Kathmandu Valley, which included most of the urban and semi-urban parts of Kathmandu, Lalitpur, and Bhaktapur districts.

2.3 Sample Design

This was a cross-sectional survey. In order to compile the sampling frames, a preliminary mapping exercise was conducted in the first phase of the survey. In the preliminary visit of the survey sites, the survey team identified the locations and a preliminary estimate of the number of the survey population was made. The survey team went to the survey area to identify all possible locations and to enumerate FSWs who could be met at the time of the survey. FSWs available in a location during the time were listed and duplications in counting

were minimized by listing those FSWs who were reported to be in the cluster for most of their time. Information was solicited from local key informants such as pimps, clients of FSWs, drivers, shopkeepers, and restaurant/cabin staff members.

Likewise, local organizations working with the survey population were visited and information was collected from them too. At each location visited by the team, the number of FSWs talked to, seen but not talked to, and reported by informants were aggregated to get a total number of sex workers in that specific location. A list of locations with the enumerated number of FSWs was prepared for the whole of the Kathmandu Valley.



Map Displayed in one of the Survey Sites Showing Sampled Locations

Based on the findings from the preliminary mapping exercise, two separate sampling frames were prepared: one for street-based FSWs and one for establishment-based FSWs. The locations were divided into clusters or geographical area where FSWs sell sex. Areas with small numbers of FSWs were merged together with the nearest location of other FSWs with similar typologies in order to ensure that the smallest clusters comprised at least 20 FSWs. The identified locations were then divided into a total of 21 clusters for street-based FSWs and 70 clusters for establishment-based sex workers in the Kathmandu Valley.

A two-stage cluster sampling method was used to draw the samples of both street and establishment FSWs. In the first stage, probability proportional to size (pps) method was used to draw 20 clusters from the street-based FSW's sampling frame and 30 clusters from the establishment-based FSW's sampling frame. Extra clusters were also selected in advance to make replacements for refusals if necessary.

At the second stage, the survey team members listed the number of FSWs present at the time of their visit to each location within the selected cluster. Local key informants' help was also sought to develop the list of FSWs present in the cluster at the time of the field visit. From this list, the required number of 12 respondents was randomly selected from each cluster. Refusals were recorded separately for each cluster.

2.4 Sample Size

The sample size was calculated to detect up to a 12 percent difference in key behaviors, such as consistency of condom use with different types of sex partners, exposure to HIV/AIDS prevention interventions, knowledge of STIs and STI care-seeking behaviors, knowledge and attitudes towards HIV/AIDS, and HIV risk and prevention behavior of FSWs over time in the trend analyses. Power of the sample is 80 percent, and a design effect of "2" was used in the sample size calculation to increase the power of the sample. The formula used in the sample size estimation is shown in Annex 6. A minimum sample size target of 560 FSWs was estimated for the Kathmandu Valley - 224 for street-based and 336 for establishment-based FSWs. For the self-weighted design, a strategy of interviewing an equal number of FSWs from each selected first stage cluster was adopted and additional clusters were selected to account for refusals. If the estimated sample sizes of 224 street-based FSWs and 336 establishment-based FSWs were successfully interviewed, no replacements were necessary for the refused cases (for details, see Annex 6). In the previous round of IBBS, the sample size was 500 (300 establishment-based and 200 street-based FSWs) in the Kathmandu Valley.

At the end of the survey, given the limited number of refusals, the sample obtained was 593 FSWs in the Kathmandu Valley. Out of them, 355 were establishment-based FSWs and 238 were street-based FSWs. These additional interviews, helped increase the prediction power.

2.5 Identification and Recruitment of FSWs

Coordination with the organizations working with the survey population and other key stakeholders formed an integral part of the survey. Before the inception of the actual fieldwork, a coordination meeting was organized at New ERA with the organizations working with the survey population. In the meeting, New ERA shared the findings from the preliminary visit and sought input from the participants on the locations identified by that visit. The enumeration list was also shared with the stakeholders in the meeting. Additionally, the objectives of the survey, its methodologies, fieldwork dates, and location of the sites were also shared with all the stakeholders. The meeting was attended by representatives from the CAC, CWC (Community Welfare Center), NFWLHA (National Federaton of Women Living with HIV/AIDS), STEP Nepal, and SWAN. The team members also coordinated with the following organizations while conducting the fieldwork: CAC Nepal, STEP Nepal, Richmond Fellowship, and Women Acting Together for Change (WATCH). Meetings were also conducted with Peer Educators (PEs) and Outreach Educators (OEs), Drop in Center (DIC) operators, and Voluntary Counseling and Testing (VCT) center operators representing different organizations. The meetings were focused on getting acquainted with different organizations' working areas and with the names of staff members who interacted with the target groups. It was considered necessary to collect such information since the survey also sought to measure the exposure of the survey participants to various HIV/AIDS-related programs, including peer/outreach education, and the rate of participants' visits to the DICs, VCT centers, and STI clinics located in their respective districts.

The survey team established an interview site with a mobile clinic and laboratory facilities strategically in the vicinity of each identified cluster. Randomly selected respondents were brought into these sites for interviews, biological sample collection as well as for clinical amination and treatment of STIs in order to ensure that privacy during data collection was maintained. The interview sites were selected following consultations with local GOs, NGOs, and survey community people as well as with security personnel so that the security of the FSWs at the interview locations was ensured. The mobile clinic and interview sites were operated at each location for several days, allowing FSWs working around the site to be recruited for participation. For the Kathmandu Valley, interview sites were set up at guest houses/hotels in Jamal, Koteshwor, Gaushala, and Gongabu. The Gongabu site was added after closing the Gaushala site to recruit FSWs from that part of the Kathmandu Valley (Annex 7).

After careful observation of the identified locations, the researchers started approaching the survey population using various techniques like building good rapport with their employers, visiting the sites, obtaining the help of brokers and key informants, observing the activities of women in major gathering areas for FSWs, posing as clients, chatting with other staff of the establishments, and approaching sex workers known to them. In order to confirm the identity of the survey participants, the sex workers were asked several screening questions. Such questions were related to their sexual experience and behavior; the type of sex partners they had; their involvement in the sex trade; the amount of clients they had; the amount of time they had been involved in the profession; and their knowledge of HIV/AIDS awareness/prevention activities. If the interviewers found their answers convincing enough to establish their identity as sex workers then only they were listed as prospective respondents. Once the final selection of the respondents was made randomly, the respondents were requested to take part in the survey. Respondents who satisfactorily answered all the screening questions were briefed about the purpose, objectives, and methodology of the survey. Once the selected sex worker agreed to participate in the survey, the researchers took them to the clinic and interview site for an interview and collection of a blood sample.

The respondents were enrolled after they were informed about the survey and their role in the survey. An oral informed consent form was administered by the interviewer in a private setting and witnessed by another staff member to ensure that the survey participants understood the information in the consent form and provided verbal consent. They were also informed about the services that would be provided to them. The interviewer administered the standard questionnaire in a private room.

A laminated ID card with a specific number was also issued to each respondent to ensure anonymity. The same number was used in the questionnaire, medical records, and the blood specimens of that particular respondent. The names and addresses of the respondents were not recorded anywhere. A clinician examined them and asked them if they were currently suffering from any of the STI symptoms. They were also examined physically for any evidence of STI symptoms, and, if symptoms were detected, they were treated and counseled accordingly. They were provided with free medicine for symptomatic treatment in accordance with the National STI Case Management Guidelines 2009. A lab technician drew a venous blood sample for HIV and syphilis testing. Additionally, a one-month supply of vitamins and iron, IEC materials, condoms, and Rs. 150 in cash to reimburse their transportation cost was also provided to the FSWs.

Fieldwork for the survey started on January 16, 2011, and ended on March 6, 2011.

2.6 Refusal

All respondents participated voluntarily in the survey. Out of the 600 randomly selected FSWs approached for the interview a total of seven sex workers refused to take part in the survey. Four had recently gone for HIV testing and were not interested to take the test again; one was too busy and did not have enough time to take the survey; one did not find any attractive incentive in the survey; and one of the selected sex workers was too scared to give her blood sample for the testing. Refusals were recorded at two stages: (i) at the time of approaching the sex workers at different locations and (ii) after arriving at the interview sites.

2.7 Control of Duplication

In order to avoid repeated interviews with the same FSW, the researchers were shared amongst different survey sites, as they were more familiar with the participants and could identify them. Further, the lab technicians and clinical person who examined and treated the respondent at the survey site, who also met all the participants, were alerted to the possibility of duplicate interviews and were instructed to be cautious in order to avoid this repetition.

Several questions were asked in case of any doubt regarding the participant's first time participation in the study. Such questions related to her experience of undergoing any blood test, the part of the body where the blood was taken from, her experience of having had an HIV test or test for other diseases, the meeting with the peer educators for the blood test, and the possession of an ID card with a survey number.

2.8 Research Instrument

A quantitative research approach was adopted in this study. The structured questionnaire that was tested and used in the previous rounds of IBBS was repeated with slight modifications and some additional questions on the use of family planning methods and injection-drug use. The questionnaire included questions on socio-demographic characteristics and sexual behaviors - sexual history, use of condoms, risk perception, awareness of HIV/AIDS/STIs, incidence of STI symptoms, participation in HIV/AIDS awareness programs, and alcohol/drug using habits (Annex 3).

Apart from the structured questionnaire, questions relating to STI symptoms were posed by a staff nurse to verify the occurrence of such symptoms in the past or during the survey (Annex 4). The survey participants were provided with syndromic treatment for STI problems, and a lab technician collected blood samples for HIV and syphilis testing. Strict confidentiality was maintained throughout the entire process.

2.9 Survey Personnel

The survey was conducted by a team that was comprised of a team leader, a research associate, two senior research assistants, and 27-member team of field surveyors.

Three field teams were formed for the survey in the Kathmandu Valley. Each field team consisted of one research assistant, four female interviewers, one staff nurse, one lab technician, and one runner. The first team covered the two sites at Gausala and later shifted to Gongabu. The second and the third teams were responsible for covering the Jamal and Koteshwor sites, respectively.

2.10 Recruitment and Training of Research Team

When selecting field researchers for the study, priority was given to researchers who had been involved in similar types of surveys previously such as the IBBS survey and Sero-survey among FSWs, truckers, migrants, clients, and IDUs.

Training was provided to the field researchers at the New ERA Training Hall. A one-week intensive training program was organized from January 6-12, 2011 for all the field researchers by trainers from the ASHA Project, New ERA, and Intrepid Nepal. The training focused on the followings: introduction to the study, the sampling and recruitment process, administration of the questionnaire (including characteristics of the target groups), methods of approaching them, and rapport building techniques. In addition, the training session also involved mock interviews, role-plays, class lectures, and sharing previous experiences (problems and solutions). Role-play practices were carried out based on actual field situations. Possible problems that could come up while approaching the sex workers and the ways to overcome such problems were discussed. The training also focused on providing a clear concept of informed consent, pre-test counseling, and basic knowledge of HIV/AIDS and STIs to the research team.



2.11 Field Operation Procedures

Interview Site Set-up

Interview sites with clinics and laboratory facilities were set up at four pocket areas of Kathmandu: i.e., Gongabu, Jamal, Gausala, and Koteshwor in order to cover those areas outlined by the sampling procedure. These centrally-located sites were purposefully selected to maximize the convenience of bringing participants to the clinic. The clinic had a lab facility for blood drawing and centrifuging the blood for separation of sera. There was a separate room for each activity, including the administration of the



questionnaire, STI examination, blood collection, a general physical check-up, and counseling.

Clinical Procedures

All the participants were offered a clinical examination as an incentive to participate in the study. The clinical examination included a simple health check-up, such as measuring blood pressure, body temperature, weight, pulse, and symptomatic examination of STIs with syndromic treatment. The participants were asked whether they had current STI symptoms of genital discharge, ulcers, or lower abdominal pain, and those presenting with these symptoms were treated



syndromically according to national guidelines. Other medicines such as paracetamol, alkalysing agents, and vitamins were distributed as necessary. Furthermore, an external genital examination was complemented with a speculum examination as needed. Altogether 243 respondents were provided with syndromic treatment for STIs as they went through the clinical procedure in the course of the study.

Laboratory Methodology

Laboratory services entailed on-site rapid screening of HIV 1/2 and syphilis followed by confirmation tests. Five ml of blood were drawn, and the serum was separated; both HIV rapid tests and Syphilis RPR tests were performed using the serum. The laboratories were designed for confidential testing of HIV and Syphilis as per national guidelines. Universal precautions and stringent waste

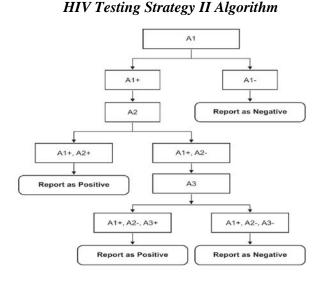


management protocols were followed. Quality assurance tests were performed on all positives, and 10 percent of random samples in the National Public Health Laboratory (NPHL) in Kathmandu for both HIV and Syphilis serum samples.

Respondents with positive RPR tests were proposed a curative penicillin injection. There was provision of an 'on call' medical doctor to give the injection. However, none of the 19 RPR reactive cases gave their consent for the injection inspite of counseling and continuous follow up from the team members. In most cases the respondents were too scared to receive injections. Therefore, as an alternative treatment, oral medicines were provided to them as per the STI treatment guidelines.

HIV 1/2 Test

HIV screening of serum samples was performed using rapid test kits following the HIV testing strategy II algorithm. Determine HIV 1/2 (Abbott, Japan), Uni-Gold HIV 1/2 (Trinity Biotech, Ireland), and SD Bioline HIV 1/2 (Standard Diagnostics, Inc, S Korea) were used as lateral flow (rapid immunochromatography) kits for testing for the presence of antibodies against HIV in the serum. Serum that tested positive with the initial kit was confirmed with the second kit. Samples that were found reactive on both tests were considered HIV antibody positive. Samples that were nonreactive on the first test were considered HIV antibody negative. Any sample that was reactive on the first test but non-reactive on the second was retested with the third "tie breaker" kit. The quality of the assay was assured by the in-built control of each kit. This procedure was based on the VCT guideline of NCASC.



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

¹ Assay A1, A2, A3 represent 3 different assays.

- ³ Report: result may be reported.
- ⁴ For newly diagnosed individuals, a positive result should be confirmed on a second sample.
- ⁵ Testing should be repeated on a second sample taken after 14 days.
- ⁶ Result is considered negative in the absence of any risk of HIV infection.

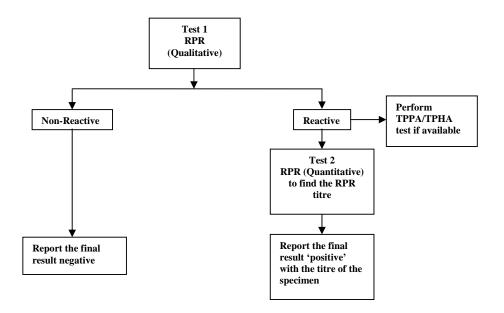
² Such a result is not adequate for diagnostic purposes; use strategies II or III. Whatever the final diagnosis, donations which were initially reactive should not be used for transfusions or transplants.

Test Kits	Company	Initial	Confirm	Tie Break	Antigen Type	Speci.	Sensi.
Determine HIV 1-2	Abbott, Japan Co. Itd	Х			Recom HIV-1 and HIV-2	99.40%	100%
Uni-Gold HIV 1-2	Trinity Biotech, Dublin, ireland		X		HIV-1 and HIV-2	100%	100%
SD Bioline HIV 1-2	Standard Diagnostics, Inc, Kyonggii- do South Korea			X	HIV-1 (gp41;p24)-2 (gp36)	99.30%	100%

Syphilis

The syphilis test was performed following the national guideline on case management of sexually transmitted diseases (NCASC, Nepal). The serum was tested for non-specific and specific treponemal agents. A non-specific treponemal test, Rapid Plasma Reagin (RPR) [Becton, Dickson and company, USA], was used for both qualitative screening and quantitative titration. All RPR reactive serum was confirmed using the specific Treponema pallidum Particle Agglutination (TPPA) test (Fujirebio Inc.) at Intrepid Nepal Pvt. Ltd. laboratory. Serum samples that tested RPR positive with titer value above or equal to 1:8 were reported as active syphilis; titration less than 1:8 was reported as a case with a history of syphilis. The quality of reagents and test cards of the RPR test kit was assessed daily on-site using a set of strong and moderate positive and negative controls.

Syphilis Testing Algorithm



Quality Control of Laboratory Tests

Quality control was strictly maintained throughout the collection, handling, and testing of the specimens. All the tests were performed using internal controls. These controls were recorded along with the other laboratory data. For quality control assurance, a 10 percent sample of the total serum collected was submitted to the National Public Health Laboratory (NPHL) for External Quality Assessment (EQA).

External Quality Assessment

External quality assessment (EQA) is evaluation of the performance of a testing laboratory by an external agency. An External Quality Assessment Scheme (EQAS) is very essential in such studies to determine the quality of testing. All HIV positive and 10 percent of all HIV negative samples were retested at NPHL in this study as an External Quality Assessment of HIV testing. Similarly, all RPR reactive and 10 percent of all RPR non-reactive samples were retested at NPHL as an EQA of Syphilis testing. Aliquots of selected serum specimens were prepared in the field and sent to Intrepid-Nepal's laboratory in Kathmandu within a week of specimen collection. Serum specimens were stored at Intrepid-Nepal's laboratory at a temperature below -20°C. Once testing activities in the field were completed, Intrepid-Nepal handed over the serum specimens to NPHL for retesting. The test kits as those used in the field were also provided to the NPHL. The EQA samples were sent to the NPHL with new code numbers.

HIV Testing

Altogether 68 serum specimens were retested for HIV at NPHL. Among them 10 were HIV positive in the field. The table below shows the comparison between results from field and NPHL; 100 percent agreement has been observed in rapid HIV test results between field and NPHL which means perfect agreement between field and NPHL results.

		NPHL	NPHL Results			
		Negative	Positive	Total		
Intrepid results	Negative	58	0	58		
intropia results	Positive	0	10	10		
	Total	58	10	68		

RPR Testing

Altogether 76 serum specimens were retested for RPR at NPHL. Among them 19 were RPR reactive in the field. The table below shows the comparison between results from field and NPHL. Ninety six percent agreement has been observed in RPR test results between field and NPHL. Three samples which were reactive in the field were found to be non-reactive at NPHL.

		NPHL		
		Negative	Positive	Total
Intrepid results	Negative	57	0	57
	Positive	3	16	19
	Total	60	16	76

TPPA Testing:

Sixteen serum specimens were retested for TPPA at NPHL. One of them was TPPA Negative at Intrepid Nepal's laboratory. The table below shows the comparison between results from field and NPHL. All results from Intrepid Nepal's laboratory agreed with results from NPHL.

		NPHL	NPHL Results			
		Negative	Positive	Total		
	1					
Intrepid results	Negative	1	0	1		
	Positive	0	15	15		
	Total	1	15	16		

2.12 Coordination and Monitoring

The overall monitoring of the survey was done by NCASC. NCASC called three monitorig meetings. Moreover SI Unit Head at NCASC and the Surveillance officer at NCASC made monitoring visits in Kathmandu and Pokhra survey sites.

New ERA carried out the overall coordination of the field implementation and report writing of the survey. Intrepid Nepal was responsible for setting up the laboratory and collecting, storing, and testing blood samples.

The key research team members monitored and supervised the field activities. The research assistant was responsible on a day-to-day basis for ensuring that the survey was implemented in the field according to the protocol. Team meetings were held every week to plan ahead and solve any field-level problems. The research assistant in the field reported to the senior research assistants or the project coordinator whenever necessary. ASHA Project staffs from the program and the strategic information (SI) and technical units also monitored the field work in alternate weeks. The observations and suggestions from ASHA Project monitors were shared with the research team in the field at the end of the monitoring visit and were also communicated with the team leader and project associate at New ERA and Intrepid Nepal. Even after the fieldwork, ASHA Project's SI unit staff closely monitored the data entry, cleaning, and analysis process. In addition, the key research team member from New ERA and Intrepid Nepal made periodic site visits as the fieldwork was being conducted.

2.13 Ethical Issues

Ethical approval was obtained from the Nepal Health Research Council (NHRC), the government's ethical clearance body, and the Protection of Human Subjects Committee (PHSC), the ethical committee of FHI. Both ethical committees approved the survey protocol, consent forms, and questionnaires.

The participants involved in the in-depth



interviews and sample surveys were fully informed about the nature of the study. They were informed that their participation was voluntary and that they were free to refuse to answer any question or to withdraw from the interview at any time. They were also informed that such withdrawal would not affect the services they would normally receive from the survey. A consent form describing the objectives of the study, the nature of the participant's involvement, the benefits, and confidentiality issues was clearly read aloud to them (Annex 5). A specific ID card was provided to the survey participants so that the names and addresses of the respondents were not recorded anywhere. HIV and syphilis RPR test results along with post-test counseling were provided to the individual participants in a confidential manner.

The research team maintained the confidentiality of the data collected throughout the survey. The interviewers submitted the completed questionnaires to the field supervisor on the day of each interview. The supervisor reviewed and kept those questionnaires in separate locked cabinets where no one except for the researchers had access to the collected information. The supervisor then transported the questionnaires to New ERA every week. In the New ERA office, the questionnaires were kept in a locked coding room where no one except authorized data coding and data entry staff had access to the individual questionnaires.

2.14 HIV/STI Pre- and Post-Test Counseling and Follow-Up

All the survey participants were informed that they could retrieve their test result at the same site after some time. They were also informed that they could collect their test results by showing the ID card with their survey number that was provided to them by the survey team. Pre- and post-HIV/syphilis test counseling was provided to the survey participants. They were briefed about the importance of receiving the test result. For follow-up services, the survey participants were referred to SACTS and CAC counseling centers.



All RPR reactive samples were transported to Intrepid laboratory in Kathmandu for TPPA test. The reports were handed over to New ERA after the test was performed. The reports that arrived during the survey period were sent to the survey sites, where the counselor handed them to the respondents who came to retrieve them. The reports that were received after the interviews were completed were sent to SACTS, and CAC's VCT centers, and the respondents were also informed that they could collect the TPPA reports from these centers.

2.15 Constraints in the Field Work

It was a challenging task to convince the FSWs to participate in the survey. In many cases, the respondents were not interested in waiting for the test results, complaining that it took too much time. Frequent and strict police patrol also made it difficult for the researchers to find survey populations. But after the identification of the randomly selected respondents and once participants were recruited, no major constraint was faced as the fieldwork was being conducted.

2.16 Data Processing and Analysis

All the completed questionnaires were peer reviewed on the day of the interview by interviewers and thoroughly checked by the field supervisors before bringing them to New ERA's Kathmandu office for further checking, coding, processing, data entry, and analysis. A double data entry system was used to detect, correct, and minimize errors in data entry. Authorized persons working with password-protected computers completed the data entry and data analysis. Simple statistical methods such as mean, median, frequency distribution, and cross tabulation were used to analyze the data. As necessary, regression analysis also was performed to analyse the effect of multiple factors on the selected dependent variable. The FoxPro database program was used for data entry, and the data was analyzed using SPSS 13.0 and EPI-INFO.

2.17 Dissemination of IBBS survey findings

Dissemination of the IBBS surveys was conducted at three levels: First, the key findings were shared with the survey community in Kathmandu valley and their comments were incorporated to support the IBBS findings. Then, it was shared at the national and central regional level in Kathmandu among a wider group of government, non-government organizations, donor agencies and stakeholders working in the field of HIV and AIDS in Nepal. This was done primarily as an update on the status and the trends of the HIV epidemic among FSWs in Kathmandu valley and to draw possible policy and program implications.

2.18 Primary use of Survey Findings

The survey results are primarily intended to use (in referece to the FSW population in Kathmandu) for:

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

CHAPTER 3.0: SOCIO-DEMOGRAPHIC CHARACTERISTICS

This chapter describes the socio-demographic characteristics of the FSWs including both street (n=238) and establishment-based (n=355) FSWs of the Kathmandu Valley. Since these two types of sex workers were sampled independently, the analysis was carried out separately.

3.1 Socio-Demographic Characteristics

Table 3.1 shows the birth districts of the respondents and duration of their stay in Kathmandu valley. The survey results showed that the majority (84.3%) of the respondents were born in districts outside the Kathmandu Valley. Around 14 percent of them were born in the Valley, while a few (2%) were born in India. Thirty-six percent of the respondents were relatively new to the Kathmandu Valley, as they had migrated to the Valley less than a year ago. Only four percent of the total number of respondents had been living in the Kathmandu Valley permanently since their birth.

Characteristics		reet =238)	Establishment (N=355)		Total (N=593)	
	n	%	Ν	%	n	%
Birth districts						
Kathmandu Valley*	31	13.0	49	13.8	80	13.5
India	4	1.7	8	2.2	12	2.0
Bangladesh	0	0.0	1	0.3	1	0.2
Other Districts	203	85.3	297	83.7	500	84.3
Period living in Kathmandu Valley						
Since Birth	9	3.8	15	4.2	24	4.0
More than 120 months	17	7.1	16	4.5	33	5.6
61 months – 120months	42	17.6	45	12.7	87	14.7
13 months – 60 months	99	41.6	136	38.3	235	39.6
Up to 12 months	71	29.8	143	40.3	214	36.1
Total	238	100.0	355	100.0	593	100.0

Table 3.1: Birthplace of Female Sex Workers and Duration of their Stay in Kathmandu Valley

*Note: Kathmandu, Lalitpur, Bhaktapur

The age of the participants ranged from 16 to 48 years with the median age being 23 years. The median age of the street-based sex workers was 26 years and that of the establishmentbased FSWs was 22 years. Overall, 28.3 percent of the respondents were less than 20 years of age. The establishment-based respondents are likely to be younger compared to the streetbased respondents; 35.5 percent of establishment based respondents as opposed to the 17.6 percent of street-based respondents belonged to the less than 20 years group. Overall, one-fourth of the respondents (25.3%) were over 30, which consisted of 34.8 percent of street-based and 18.9 percent of establishment-based respondents (Table 3.2).

Educational status of the sex workers in the Kathmandu Valley indicates that 31 percent of the respondents are illiterate; a higher percentage of the street-based FSWs (41.2%) than those based in establishments (24.2%) were illiterate. Around 25 percent of the total respondents had an education level of Grade 1-5, while around 5 percent of them had educat to SLC level or above (Table 3.2).

Socio-demographic Characteristics	St	reet		shment	Тс	otal
U .	n	%	Ν	%	n	%
Age of respondents						
Less than 20	42	17.6	126	35.5	168	28.3
20 - 24	59	24.8	114	32.1	173	29.2
25 - 29	54	22.7	48	13.5	102	17.2
30 - 34	41	17.2	44	12.4	85	14.3
35 or above	42	17.6	23	6.5	65	11.0
Mean/Median age		8/26.0		/22.0		/23.0
Total	238	100.0	355	100.0	593	100.0
Education						
Illiterate	98	41.2	86	24.2	184	31.0
Literate, no schooling	29	12.2	35	9.9	64	10.8
Grade 1 – 5	59	24.8	91	25.6	150	25.3
Grade 6 – 9	41	17.2	124	34.9	165	27.8
SLC and Above	11	4.6	19	5.3	30	5.1
Total	238	100.0	355	100.0	593	100.0
Ethnic/Caste group						
Chhetri/Thakuri	76	31.9	105	29.6	181	30.5
Tamang	48	20.2	101	28.4	149	25.1
Newar	23	9.7	31	8.7	54	9.1
Brahmin	23	9.7	23	6.5	46	7.8
Magar	17	7.1	26	7.3	43	7.3
Rai/Limbu	12	5.0	26	7.3	38	6.4
Damai/Sarki/Kami/Sunar	15	6.3	11	3.1	26	4.4
Gurung	6	2.5	18	5.1	24	4.0
Tharu	10	4.2	2	0.6	12	2.0
Others	8	3.4	12	3.4	20	3.4
Total	238	100.0	355	100.0	593	100.0
Marital status	100		150	5 0 4		
Married	132	55.5	179	50.4	311	52.4
Divorced/Separated	63	26.5	61	17.2	124	20.9
Widowed	7	2.9	7	2.0	14	2.4
Never Married	36	15.1	108	30.4	144	24.3
Total	238	100.0	355	100.0	593	100.0
Age of the respondent when she got divorced/separated/ widowed						
Less than 20 (14-19)	14	20	23	33.8	37	26.8
20 - 24	22	31.4	26	38.2	48	34.8
25 - 29	16	22.9	11	16.2	27	19.6
$\frac{25}{30} - \frac{29}{34}$	12	17.1	4	5.9	16	11.6
35 or above (35-40)	6	8.6	3	4.4	9	6.5
Not reported	0	0.0	1	1.5	1	0.7
Mean/Median Age	25.2	2/24.0	22.5	/21.0	23.9	/22.0
Total	70	100.0	68	100.0	138	100.0
Age at first marriage				1		1
11 – 14	46	22.8	48	19.4	94	20.9
15 - 19	122	60.4	167	67.6	289	64.4
20 - 24	28	13.9	29	11.7	57	12.7
25 - 36	6	3.0	3	1.2	9	2.0
Aean/Median age at first marriage		8/16.0	16.7	/16.0	16.7	/16.0
Mean/Median age at first marriage			247	100.0	449	100.0
Mean/Median age at first marriage Total	202	100.0				
Total	202	100.0				
Total Married respondent whose husband has second wife			29		50	16.1
Total	202 21 111	15.9 84.1		16.2 83.8	50 261	16.1 83.9

Table 3.2: Socio-Demographic Characteristics of Female Sex Workers

The ethnic composition of the respondents shows that around 38 percent of them belonged to the Brahmin and Chhetri/Thakuri community. Twenty-five percent of them came from the

Tamang community, while other Tibeto-Burman communities (Newar, Magar, Rai, Limbu, and Gurung) made up around 27 percent of the total respondents. Few (4.4%) of them were from the occupational caste groups (Damai, Sarki, Kami, Sunar, etc).

Large proportions (75.7%) of FSWs had been married before; a higher proportion of the street-based FSWs (84.9%) were married than their establishment-based counterparts (69.6%). Overall, 52.4 percent of the respondents were currently married (street - 55.5% and establishment - 50.4%); 20.9 percent were divorced or permanently separated (street - 26.5% and establishment - 17.2%); and 2.4 percent were widowed (street - 2.9% and establishment - 2%). A total of 24.3 percent (street - 15.1% and establishment - 30.4%) of the respondents were never married (Figure 1). About 62 percent of married respondents were less than 24 years old at the time they became widows or got divorced/separated from their husbands, with the median age being 22 years.

Marriage at quite an early age was a prominent trend, as 64.4 percent of the respondents who had been married at some point had first been married at the age of 15-19. Among them, 20.9 percent reported being married between 11-14 years of age. Additionally, 16.1 percent of respondents' husbands had another wife (Table 3.2).

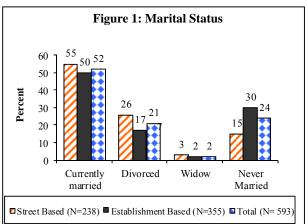


Table 3.3: Living Status of FSWs and Dependents Supported by Them

Living status of Female Sex Workers :		Street		Establis	shment	Total	
		n	%	n	%	n	%
Currently married respondents living with husband/male friend:							
Yes		106	80.3	137	76.5	243	78.1
No		26	19.7	42	23.5	68	21.9
	Total	132	100.0	179	100.0	311	100.0
Unmarried respondents living with male friend							
Yes		1	2.8	18	16.7	19	13.2
No		35	97.2	90	83.3	125	86.8
	Total	36	100.0	108	100.0	144	100.0
Have dependents							
Yes		173	72.7	221	62.3	394	66.4
No		65	27.3	134	37.7	199	33.6
	Total	238	100.0	355	100.0	593	100.0
Total number of dependents							
One		52	30.1	91	41.2	143	36.3
2-3		99	57.2	105	47.5	204	51.8
4 and more		22	12.7	25	11.3	47	11.9
Mean number of dependents		2	2	2.	0	2	.1
	Total	173	100.0	221	100.0	394	100.0

Among the currently married respondents, 78.1 were living with their husband/male friend. At the same time, 13.2 percent of unmarried respondents (about 17% of establishment-based and 3% of street-based FSWs) reported living with a male partner at the time of the survey.

A total of 66.4 percent of the FSWs (street - 72.7%, establishment - 62.3%) reported that they had dependents, either children or adults. Almost half of them (51.8%) had 2-3 such

dependents, while 36.3 percent of them had one dependent. The others (11.9%) were responsible for four or more members of their family (Table 3.3).

3.2 Child Birth and Use of Family Planning Devices

Eighty-one percent of the respondents who had been married before the survey had ever given birth. The number of live births ranged between one to five. About 46.1 percent of them had given birth to one live child while the other 53.9 percent gave birth to more than one child. At the same time, 14.9 percent of the married respondents (67/449) have had at least one miscarriage while 40.1 percent (180/449) had terminated/aborted pregnancies. Many had experienced one miscarriage (83.6%) and abortion/termination (66.1%). Most of the abortion/termination cases (88.8%) had been assisted by medical personnel or trained health attendants.

Dus guon av II: at a w	Street		Establishment		Total		
Pregnancy History	n	%	n	%	n	%	
Respondent ever gave birth							
Yes	168	83.2	194	78.5	362	80.6	
No	34	16.8	53	21.5	87	19.4	
Total	202	100.0	247	100.0	449	100.0	
No of live births							
One	62	36.9	105	54.1	167	46.1	
Two	61	36.3	46	23.7	107	29.6	
Three	23	13.7	32	16.5	55	15.2	
More than three	22	13.1	11	5.7	33	9.1	
Average # of children born		2.0		1.7		1.9	
Total	168	100.0	194	100.0	362	100.0	
Ever had miscarriage							
Yes	36	17.8	31	12.6	67	14.9	
No	166	82.2	216	87.4	382	85.1	
Total	202	100.0	247	100.0	449	100.0	
Number of miscarriage							
One	29	80.6	27	87.1	56	83.6	
Two	5	13.9	2	6.5	7	10.4	
Three	2	5.6	2	6.5	4	6.0	
Total	36	100.0	31	100.0	67	100.0	
Ever terminated/aborted any pregnancies							
Yes	73	36.1	107	43.3	180	40.1	
No	129	63.9	140	56.7	269	59.9	
Total	202	100.0	247	100.0	449	100.0	
Number of pregnancies terminated/aborted							
One	45	61.6	74	69.2	119	66.1	
Two	17	23.3	19	17.8	36	20.0	
Three	10	13.7	11	10.3	21	11.7	
More than three	1	1.4	3	2.8	4	2.2	
Total	73	100.0	107	100.0	180	100.0	
Person who assisted the last abortion							
Doctor	47	64.4	60	56.1	107	59.4	
Nurse	18	24.7	33	30.8	51	28.3	
Nobody	4	5.5	11	10.3	15	8.3	
TBA	1	1.4	1	0.9	2	1.1	
Others	3	4.1	2	1.9	5	2.8	

Table 3.4: Pregnancy History of Ever Married Female Sex Workers

There were some respondents who desired to have children in the next two years (18.7%) or next six months (6.5%). At the same time, few respondents (5.1%) had reported being pregnant in the last 12 months. Although 17.4 percent of them (4/23) had given birth to a child, most (69.5%) had gone through a spontaneous or forced abortion (Table 3.5).

Desire to have children	Street		Establishment		Total	
	n	%	n	%	n	%
Wish to have child in the next two years						
Yes	37	18.3	47	19.0	84	18.7
No	165	81.7	200	81.0	365	81.3
Total	202	100.0	247	100.0	449	100.0
Wish to have child in the next six month						
Yes	12	5.9	17	6.9	29	6.5
No	190	94.1	230	93.1	420	93.5
Total	202	100.0	247	100.0	449	100.0
Was pregnant in the last 12 months						
Yes	9	4.5	14	5.7	23	5.1
No	188	93.1	229	92.7	417	92.9
Currently pregnant	5	2.5	4	1.6	9	2.0
Total	202	100.0	247	100.0	449	100.0
Outcome of last pregnancy						
Live birth	3	33.3	1	7.1	4	17.4
Still birth	1	11.1	0	0.0	1	4.3
Spontaneous abortion	3	33.3	12	85.7	15	65.2
Forced abortion	1	11.1	0	0.0	1	4.3
Miscarriage	1	11.1	1	7.1	2	8.7
Total	9	100.0	14	100.0	23	100.0

Table 3.6: Kno	wledge and Pro	actice of Fan	nilv Planning	Methods
1 4010 5.0. 1110	micuse unu i n	ichice of 1 and	ing I mining	mous

Family Planning Methods	Street		Establishment		Total	
Family Flamming Methods	n	%	n	%	n	%
Types of family planning methods heard by						
respondents						
Condoms	238	100.0	355	100.0	593	100.0
Injectables	234	98.3	354	99.7	588	99.2
Pills	233	97.9	344	96.9	577	97.3
Female sterilization	232	97.5	344	96.9	576	97.1
Male sterilization	233	97.9	341	96.1	574	96.8
Withdrawal	200	84.0	308	86.8	508	85.7
Implants	203	85.3	300	84.5	503	84.8
IUD	197	82.8	295	83.1	492	83.0
Rhythm method	113	47.5	160	45.1	273	46.0
Others	8	3.4	20	5.6	28	4.7
Total	238	*	355	*	593	*
Currently using any method to delay or avoid p	regnancy					
Yes	203	85.3	313	88.2	516	87.0
No	35	14.7	42	11.8	77	13.0
Total	238	100.0	355	100.0	593	100.0
Methods of family planning used currently						
Condoms	164	80.8	282	90.1	446	86.4
Injectables	42	20.7	48	15.3	90	17.4
Pills	19	9.4	37	11.8	56	10.9
Withdrawal	16	7.9	35	11.2	51	9.9
Female sterilization	11	5.4	6	1.9	17	3.3
Implants	8	3.9	7	2.2	15	2.9
IUD	6	3.0	6	1.9	12	2.3
Male sterilization	4	2.0	4	1.3	8	1.6
Rhythm method	6	3.0	1	0.3	7	1.4
Others	2	1.0	5	1.5	7	1.4
Total	203	*	313	*	516	*

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

Table 3.6 shows the different types of family planning methods that the respondents had heard of. All of the respondents had heard of condoms; other methods that they had heard were injectables (99.2%), pills (97.3%), female sterilization (97.1%), and male sterilization (96.8%). Most of them had also heard about the withdrawal method (85.7%), implants (84.8%), and IUDs (83%). A comparatively lower proportion of the respondents had heard of the rhythm method (46%). Twenty-five (4%) respondents mentioned that they had heard of emergency contraceptive pills, too, that come with the brand name I-pill in the market (Table 3.6).

Eighty-seven percent of the respondents had been using family planning methods to delay or avoid pregnancy at the time of the survey. The majority of them (86.4%) had been using condoms, while some others were on injectables (17.4%), pills (10.9%), and methods like withdrawal (9.9%), female sterilization (3.3%), implants (2.9%), intrauterine device/IUD (2.3%) and some other methods as listed in Table 3.6.

CHAPTER 4.0: PREVALENCE OF HIV AND SYPHILIS

4.1 Prevalence of HIV and Syphilis Infection

Out of 593 respondents who participated in the survey, 10 of them (1.7%) tested positive for HIV. All the HIV positive cases were seen among the street-based FSWs (10/238) while none of the 355 establishment-based FSWs who participated in the survey were HIV positive, and the difference is statistically significant (Table 4.1). The HIV prevalence among the FSWs has remained somewhat stable since the first round of IBBS in 2004 (2% in 2004, 1.4% in 2006, and 2.2%in 2008 and 1.7% in 2011). Syphilis infection, on the other hand, has decreased significantly over the years. Active syphilis has decreased from six percent in 2004 to 0.7 percent in 2011, while prevalence of syphilis history is 2.5 percent; it was 8.8 percent in 2004. The HIV and STI prevalence trends are under section 8.1 in Chapter 8.

	Stree	et (N=238)	Establi	shment (N=355)	al (N=593)	
STI Infection	n	% (95% CI)	n	% (95% CI)	n	% (95% CI)
HIV +ve	10	4.2 (1.7- 6.8)	0	0.0 (NA)	10	1.7 (0.7-2.7)
Syphilis Infection*						
Active Syphilis	4	1.7 (0.1- 3.3)	0	0.0 (NA)	4	0.7 (0.1-1.2)
Syphilis History	10	4.2 (1.7- 6.8)	5	1.4 (0.5-3.0)	15	2.5 (1.3-3.8)

Table 4.1: Prevalence of HIV and Syphilis among Female Sex Workers

* HIV prevalence and syphilis infection- both active syphilis and syphilis history is significantly higher in street based FSWs (p<0.01)

Syphilis history (RPR +ve and RPR titre <1:8) was 2.5 percent and active syphilis (RPR+ and RPR titre \geq 1:8) was 0.7 percent. Both active syphilis as well as syphilis history was significantly higher among street-based FSWs than those based in establishments. Four of the 238 street-based respondents (1.7%) were currently infected with high titre syphilis at the time of the survey while no cases of active syphilis were detected among any of the 355 establishment-based respondents. At the same time, 4.2 percent (10/238) of the street based sex workers had a history of syphilis while 1.4 percent (5/355) of establishment-based respondents had a history of syphilis with <1:8 titre (Table 4.1).

4.2 Association of Socio-Demographic Characteristics and Syphilis Infection with HIV Infection

Table 4.2 demonstrates the relationship of HIV positive status and syphilis infection with demographic variables. It was observed that FSWs belonging to the older age group (≥ 20) were at higher risk of HIV infection than their younger counterparts. While none of the respondents who were less than 20 years old tested HIV positive, 2.3 percent of the respondents aged 20 years or more were HIV positive. Furthermore, the FSWs who had been in the sex trade for two or more years were at a significantly higher risk of HIV infection than those who had been in the sex trade for a shorter duration. In addition, all the HIV infection was prevalent among the FSWs who were ever married. Other demographic variables such as educational level, number of clients per week, and experience of working as sex workers in India were not associated significantly with HIV infection. Additionally, the presence of syphilis (active or history) also did not show a significant association with HIV prevalence.

	Stree	t (N=238)	Establishm	ent (N=355)	Tota	l (N=593)
Socio-demographic characteristics	Ν	HIV+ve n (%)	Ν	HIV+ve n (%)	Ν	HIV+ve n (%)
Age						
<20 years old	42	0(0.0)	126	0(0.0)	168	0(0.0)
≥ 20 years old	196	10(5.1)	229	0(0.0)	425	10(2.3)
Educational level		(p=1.0) [†]				(p=0.75) [†]
Illiterate and literate with no schooling	127	5(3.9)	121	0(0.0)	248	5(2.0)
Schooling (Grades 1 to 10 and above SLC)	111	5(4.5)	234	0(0.0)	345	5(1.4)
Marital status						
Ever Married	202	10(4.9)	247	0(0.0)	449	10(2.2)
Never married	36	0(0.0)	108	0(0.0)	144	0(0.0)
Years of sex work						
6-11 months	55	0(0.0)	109	0(0.0)	164	0(0.0)
12-23 months	58	1(1.7)	90	0(0.0)	148	1(0.7)
≥ 2 years	125	9(7.2)	156	0(0.0)	281	9(3.2)
Sex work in India						
Yes	4	0(0.0)	3	0(0.0)	7	0(0.0)
No	234	10(4.3)	352	0(0.0)	586	10(1.7)
Number of clients per week		(p=1.0) [†]				(p=1.0) [†]
Less than 5 clients	141	6 (4.3)	226	0(0.0)	367	6(1.6)
\geq 5 clients	97	4 (4.1)	129	0(0.0)	226	4(1.8)
Syphilis Infection		(p=0.36) [†]				(p=0.23) [†]
Syphilis History	10	1(10.0)	5	0(0.0)	15	1(6.7)
No infection of Syphilis	224	9(4.0)	350	0(0.0)	574	9(1.6)

 Table 4.2: Association of Socio-Demographic Characteristics, sexual behavior and Syphilis with HIV
 Infection

*Significant association between the demographic variables and HIV and syphilis infection (p<0.05) † Fisher's Exact Test: two-sided p-value

4.3 Association of Condom Use with HIV and Syphilis Infection

The association of HIV and syphilis infection with the frequency of condom use of the respondents with their clients, regular clients, and non-paying regular partners was examined (Table 4.3). No significant association was detected between the inconsistency of condom use with clients and non-paying regular partners and HIV and syphilis infection. A higher percentage of FSWs who reported consistent condom use with different partners were HIV positive, this could however also mean that some of these respondents knew their status and had been using condoms to avoid infecting their partners. This is also corroborated by the finding that eight of the 10 HIV positive respondents (80%) had already taken an HIV test and knew their status (See Table 9 in Annex 2).

Frequency of Condom Use		HIV Positive N (%)	Active Syphilis n (%)	Syphilis History n (%)
Frequency of condom use with regular clients: (n=484)		(p=1.00) [†]		(p=0.53) [†]
All of the time	361	5(1.4)	3(0.8)	11(3.0)
Not all the time	123	1(0.8)	0(0.0)	2(1.6)
Frequency of condom use with non-paying regular partners: (n=335)		(p=0.39) [†]		(p=0.60) [†]
All of the time	39	1(2.6)	0(0.0)	0(0.0)
Not all the time	296	3(1.0)	0(0.0)	8(2.7)
Frequency of condom use with clients: (n=593)		(p=0.30) [†]	(p=0.39) [†]	(p=0.08) [†]
All of the time	435	9(2.1)	3(0.7)	14(3.2)
Not all the time	158	1(0.6)	1(0.6)	1(0.6)

Table 4.3: Association of Condom Use with HIV and Syphilis Infection

† Fisher's Exact Test: two-sided p-value

4.4 Prevalence of STI Syndromes and Syphilis infection

There was no association between the reported STI symptoms and the clinical diagnosis/examination of STI syndromes. During the survey, 48.2 percent of the respondents reported that they were suffering from symptoms that they believed to be evidence of STIs. However, after the laboratory test and clinical examination, it was found that 2.1 percent (6/286) of those reporting STI symptoms also had a history of syphilis (4 street-based and 2 establishment-based) and one street-based respondent had active syphilis. Moreover, among the 307 sex workers who reported not having any STI symptoms, nine (2.9%) were suffering from untreated syphilis (Table 4.4). Interestingly, it is observed that the prevalence of syphilis history and active syphilis is higher (although not significant) among those who reported not having any of the STI symptoms than those reporting any one of the STI symptoms.

		Street (N=2	238)	Est	ablishment	(N=355)		Total (N=	593)
Reported STI symptoms	N	Syphilis History n (%)	Active Syphilis n (%)	N	Syphilis History n (%)	Active Syphilis n (%)	N	Syphilis History n (%)	Active Syphilis n (%)
Painful sex	41	3(7.3)	1(2.4)	55	1(1.8)	0(0.0)	96	4(4.2)	1(1.0)
Abdominal pain	50	1(2.0)	1(2.0)	76	1(1.3)	0(0.0)	126	2(1.6)	1(0.8)
Vaginal itching	56	1(1.8)	1(1.8)	82	0(0.0)	0(0.0)	136	1(0.7)	1(0.7)
Vaginal odor	46	2(4.3)	0(0.0)	77	0(0.0)	0(0.0)	123	2(1.6)	0(0.0)
Vaginal discharge	67	1(1.5)	0(0.0)	92	1(1.1)	0(0.0)	159	2(1.3)	0(0.0)
Dysuria	27	0(0.0)	1(3.7)	45	2(4.4)	0(0.0)	72	2(2.8)	1(1.1)
Polyuria	26	1(3.8)	1(3.8)	29	1(3.4)	0(0.0)	55	2(3.6)	1(1.8)
Genital ulcers	14	0(0.0)	0(0.0)	19	0(0.0)	0(0.0)	33	0(0.0)	0(0.0)
Unusual vaginal bleeding (discharge)	2	0(0.0)	0(0.0)	1	0(0.0)	0(0.0)	3	0(0.0)	0(0.0)
Genital warts	9	0(0.0)	0(0.0)	5	0(0.0)	0(0.0)	14	0(0.0)	0(0.0)
Others	4	0(0.0)	0(0.0)	4	0(0.0)	0(0.0)	8	0(0.0)	0(0.0)
Any of the above Symptoms	112	4(3.6)	1(0.9)	174	2(1.1)	0(0.0)	286	6(2.1)	1(0.3)
None of the above Symptoms	126	6(4.8)	3(2.4	181	3(1.7)	0(0.0)	307	9(2.9)	3(1.0)

Table 4.4: Reported STI Syndromes and Measured Clinical Diagnosis for Syphilis

*No significant association between reported STI symptom and active syphilis

4.5 Association of Condom Carrying Practice, Comprehensive Knowledge of HIV/AIDS Transmission and Exposure to HIV Programs in the Past Year with HIV and Syphilis Infection

The association of HIV and Syphilis infection with some other variables like condom carrying practice, knowledge of *ABC and <u>BCDEF HIV transmission and misconception</u> <i>indicators* (A -abstinence from sex, B-being faithful to one partner or avoiding multiple sex partners, C-consistent condom use or use of a condom during every sex act, D-a healthy-looking person can be infected with HIV,E-a person cannot get HIV from a mosquito bite and F-one cannot get HIV by sharing a meal with an HIV-infected person) and exposure to VCT and OE/PE in the past year have been analyzed in Table 4.5. No significant association was noticed between HIV prevalence and these variables. However, active syphilis higher among those respondents who reportedly carried condoms all of the times and who knew all of ABC (Table 4.5). The findings also show a slightly higher number of HIV positive FSWs to have been reached by programs like OE/PE and visited VCT in the past year.

Variables	N (%)	HIV Positive n (%)	Active Syphilis n (%)
Condom carrying practice		(p=0.25)	
All of the time	126	5(4.0)	4(3.2)
Not all the time	467	5(1.1)	0(0.0)
Knowledge of ABC		(p=0.63)	
Know all of ABC	282	4(1.4)	4(1.4)
Do not Know	311	6(1.9)	0(0.0)
Knowledge of BCDEF		(p=0.50)	(p=0.39)
Know all of BCDEF	180	4(2.2)	2(1.1)
Do not Know	413	6(1.4)	2(0.0)
Visited a VCT in past year		(p=0.30)	(p=0.39)
Yes visited	317	7(2.2)	3(0.9)
No	276	3(1.1)	1(0.4)
Visited an OE/PE in past year		(p=1.0) [†]	(p=0.51) [†]
Yes	497	9 (1.8)	3(0.6)
No	96	1 (1.0)	1(1.0)

Table 4.5:Association of Condom Carrying Practice, Comprehensive Knowledge of HIV/AIDSTransmission and Exposure to HIV Programs in Past Year with HIV and Syphilis Infection

† Fisher's Exact Test: two-sided p-value

CHAPTER 5.0: SEXUAL BEHAVIOR AND CONDOM USE AMONG FEMALE SEX WORKERS

This chapter describes the sexual behavior of the FSWs, including the duration of their involvement in the sex trade, age at first sexual intercourse, average number of the clients, types of the clients, income sources, and their condom use with different sex partners.

5.1 Sexual Behavior of FSWs

Table 5.1 describes the sexual behaviors of the surveyed FSWs. The majority of the respondents (70.5%) reported having had their first sexual intercourse when they were 15-19 years of age. There were some (20.4%) who had sexual intercourse for the first time at an earlier age of 11-14.

General Data and an	Str	reet	Establishment		Total	
Sexual Behavior	n	%	n	%	n	%
Age at first sexual intercourse						
10 - 14	55	23.1	66	18.6	121	20.4
15 – 19	155	65.1	263	74.1	418	70.5
20 - 24	23	9.7	24	6.7	47	7.9
25 - 30	5	2.1	2	0.6	7	1.2
Mean/Median age at first sex	16.5	/16.0	16.3/	16.0	16.4	/16.0
Total	238	100.0	355	100.0	593	100.0
Duration of sexual exchange for money						
6 – 12 months	85	35.7	154	43.4	239	40.3
13 – 24 months	51	21.4	83	23.4	134	22.6
25 – 36 months	36	15.1	51	14.4	87	14.7
37–48 months	18	7.6	17	4.8	35	5.9
More than 48 months (49 months-24 yrs.)	48	20.2	50	14.1	98	16.5
Mean duration of sex work (months)	33	5.7	27	.6	3	0.0
Total	238	100.0	355	100.0	593	100.0
Working as sex worker from the sampled location						
Up to 6 months	21	8.8	57	16.0	78	13.1
7 – 12 months	87	36.5	125	35.2	212	35.8
13 – 24 months	47	19.7	77	21.7	124	20.9
25 – 36 months	32	13.4	42	11.8	74	12.5
37 – 48 months	20	8.4	13	3.7	33	5.6
More than 48 months	31	13.0	41	11.5	72	12.1
Total	238	100.0	355	100.0	593	100.0
Other type of sites where the respondent work as a sex worker						
Restaurant	1	0.4	7	2.9	8	3.4
Massage parlor	0	0.0	5	1.4	5	0.8
House settlement	3	1.3	6	1.7	9	1.5
Bhatti pasal	1	0.4	1	0.3	2	0.3
Hotel /lodge	10	4.2	14	3.9	24	4.0
Squatter settlement/refuse	1	0.4	0	0.0	1	0.2
Did not work anywhere else	223	93.7	325	91.5	548	92.4
Total	238	*	355	*	593	*
Ever worked as a sex worker in other location	200	+			070	
Yes	15	6.3	12	3.4	27	4.5
No	223	93.7	343	96.6	566	95.4
Total	238	100.0	355	100.0	593	100.0
Had worked in India as a sex worker	430	100.0	555	100.0	575	100.0
Yes	4	1.7	3	0.8	7	1.2
No	234	98.3	352	99.2	586	98.8
Total	234	100.0	355	100.0	593	100.0
	238	100.0	333	100.0	393	100.0
Decision made to go to India	1	25.0	1	33.3	2	28.6
Coerced Voluntarily	3	25.0 75.0	2	66.7	5	28.6
	-				-	-
Total	4	100.0	3	100.0	7	100.0

Table 5.1: Sexual Behavior of Female Sex Workers

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

The mean number of months for which the respondents were involved in the sex trade was 30 months, with about 40 percent of them having been in the sex trade for no more than a year, indicating that new sex workers are entering the business at a high rate. A higher proportion of establishment-based FSWs (43.4%) compared to street-based FSWs (35.7%) were new to the sex industry. Conversely, a higher proportion of FSWs who were involved in the sex trade for more than four years were street-based (20.2%) compared to those based in establishments (14.1%). As per the survey criteria set for the survey population, those sex workers involved in the profession for less than six months were not recruited.

Forty-nine percent of the respondents had been carrying out sex work in the Kathmandu Valley for less than a year, while the rest had spent more than a year as sex workers in the Valley Around eight percent of the respondents worked as sex workers from some other sites as well besides those from where they were sampled for the survey. There were some street based respondents who reportedly also worked in restaurants and hotel/lodges. A few of the respondents (4.5%) had worked as sex workers elsewhere in the country. Similarly, seven of the 593 respondents (1.2%) had worked in India for some time as sex workers. Of them, while two had been forcibly taken to India, five had gone there of their own free will (Table 5.1).

5.2 Sex Workers and Their Clients

Table 5.2 shows the number of clients (i.e. paying sex partners) of the respondents and their average working days. The number of clients per day ranged from one to six clients, with a mean of 1.6 clients per day. While 58.7 percent of them reportedly entertained one client per day, 15 percent of them had three or more clients on average per day. Street-based sex workers were more likely to have more clients than those based in establishments (Table 5.2).

In order to have a clear picture of the number of clients that FSWs served, they were asked about the number of clients they served on the day before the interview, during the week preceding the survey, and on the day of their most recent sexual contact. The number of clients served by the FSWs on the previous day of the interview ranged from none to eight. Fifty-four percent of the respondents did not have any clients on the day preceding the survey, 24.8 percent reported that they had served one client, 14.8 percent had two clients, while the rest of them (6.4%) reportedly had more than two clients on the previous day (Table 5.2). Not much variation was noticed in the number of clients entertained by the street versus the establishment-based respondents.

Number of Clients of Sex Workers		reet =238)		lishment =355)		otal =593)
	Ν	%	n	%	n	%
Average number of clients per day						
One	123	51.7	225	63.4	348	58.7
Two	71	29.8	85	23.9	156	26.3
Three– Four	37	15.5	39	11.0	76	12.8
More than Four	7	2.9	5	1.4	13	2.2
Range	1	l-6	1	1-5		-6
Mean clients per day		1.8	1.5		1.6	
Number of clients on the previous day						
None	129	54.2	191	53.8	320	54.0
One	58	24.4	89	25.1	147	24.8
Two	36	15.1	52	14.6	88	14.8
Three – Four	11	4.6	17	4.8	28	4.7
More than Four	4	1.7	6	1.7	10	1.7
Range	()-8	()-7	0	-8

Table 5.2: Number of Clients and Average Working Days

Mean no. of clients on the previous day	(0.8	().8	0	.8
Number of clients in the past week						
0	8	3.4	24	6.8	32	5.4
One	20	8.4	39	11.0	59	9.9
Two	32	13.4	74	20.8	106	17.9
Three – Four	81	34.0	89	25.1	170	28.7
Five – Ten	77	32.3	85	23.9	162	27.3
More than Ten	20	8.4	44	12.4	64	10.8
Mean number of clients in the past week	4	5.0	4	5.0	5	5.0
Time of last sexual contact						
On the day of interview	10	4.2	26	7.3	36	6.1
1-2 days before	158	66.4	207	58.3	365	61.6
3-5 days before	57	23.9	91	25.6	148	24.9
6 and more ays before	13	5.5	31	8.7	44	7.4
Number of clients on the day of last sexual						
contact						
One	167	70.2	274	77.2	441	74.4
Two	50	21.0	63	17.7	113	19.0
Three – Nine	21	8.8	18	5.1	39	6.6
Mean number of clients on that day		1.5	1	1.3	1	.4
Average number of days worked in a week						
One	5	2.1	7	2.0	12	2.0
Two	34	14.3	50	14.1	84	14.2
Three	37	15.5	88	24.8	125	21.1
Four to seven days	162	68.1	210	59.1	372	62.7
Mean number of days worked in a week	4	4.6	4	4.3	4	.4
Total	238	100.0	355	100.0	593	100.0

Additionally, the mean number of clients entertained by the sex workers in the past week was five. While 5.4 percent of them did not have any clients, about 10 percent had one client in the previous week. On the other hand, 27 percent of the respondents had five to ten clients, while about 11 percent reported serving more than 10 clients in the week preceding the survey. It was further noticed that both street-based FSWs as well as the establishment-based FSWs had served five clients on average in the previous week.

The majority of sex workers (61.6%) had sexual contact a day or two before the day of the interview. While a large proportion of the respondents (74.4%) had entertained one client on the day they last had sexual contact, 19 percent of them had seen two clients. On average, street-based FSWs had entertained a slightly higher number of clients (1.5) than establishment-based FSWs (1.3) on the day of their last sexual act. Again, on average the respondents worked for 4.4 days per week with street-based FSWs working for 4.6 days and those based in the establishments working for 4.3 days (Table 5.2). A large proportion of FSWs (62.7%) reported that they worked as sex workers for four to seven days a week.

5.3 Types of Clients

The sex workers' clients belong to a wide variety of professions. Overall, 61.7 percent of sex workers reported businessmen as clients who visited them frequently. Other common clients, reported by the respondents, were service holders/professionals (44.9%), as policemen/soldiers (44.3%), and transport workers/drivers (41.1%). It was further observed that many street-based FSWs (61.3%) were visited most frequently by transport workers/drivers; whereas, many establishment-based FSWs (67%) were visited most frequently by businessmen. Similarly, migrant workers/wage laborers were also common clients of street-based sex workers (37%), while professionals like doctors and other service holders reportedly were the common clients of 53.5 percent of the establishment-based respondents (Table 5.3).

Types of Clients		reet =238)	Establis (N=		-	otal :593)
	n	%	n	%	n	%
Occupation of most frequent clients						
Businessman	128	53.8	238	67.0	366	61.7
Service Holder/officer/doctor	76	31.9	190	53.5	266	44.9
Policeman/army man	102	42.9	161	45.3	263	44.3
Transport worker/driver	146	61.3	98	27.6	244	41.1
Contractor	82	34.5	105	29.6	187	31.5
Foreign employee	55	23.1	95	26.8	150	25.3
Migrant/industrial worker/wage laborer	88	37.0	50	14.1	138	23.3
Tourist/foreigner	8	3.4	26	7.3	34	5.7
Student	8	3.4	25	7.0	33	5.6
Others	5	2.1	4	1.1	9	1.5
Don't know	1	0.4	2	0.6	3	0.5
Occupation of last client						
Businessman	49	20.6	96	27.0	145	24.4
Service holder/doctor	29	12.2	64	18.0	93	15.7
Contractor	29	12.2	38	10.7	67	11.3
Policeman/army man	23	9.7	42	11.8	65	11.0
Transport worker/ driver	35	14.7	26	7.3	61	10.3
Foreign employee	23	9.7	31	8.7	54	9.1
Migrant/industrial/wage Laborer	30	12.6	16	4.5	46	7.7
Student	6	2.5	10	2.8	16	2.7
Foreigner	2	0.8	13	3.7	15	2.5
Others	3	1.3	2	0.6	5	0.8
Don't Know	9	3.6	17	4.8	26	4.5
Total	238	*	355	*	593	*

Table 5.3: Occupational Background of Clients of Female Sex Workers

Almost one-fourth of the FSWs (24.4%) had businessmen as their last client. Others had their last sexual contact with professionals (15.7%), contractors (11.3%), policemen/soldiers (11%), and foreign employees (9.1%). Comparatively, more of the street-based FSWs had their last sexual contact with transport workers/drivers (14.7%) and migrants/industrial workers/wage laborers (12.6%) than establishment-based FSWs (7.3% and 4.5%, respectively, Table 5.3).

5.4 Sex Workers and Their Sex Partners

This section presents additional information on the number of sex partners that the respondents had including both paying and non-paying regular sex partners. Non-paying partners included boyfriends, husbands, and regular partners of the respondents who do not pay them for sexual services; while paying partners included those partners who pay them for sexual contact.

The respondents were asked about the number of paying as well as non-paying regular sex partners they had in the week preceding the survey. The respondents had an average of five paying and 0.5 non-paying sex partners in the preceeding week. The mean number of sex partners (paying as well as non-paying) entertained by street-based sex workers as well as the establishment-based sex workers in the past week was 5.5. Among the total respondents, 35.9 percent of the FSWs had 3-5 paying sex partners, 49.7 percent of them had 1-2 non-paying sex partners, and 43.8 percent had 3-5 paying and non-paying sex partners in the week preceding the survey. 11.5 percent of the total respondents (8.8 percent of the street-based and 13.2 percent of establishment-based FSWs) had served more than 10 paying and non-paying sex partners during this period (Table 5.4).

Sex Partners of Sex Workers		reet 238)		shment 355)	Total (N=593)	
	n		n	%	(N= n 32 171 213 114 63 297 295 1 2297 295 1 0 12 122 260 131 68 249 177 143	%
No. of paying sex partners in the past week						
None	8	3.4	24	6.8	32	5.4
One – two	55	23.1	116	32.7	171	28.8
Three – five	103	43.3	110	31.0	213	35.9
Six – ten	33	13.9	62	17.5	114	19.2
More than ten	20	8.4	43	12.1	63	10.6
Mean (paying partners in the past week)	5	.0	5	.0	5	.0
No. of non-paying regular sex partners in the past week						
None	122	51.3	175	49.3	297	50.1
One – two	116	48.7	179	50.4	295	49.7
Three – four	0	0.0	1	0.3	1	0.2
Mean (non-paying regular partners in the past week)	0	.5	0	.5	0	.5
No. of paying and non-paying regular sex partners in the past	week					
None	3	1.3	9	2.5	12	2.0
One – two	39	16.4	83	23.4	122	20.6
Three – five	114	47.9	146	41.1	260	43.8
Six – ten	61	25.6	70	19.7	131	22.1
More than ten	21	8.8	47	13.2	68	11.5
Mean (paying and non-paying sex partners in the past week)	5	.5	5	.5	5	.5
Last sex partner						
Client	99	41.6	150	42.3	249	42.0
Regular client	84	35.3	93	26.2	177	29.8
Husband/male friend	47	19.7	96	27.0	143	24.1
Other male	8	3.4	16	4.5	24	4.0
Total	238	100.0	355	100.0	593	100.0

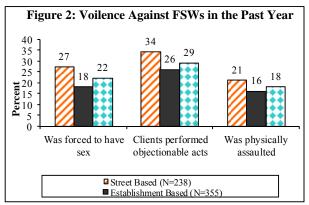
Table 5.4: Number of Different Type of Sex Partners of Female Sex Workers

Forty-two percent of the sex workers had their last sexual contact with non-regular clients, 29.8 percent had regular clients as their last sex partner, while 24.1 percent had sex most recently with their husband/male friends.

5.5 Types of Sex Practiced and Acts of Violence Faced by FSWs

Sex workers are often subjected to violence including forced sex. On many occasions they

are forced into unsafe sexual contact, which puts them at the risk of STI and HIV transmission. The respondents in the survey were also asked if they had ever faced situations such as forced sex or if clients had demanded types of sexual acts in which they were unwilling to participate. This survey found that the street-based FSWs were more likely to face different forms of violence compared to those based in establishments. A higher proportion of



street-based than establishment-based FSWs were subjected to objectionable activities like forced or unconsensual sex (27.3% street-based and 18.3% establishment-based), were physically assaulted (21% street-based and 15.8% establishment-based), and/or had clients performing objectionable activities (34% street-based and 26.2% establishment-based).

Further analysis shows that 14.7 percent of the street based and 11.5 percent of the establishment based FSWs had been subjected to both forceful sex as well as physical assault.

A total of 174 (29.3%) respondents pointed out that they were forced to perform sexual acts against their wishes in the past year. Verbal torture (46%), forceful sex after drinking alcohol (38.5%), clients refusing to pay for sexual services (32.2%), and masturbation (27%) were some of activities that they were forced to perform despite their reluctance to do so. Some also reported that they were assaulted (25.3%) and/or were forced to have oral sex (17.2%). Generally, street-based sex workers were subjected to more of these forms of violence than establishment-based sex workers (Table 5.5).

Although the majority of the respondents (99.2%) have had vaginal sex with their most recent client, few had been engaged in masturbation (5.4%), oral sex (0.8%), and anal sex (0.8%).

Type of Sex	Str	eet	Establi	shment	Tot	tal
Type of Sex	n	%	n	%	n	%
Types of sex acts in the past year						
Only vaginal	189	79.4	298	83.9	487	82.1
Masturbation	25	10.5	44	12.4	69	11.6
Oral sex	20	8.4	21	5.9	41	6.9
Anal sex	22	9.2	20	5.6	42	7.1
Total	238	100.0	355	100.0	593	100.0
Clients refusing to pay for sexual services						
Yes	89	37.4	59	16.6	148	25.0
No	149	62.6	296	83.4	445	45.0
Mean no. of such incidences in past six months	2.	9	2.	.2	2.	6
Total	238	100.0	355	100.0	593	100.0
Types of activities performed by clients which female sex workers disliked						
Verbal torture	34	42.0	46	49.5	80	46.0
Forced to have sex after drinking alcohol	35	43.2	32	34.4	67	38.5
Not paid	34	42.0	22	23.7	56	32.2
Masturbation	18	22.2	29	31.2	47	27.0
Assaulted	22	27.2	22	23.7	44	25.3
Oral Sex	13	16.0	17	18.3	30	17.2
Anal Sex	13	16.0	11	11.8	24	13.8
Stole Money	11	13.6	13	14.0	24	13.8
Burnt with cigarette	2	2.5	1	1.1	3	1.7
Others	2	2.5	2	2.1	4	2.3
Total	81	*	93	*	174	*
Types of sex with last client						
Vaginal Sex	237	99.6	351	98.9	588	99.2
Masturbation	14	5.9	18	5.1	32	5.4
Oral Sex	0	0.0	5	1.4	5	0.8
Anal Sex	1	0.4	4	1.1	5	0.8
Total	238	*	355	*	593	*

 Table 5.5: Types of Sex Practiced by Female Sex Workers

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

5.6 Income of FSWs from Sex Work and Other Jobs

Table 5.6 categorizes the FSWs according to their income from sex work and other jobs outside of the sex industry. Both cash and gifts received by the sex workers have been taken into account when calculating the total income. The mean income of FSWs from their last client was Rs. 1,167 (Rs. 872 street-based and Rs. 1,364 establishment-based FSWs) with a minimum of Rs. 50 to a maximum of Rs. 11,000. Such variations in income could be due to

the varying rates for sex acts charged by the different categories of sex workers in the survey population. Other reasons could be different rates for married and uneducated sex workers compared to their educated and unmarried counterparts.

Str		Establ	ishment	Te	otal
n	%	n	%	n	%
2	0.8	3	0.8	5	0.8
2	0.8	0	0.0	2	0.3
94	39.5	96	27.0	190	32.0
87	36.5	101	28.4	188	31.7
27	11.3	63	17.7	90	15.2
10	4.2	39	11.0	49	8.3
16	6.7	53	14.9	69	11.6
50-4	1,575	150-	11,000	50-1	1,000
8	72	1.	364	11	167
26	10.9	16	4.5	42	7.1
48	20.2	36	10.1	84	14.2
58	24.3	44	12.4	102	17.2
51	21.4	48	13.5	99	16.7
26	10.9	70	49.7	96	16.2
26	10.9	117		143	24.1
3	1.3	24	6.8	27	4.5
200-1	5.000	500-		200-2	24,000
					453
-)		- ,		,	
147	61.8	321	90.4	468	78.9
	_				21.1
					100.0
3	2.0	205	63.9	208	44.4
					19.4
					8.5
-		-			7.7
-			-		7.1
					3.8
					3.8
		-			2.6
-					1.5
	_				0.4
	_				1.5
-	*		*		*
		021		400	
	38.2	34	9.6	125	21.1
					10.1
					43.0
					11.3
				-	7.2
11	1.6	32	9.0	43	7.2
	5 000	1 50	10.000	150 -	1 = 0.00
200-1	5,000 00		10,000 280		<u>15,000</u> 224
	n 2 94 87 27 10 16 50-4 8 26 48 58 51 26 26 26 3 200-1	2 0.8 2 0.8 94 39.5 87 36.5 27 11.3 10 4.2 16 6.7 50-4,575 872 26 10.9 48 20.2 58 24.3 51 21.4 26 10.9 3 1.3 200-15,000 3,254 238 100.0 3 2.0 71 48.3 31 21.1 0 0.0 3 2.0 71 48.3 31 21.1 0 0.0 13 8.8 11 7.5 8 5.4 7 4.8 1 0.7 3 2.0 147 * 8 5.4 7 4.8 1 0.7 <td>n % n 2 0.8 3 2 0.8 0 94 39.5 96 87 36.5 101 27 11.3 63 10 4.2 39 16 6.7 53 $50-4,575$ $150-6$ 872 11 26 10.9 16 48 20.2 36 58 24.3 44 51 21.4 48 26 10.9 70 26 10.9 70 26 10.9 117 3 2.4 $500-3$ 26 10.9 70 26 10.9 717 3 2.0 205 71 48.3 20 31 21.1 9 0 0.0 36 <td< td=""><td>n $%$ n $%$ 2 0.8 3 0.8 2 0.8 0 0.0 94 39.5 96 27.0 87 36.5 101 28.4 27 11.3 63 17.7 10 4.2 39 11.0 16 6.7 53 14.9 50-4,575 150-11,000 872 1364 26 10.9 16 4.5 48 20.2 36 10.1 58 24.3 44 12.4 51 21.4 48 13.5 26 10.9 70 49.7 26 10.9 117 33.0 3 1.3 24 6.8 200-15,000 500-24,000 3,254 5,257 147 61.8 321 90.4 91 38.2 34 9.6 238 100.0 355</td><td>n % n % n 2 0.8 3 0.8 5 2 0.8 0 0.0 2 94 39.5 96 27.0 190 87 36.5 101 28.4 188 27 11.3 63 17.7 90 10 4.2 39 11.0 49 16 6.7 53 14.9 69 $50-4,575$ $150-11,000$ $50-1$ 872 1364 11 26 10.9 16 4.5 42 48 20.2 36 10.1 84 58 24.3 44 12.4 102 51 21.4 48 13.5 99 26 10.9 70 49.7 96 26 10.9 117 33.0 143 3</td></td<></td>	n % n 2 0.8 3 2 0.8 0 94 39.5 96 87 36.5 101 27 11.3 63 10 4.2 39 16 6.7 53 $50-4,575$ $150-6$ 872 11 26 10.9 16 48 20.2 36 58 24.3 44 51 21.4 48 26 10.9 70 26 10.9 70 26 10.9 117 3 2.4 $500-3$ 26 10.9 70 26 10.9 717 3 2.0 205 71 48.3 20 31 21.1 9 0 0.0 36 <td< td=""><td>n $%$ n $%$ 2 0.8 3 0.8 2 0.8 0 0.0 94 39.5 96 27.0 87 36.5 101 28.4 27 11.3 63 17.7 10 4.2 39 11.0 16 6.7 53 14.9 50-4,575 150-11,000 872 1364 26 10.9 16 4.5 48 20.2 36 10.1 58 24.3 44 12.4 51 21.4 48 13.5 26 10.9 70 49.7 26 10.9 117 33.0 3 1.3 24 6.8 200-15,000 500-24,000 3,254 5,257 147 61.8 321 90.4 91 38.2 34 9.6 238 100.0 355</td><td>n % n % n 2 0.8 3 0.8 5 2 0.8 0 0.0 2 94 39.5 96 27.0 190 87 36.5 101 28.4 188 27 11.3 63 17.7 90 10 4.2 39 11.0 49 16 6.7 53 14.9 69 $50-4,575$ $150-11,000$ $50-1$ 872 1364 11 26 10.9 16 4.5 42 48 20.2 36 10.1 84 58 24.3 44 12.4 102 51 21.4 48 13.5 99 26 10.9 70 49.7 96 26 10.9 117 33.0 143 3</td></td<>	n $%$ n $%$ 2 0.8 3 0.8 2 0.8 0 0.0 94 39.5 96 27.0 87 36.5 101 28.4 27 11.3 63 17.7 10 4.2 39 11.0 16 6.7 53 14.9 50-4,575 150-11,000 872 1364 26 10.9 16 4.5 48 20.2 36 10.1 58 24.3 44 12.4 51 21.4 48 13.5 26 10.9 70 49.7 26 10.9 117 33.0 3 1.3 24 6.8 200-15,000 500-24,000 3,254 5,257 147 61.8 321 90.4 91 38.2 34 9.6 238 100.0 355	n % n % n 2 0.8 3 0.8 5 2 0.8 0 0.0 2 94 39.5 96 27.0 190 87 36.5 101 28.4 188 27 11.3 63 17.7 90 10 4.2 39 11.0 49 16 6.7 53 14.9 69 $50-4,575$ $150-11,000$ $50-1$ 872 1364 11 26 10.9 16 4.5 42 48 20.2 36 10.1 84 58 24.3 44 12.4 102 51 21.4 48 13.5 99 26 10.9 70 49.7 96 26 10.9 117 33.0 143 3

Table 5.6: Income of Female Sex Workers from Sex Work and Other Jobs

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

The average weekly income of the establishment-based FSWs was also higher (Rs 5,257) than those based in the street (Rs. 3,254). Only 12.2 percent of street-based respondents

earned more than 5,000 in a week compared to 39.8 percent of establishment-based FSWs reporting so (Table 5.6).

A large proportion of the respondents (78.9%) said that they were engaged in other jobs as well. The majority of the establishment-based FSWs (90.4%) reported having another job, while 61.8 percent of the street-based FSWs reported so. A majority of the establishment-based sex workers who had other jobs had been working as waitresses (63.9%) in different restaurants, while street-based sex workers worked mostly as wage laborers (48.3%) (Table 5.6). Among the street-based FSWs, the average weekly income from the other jobs was Rs. 1,100, ranging from Rs. 200-15,000, and among the establishment-based FSWs, it was Rs. 1,280 ranging from Rs. 150-10,000.

5.7 Knowledge of Condoms

HIV/AIDS awareness and prevention campaigns focus on promoting condom use by raising awareness and facilitating easy access to free condoms. Different types of information, education and communication (IEC) materials are distributed and awareness messages are aired through radio, television, and other media.

All of the respondents had heard about male condoms. Radio and television were the two most popular sources of information of condoms as mentioned by 89.5 percent each of the sex workers. Similarly, over 80 percent of the respondents also mentioned that they had heard about such condoms from friends/neighbors (86.3%), the pharmacy (85.5%), NGOs (83.3%), and clients (77.7%). Other popular sources of information about condoms were hospitals (61.2%), newspapers/posters (57.3%), billboards/signboards (53.5%), health posts/health centers (50.8%), and health workers (45%). Cinema halls, community events, and community workers were also mentioned by some of the respondents as other sources of their knowledge about condoms (Table 5.7).

Forty-six percent of the respondents were aware of female condoms (43.7% of street-based and 47.6% of the establishment-based respondents). Over two-thirds of the respondents (67.8%) had heard about female condoms from NGO staff, while 28.6 percent had come to know about female condoms from their friends/relatives or neighbors. Other sources of information on female condoms reported by the respondents have been listed in Table 5.7.

Although 80.9 percent of the respondents considered female condoms useful, only 4 percent (11 respondents) had ever used one. Around 64 percent of them (7/11) had used one within a year preceding the survey, 36.4 percent (4/11) had last used a female condom more than 12 months back.

Source of knowledge of Male Condoms	Sti	eet	Establi	shment	Total	
Source of knowledge of Male Condoms	n	%	n	%	n	%
Sources of knowledge on male condoms						
Radio	213	89.5	318	89.6	531	89.5
Television	208	87.4	323	91.0	531	89.5
Friend/Neighbor	206	86.6	306	86.2	512	86.3
Pharmacy	198	83.2	309	87.0	507	85.5
NGOs	194	81.5	300	84.5	494	83.3
Clients	182	76.5	279	78.6	461	77.7
Hospital	144	60.5	219	61.7	363	61.2
Newspaper/Poster	135	56.7	205	57.7	340	57.3
Billboard/Signboard	121	50.8	196	55.2	317	53.5
Health Post/Health Center	127	53.4	174	49.0	301	50.8
Health Worker/Volunteer	113	47.5	154	43.4	267	45.0
Cinema Hall	69	29.0	68	19.2	137	23.1
Community Event/Training	27	11.3	40	11.3	67	11.3
Community Workers	22	9.2	39	11.0	61	10.3
Street Drama	25	10.5	34	9.6	59	9.9
Comic Book	15	6.3	38	10.7	53	8.9
Video Van	12	5.0	26	7.3	38	6.4
Total	238	*	355	*	593	*
Heard about female condom						
Yes	104	43.7	169	47.6	273	46.0
No	134	56.3	186	52.4	320	54.0
Total	238	100.0	355	100.0	593	100.0
Source of information about female condom						
NGO staff	73	70.2	112	66.3	185	67.8
Friends/Relatives/Neighbors	29	27.9	49	29.0	78	28.6
Radio	14	13.5	12	7.1	26	9.5
TV	8	7.7	13	7.7	21	7.7
Pharmacy	4	3.8	9	5.3	13	4.8
Sex partners/clients	3	2.9	7	4.1	10	3.7
Newspapers/Posters	2	1.9	7	4.1	9	3.3
Health Workers/Volunteers	3	2.9	4	2.4	7	2.3
Hospital	3	2.9	3	1.8	6	2.2
Others	5	4.8	6	3.5	11	4.0
	104	*	169	*	273	*
Total						
Ever used Female Condom	7	6.7	4	2.4	11	4.0
Ever used Female Condom Yes	7 97			2.4 97.6		
Ever used Female Condom Yes No	97	93.3	165	97.6	262	96.0
Ever used Female Condom Yes No Total						96.0
Ever used Female Condom Yes No Total Respondents consider female condoms as useful	97 104	93.3 100.0	165 169	97.6 100.0	262 273	96.0 100.0
Ever used Female Condom Yes No Total Respondents consider female condoms as useful Yes	97 104 208	93.3 100.0 87.4	165 169 272	97.6 100.0 76.6	262 273 480	96.0 100.0 80.9
Ever used Female Condom Yes No Total Respondents consider female condoms as useful	97 104	93.3 100.0	165 169	97.6 100.0	262 273	96.0 100.0

Table 5.7: Sources	of Knowledge of Condom amor	ng Female Sex Workers
	of Live wreage of contaonic antor	

5.8 Condom Use with Different Partners

The survey participants basically entertain three different types of sex partners: (i) paying partners, i.e., those who pay them in cash or buy gifts for sex (ii) non-paying regular partners, i.e. those who do not pay them for sex i.e. their husbands, boyfriends, and cohabiting male partners (iii) regular partners, i.e. those who visit them on a regular basis. In addition, some FSWs had other sex partners who were neither their clients nor regular partners, and they have been included in this survey as 'other' sex partners. The following sections describe their condom use patterns with these different sex partners.

5.8.1 Condom Use with Clients and Regular Clients

Around 83 percent of the respondents had used a condom during their last sexual contact with their clients. In most cases, the respondents themselves (90.6%) had suggested using condoms to these clients (Table 5.8). Most of those who had not used condoms during their last sexual act cited that their clients had objected to the use of a condom at that time (63.1%), while some others said they had already been using other contraceptives (38.8%), so did not use a condom. In addition, 10.7 percent of the respondents pointed out that they agreed to sexual contact without a condom since their clients offered them more money (See Table 1 in Annex-2).

Overall, 73.4 percent of the respondents had used condoms consistently with their clients in the past year with about 7 percent reporting never or rarely using condom. Not much variation was noticed between establishment-based FSWs and street-based FSWs in this regard. Those who did not use condoms consistently during their sexual contacts with clients had done so mainly because their sex partners had objected (81.6%) or because they had been using other contraceptives (34.8%) (See Table 2 in Annex-2).

Condom Use	Sti	reet	Establi	shment	Total	
Condom Use	n	%	n	%	n	%
Use of condom with most recent client						
Yes	199	83.6	291	82.0	490	82.6
No	39	16.4	64	18.0	103	17.4
Total	238	100.0	355	100.0	593	100.0
Condom use suggested by						
Respondent	179	89.9	265	91.1	444	90.6
Sex partner	20	10.1	26	8.9	46	9.4
Total	199	100.0	291	100.0	490	100.0
Use of condom with the client in the past year						
Every time	171	71.8	264	74.4	435	73.4
Most of the time	36	15.1	51	14.4	87	14.7
Sometimes	16	6.7	13	3.7	29	4.9
Rarely	5	2.1	5	1.4	10	1.7
Never	10	4.2	22	6.2	32	5.4
Total	238	100.0	355	100.0	593	100.0
Had regular client in the past year						
Yes	192	80.7	292	82.3	484	81.6
No	46	19.3	63	17.7	109	18.4
Total	238	100.0	355	100.0	593	100.0
Use of condom with regular clients in the past ye	ar					
Every time	143	74.5	218	74.7	361	74.6
Most of the time	21	10.9	29	9.9	50	10.3
Sometimes	10	5.2	16	5.5	26	5.4
Rarely	6	3.1	5	1.7	11	2.3
Never	12	6.3	24	8.2	36	7.4
Total	192	100.0	292	100.0	484	100.0
Use of condom with most recent regular client						
Yes	160	83.3	238	81.5	398	81.6
No	32	16.7	54	18.5	86	17.8
Total	192	100.0	292	100.0	484	100.0
Condom use suggested by						
Respondent	134	83.8	216	90.8	350	87.9
Sex partner	26	16.3	22	9.2	48	12.1
Total	160	100.0	238	100.0	398	100.0

 Table 5.8: Condom Use with Clients and Regular Clients

Around 82 percent of the sex workers had clients visiting them on a regular basis. Around 75 percent of them reported that they used condoms consistently in the past year, and 81.6

percent of them further reported the use of a condom during their last sexual contact with their regular client. A majority of these respondents (87.9%) had themselves suggested using a condom to their regular clients during their most recent sexual intercourse with them (Table 5.8). Those who did not use condoms during their latest sexual contact with regular clients had done so mainly because their sex partners had objected (68.6%) or because they had been using other contraceptives (20.9%) (See Table 1 in Annex-2).

5.8.2 Condom Use with Non-Paying Regular Partners

Overall 56.5 percent of the respondents reported having non-paying regular sex partners (husband, boyfriend, live-in partner) in the year preceding the survey. Around 18 percent of those respondent used condoms during their most recent sexual contact with their non-paying partners. In most of the cases the respondents themselves (70.2%) had suggested using a condom (Table 5.8). Among those who had not used condoms during the most recent sexual contact with their non-paying regular partners, 40.8 percent mentioned that they had been using other contraceptives, while 37.1 percent mentioned that their partners did not want to use a condom (See Table 1 in Annex-2).

Consistent use of condoms with non-paying regular partners was found to be very low amongst both street (12.8%) and establishment-based FSWs (10.9%). Most of the respondents (88.4%) reported that they were not using condoms consistently with their non-paying regular partners (Table 5.8.1).

Sexual contact with non-payng partners and	St	reet	Establ	ishment	Total		
condom use	n	%	n	%	n	%	
Have non-paying regular partner during past	year						
Yes	133	55.9	202	56.9	335	56.5	
No	104	43.7	152	42.8	256	43.2	
Not reported	1	0.4	1	0.3	2	0.3	
Total	238	100.0	355	100.0	593	100.0	
Use of condom with non-paying regular partner	in the past	year					
Every time	17	12.8	22	10.9	39	11.6	
Most of the time	9	6.8	11	5.4	20	6.0	
Sometimes	12	9.0	23	11.4	35	10.4	
Rarely	26	19.5	28	13.9	54	16.1	
Never	69	51.9	118	58.4	187	55.8	
Frequency of sexual contact with the last non-pay	ying regula	r sex partne	r in the pas	st one montl	1		
None	6	4.7	11	5.6	17	5.2	
Once	1	0.8	4	2.1	5	1.5	
2-5 times	23	17.8	27	13.8	50	15.4	
6-9 times	15	11.6	21	10.8	36	11.1	
10-20 times	59	45.7	77	39.5	136	42.0	
21 and more times	25	19.4	55	28.2	80	24.7	
Total	129	100.0	195	100.0	324	100.0	
Used condom in the last sex with non- paying reg	ular sex pa	rtner					
Yes	24	18.6	33	16.9	57	17.6	
No	105	81.4	162	83.1	267	82.4	
Total	129	100.0	195	100.0	324	100.0	
Condom use suggested by							
Respondent	16	66.7	24	72.7	40	70.2	
Sex partner	8	33.3	9	27.3	17	29.8	
Total	24	100.0	33	100.0	57	100.0	

 Table 5.8.1: Condom Use with Non-Paying Regular Sex Partners

5.8.3 Condom Use with People Other than Clients, Husbands, and Male Friends

Table 5.8.2 demonstrates the use of condoms with other males who were neither the participants' clients, friends, nor their spouses but with whom they met once in a while. Over two-fifths of the respondents (41.7%) were engaged in sexual acts with such people in the past year. Although 86.6 percent of them had used a condom during their last sexual contact with such people, 13.4 percent of them had not used one. Most of those who had used a condom had themselves (88.3%) suggested using condoms during the last such sexual contact. Most of those who had not used a condom during their most recent sexual encounter had done so because their partners did not want to use one (75.8%) (See Table 1 in Annex-2)

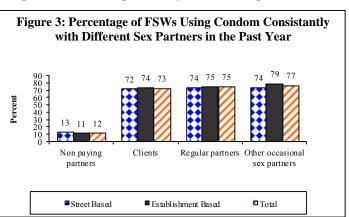
Condom Use by Female Ser, Workers	St	reet	Establi	shment	Т	otal
Condom Use by Female Sex Workers		%	n	%	n	%
Have sexual contact with partner other than client, husba	nd, and m	ale friend	in the pas	st year		
Yes	104	43.7	143	40.3	247	41.7
No	134	56.3	212	59.7	346	58.3
Tota	1 238	100.0	355	100.0	593	100.0
Use of condom with partner other than client, husband, r	nale friend	in the last	sex			
Yes	89	85.6	125	87.4	214	86.6
No	15	14.4	18	12.6	33	13.4
Tota	l 104	100.0	143	100.0	247	100.0
Condom use suggested by						
Respondent	71	79.8	118	94.4	189	88.3
Sex partner	18	20.2	7	5.6	25	11.7
Tota	1 89	100.0	125	100.0	214	100.0
Consistent use of condom with partner other than client,	husband, r	nale friend	l in the pa	ist year		
Every time	77	74.0	113	79.0	190	76.9
Most of the time	12	11.5	14	9.8	26	10.5
Sometimes	4	3.8	5	3.5	9	3.6
Rarely	6	5.8	3	2.1	9	3.6
Never	5	4.8	7	4.9	12	4.9
Not reported	0	0.0	1	0.7	1	0.4
Tota	1 104	100.0	143	100.0	247	100.0

 Table 5.8.2: Condom Use with Partners Other than Client, Husband, Male Friend

Consistent condom use with 'other' partners was reported by about 77 percent of the

respondents who had such partners; this included 74 percent of street and 79 percent of establishment-based sex workers.

Figure 3 compares the reported consistent use of condoms by the respondents with their different sex partners in the past year. Consistent condom use was lowest with non-paying regular partners (12.8% street-



based and 10.9% establishment-based). It is further evident from the figure that about seven in ten respondents had used condoms consistently with occasional sex partners (76.9%), regular clients (74.6%) and clients (73.4%). In all these cases reasons like 'partner objected' and 'used other contraceptives' were the most common reasons cited for not using condoms by both the street as well as establishment-based FSWs (See Table 2 in Annex-2). In cases where a condom was used during the last sexual encounter, the respondents were usually the ones to suggest the use of condom.

5.9 Availability of Condoms and Their Brand Names

When asked if they usually carried condoms with them, 21.2 percent of respondents replied positively - this included 27.7 percent of the street-based and 16.9 percent of the establishment-based respondents. However, almost three-fourths (72.2%) of those who said they usually carried condoms did not have one with them when requested by the interviewers to show them the condoms (Table 5.9).

In order to assess their accessibility to condoms, the respondents were asked how long it took for them to get a condom from the nearest source. Around 36 percent of the sex workers said that they could get condoms within five minutes from their place of work, while 46.7 percent could get them within 6-10 minutes. There were some respondents (8.2%) who reported that it took more than 15 minutes for them to reach the nearest available condoms.

Additionally, the majority of the sex workers (96.5%) reported that they could get condoms from pharmacies, while 68 percent maintained that they could have condoms from NGO/health staff or other volunteers. Hospitals (44.7%), grocery shops (39.8%), private clinics (37.1%), clients (35.1%), and 'paan' shops (31.7%) were mentioned as other places where they could obtain condoms (Table 5.9).

Jodi (31.7%), Black Cobra (31.4%), Number One (28.8%), and Dhaal (21.9%) were some of the common brand names of condoms used by the respondents (Table 5.9).

Condom Acquisition	Str	eet	Establis		Total	
-	n	%	n	%	n	%
Carry condom usually						
Yes	66	27.7	60	16.9	126	21.2
No	172	72.3	295	83.1	467	78.8
Total	238	100.0	355	100.0	593	100.0
No. of condoms carried						
One	2	3.0	1	1.7	3	2.4
Two	4	6.1	2	3.3	6	4.8
Three – Five	8	12.1	5	8.3	13	10.3
Six – Ten	6	9.1	1	1.7	7	5.5
More than Ten	2	3.0	4	6.7	6	4.8
Not carrying right now	44	66.7	47	78.3	91	72.2
Total	66	100.0	60	100.0	126	100.0
Time needed to obtain condoms from nearest place						
Up to 5 minutes	71	29.8	142	40.0	213	35.9
6 – 10 minutes	120	50.4	157	44.2	277	46.7
11 – 15 minutes	26	10.9	27	7.6	53	8.9
16 - 20 minutes	12	5.0	22	6.2	34	5.7
21 and more minutes	8	3.4	7	2.0	15	2.5
Don't Know	1	0.4	0	0.0	1	0.2
Total	238	100.0	355	100.0	593	100.0
Places where condoms are available						
Pharmacy	231	97.1	341	96.1	572	96.5
NGO/Health Workers/ Volunteers	163	68.5	240	67.6	403	68.0
Hospital	97	40.8	168	47.3	265	44.7
General grocery store (Kirana Pasal)	86	36.1	150	42.3	236	39.8
Private Clinic	93	39.1	127	35.8	220	37.1
Clients	94	39.5	114	32.1	208	35.1
Paan Shop	78	32.8	110	31.0	188	31.7
Peer/Friends	50	21.0	64	18.0	114	19.2
Bar/Guest House/Hotel	41	17.2	50	14.1	91	15.3
Health Post/Health Center	45	18.9	44	12.4	89	15.0
Massage Center	0	0.0	23	6.5	23	3.9
Bhatti Pasal	17	7.1	1	0.3	18	3.0
FPAN Clinic	8	3.4	6	1.7	14	2.4
Don't know	1	0.4	0	0.0	1	0.2
Total	238	*	355	*	593	*
Brand names of condom most used						
Jodi	64	26.9	124	34.9	188	31.7
Black Cobra	60	25.2	126	35.5	186	31.4
Number 1	90	37.8	81	22.8	171	28.8
Dhaal	67	28.2	63	17.7	130	21.9
Panther	42	17.6	60	16.9	102	17.2
Skinless	21	8.8	43	12.1	64	10.8
Kamasutra	16	6.7	32	9.0	48	8.1
Natural latex rubber	4	1.7	8	2.3	12	2.0
Trishna	4	1.7	8	2.3	12	2.0
Lily	1	0.4	9	2.5	10	1.7
Others	9	3.8	15	4.2	24	4.0
Not Used in the Past Year	2	0.8	4	1.1	6	1.0
Total	238	*	355	*	593	*

5.10 Modes of Obtaining Condoms

Table 5.11 classifies the modes of obtaining condoms by the respondents. A total of 27 FSWs (4.6%) reported that they had never used a condom. At the same time, 48.7 percent reported that they obtained free condoms all the time, 12.6 percent always purchased them, and 34.1

percent obtained them both ways. A slightly higher proportion of establishment-based FSWs (51.8%) than street-based FSWs (44.1%) reported that they had access to free condoms. On being asked if they had received condoms in the past year, 68.2 percent of the respondents (65.9% of the street-based and 69.7% of the establishment-based) mentioned that they had received free condoms from one or more sources.

Table 5.11 shows the places from where FSWs usually obtained free condoms or purchased them. Among those respondents who reported obtaining free condoms, 76.4 percent said that they got them from NGO/health workers or other volunteers, 63.7 percent said that their clients brought condoms with them, and 24.6 percent reported that their peers/friends usually gave condoms to them. Other reported sources of free condoms have been listed in Table 5.10.

Condom Acquisition	St	reet	Establi	shment	Total	
Condom Acquisition	n	%	n	%	n	%
Mode of obtaining condoms						
Always free of cost	105	44.1	184	51.8	289	48.7
Purchase	36	15.1	39	11.0	75	12.6
Obtain both ways	88	37.0	114	32.1	202	34.1
Condom never used	9	3.8	18	5.1	27	4.6
Tota	1 238	100.0	355	100.0	593	100.0
Free condoms usually obtained from						
NGO/Health workers/Volunteers	148	76.7	227	76.2	375	76.4
Client	132	68.4	181	60.7	313	63.7
Peers/friends	46	23.8	75	25.2	121	24.6
Hotel/Lodge/Restaurant	10	5.2	27	9.1	37	7.5
Bhatti Shop	14	7.3	1	0.3	15	3.1
Massage Parlor	0	0.0	14	4.7	14	2.9
Health Post / Health Center	7	3.6	4	1.3	11	2.2
Hospital	5	2.6	5	1.7	10	2.0
FPAN clinics	3	1.6	0	0.0	3	0.6
Community events	1	0.5	2	0.7	3	0.6
Tota	l 193	*	298		491	*
Most convenient place to obtain free condom						
NGO/Health workers/Volunteers	145	75.1	221	74.2	366	74.5
Client/ others sex partners	119	61.7	158	53.0	277	56.4
Peers/friends	31	16.1	58	19.5	89	18.1
Hotel/Lodge/Restaurant	6	3.1	22	7.4	28	5.7
Bhatti Shop	13	6.7	1	0.3	14	2.9
Massage Parlor	0	0.0	12	4.0	12	2.4
Health Post/Health Center	3	1.6	4	1.3	7	1.4
Hospital	4	2.1	1	.0.3	5	1.0
Others	2	1.0	1	0.3	3	0.6
Tota	l 193	*	298		491	*
Respondent was given condom in the past one year						
Yes	151	65.9	235	69.7	386	68.2
No	78	34.1	102	30.3	180	31.8
Tota	1 229	100.0	337	100.0	566	100.0
Places of purchasing condom						
Pharmacy	116	93.5	147	96.1	263	94.9
Private Clinic	49	39.5	40	26.1	89	32.1
General grocery store (Kirana Pasal)	21	16.9	29	19.0	50	18.1
Pan Shop	28	22.6	18	11.8	46	16.6
Hotel/Lodge/Restaurant	24	19.4	15	9.8	39	14.1
Others	1	0.8	0	0.0	1	0.4
Tota	l 124	*	153	*	277	*
Most convenient place to purchase condom						
Pharmacy	105	84.7	139	90.8	244	88.1

Table 5.10: Modes and Places for Obtaining Condoms by Female Sex Workers

Condom Acquisition	Street		Establishment		Total	
Condom Acquisition	n	%	n	%	n	%
Private Clinic	27	21.8	20	13.1	47	17.0
Pan Shop	19	15.3	11	7.2	30	10.8
General grocery store (Kirana Pasal)	13	10.5	17	11.1	30	10.8
Hotel/lodge/Restaurant	19	15.3	7	4.6	26	9.4
Total	124	*	153	*	277	*

Almost 75 percent of the respondents felt it was convenient to have free condoms from NGOs/health workers/volunteers, while 56.4 percent preferred that their clients brought condoms with them. Peers/friends and hotels/lodges/restaurants were the next preferred suppliers of free condoms (Table 5.10).

Among those sex workers who purchased condoms all the time or occasionally, 94.9 percent usually bought them from pharmacies, while 32.1 percent from private clinics. Some also bought them from grocery stores (18.1%), 'paan' shops (16.6%), and hotels/lodges/restaurants (14.1%). When asked about their opinion on the most convenient places for them to purchase condoms, the majority of the respondents (88.1%) said they preferred to buy condoms from a pharmacy (Table 5.10).

5.11 Use of Alcohol and Drugs by FSWs and Clients

The majority of respondents (76.6%) consumed alcohol in the past month (73.1% streetbased FSWs and 78.9% establishment-based FSWs). While 29.2 percent of the respondents (23.9% street-based and 32.7% establishment) consumed alcohol everyday, 30.4 percent (33.2% street-based and 28.5% establishment-based) drank alcohol 2-3 times a week in the month preceding the survey (Table 5.11).

Consumption of Alcohol and Drugs		Str	·eet	Establishment		Total	
Consumption of Alconol and Drugs		n	%	n	%	n	%
Consumption of alcohol in the past month							
On a daily basis		57	23.9	116	32.7	173	29.2
2-3 times a week		79	33.2	101	28.5	180	30.4
Once a Week		15	6.3	30	8.5	45	7.6
Less than once a week		23	9.7	33	9.3	56	9.4
Never		64	26.9	75	21.1	139	23.4
	Total	238	100.0	355	100.0	593	100.0
Tried any types of drugs in the past month							
Yes		12	5.0	41	11.5	53	8.9
No		226	95.0	314	88.5	540	91.1
	Total	238	100.0	355	100.0	593	100.0
Know Injecting Drug Users (IDUs)							
Yes		36	15.1	81	22.8	117	19.7
No		202	84.9	274	77.2	476	80.3
	Total	238	100.0	355	100.0	593	100.0
Relationship with known IDUs							
Friend		16	44.4	48	59.3	64	54.7
Local boys		18	50.0	37	45.7	55	47.0
Relative		3	8.3	14	17.3	17	14.5
Client		4	11.1	7	8.6	11	9.4
Family		0	0.0	3	3.7	3	2.6
Husband		1	2.8	0	0.0	1	0.9
	Total	36	*	81	*	117	*

Table 5.11: Use of Alcohol / Drugs by Female Sex Workers and Knowledge of IDUs among them

Consumption of Alcohol and Drugs		Str	reet	Establishment		Total	
Consumption of Alcohol and Drugs		n	%	n	%	n	%
Knowledge of sex partners being IDUs							
Yes		4	1.7	8	2.3	12	2.0
No		234	98.3	347	97.7	581	98.0
	Total	238	100.0	355	100.0	593	100.0
Drug using history							
Ever exchanged sex for drugs		3	1.3	4	1.1	7	1.2
Ever exchanged sex for money to buy drugs		3	1.3	3	0.8	6	1.0
	Total	238	*	355	*	593	*

Around nine percent of the sex workers had also used drugs at least once in the past month. Additionally, among the 593 sex workers, two percent of the respondents (12/593) knew that their sex partners (including clients and spouse) injected drugs. Among them, three were married respondents; one of whom said that her husband injected drugs. Eleven respondents said that their clients injected drugs while there were five respondents whose regular clients injected drugs (See Table 3 in Annex-2).

Additionally, 19.7 percent (117/593) said that they knew someone who injected drugs. When asked about their relationship with known IDUs, 54.7 percent said they were their friends, while 47 percent mentioned that they were the local boys in the neighborhood. At the same time, 14.5 percent said they were their relatives and/or family members, while, 9.4 percent of respondents also mentioned that the IDUs that they knew were their clients. Seven of the sex workers also admitted having sex in exchange for drugs, while six had at least once been engaged in sexual contact for money to buy drugs (Table 5.12).

Ten of the 593 (1.7%) respondents who took part in the survey had ever injected drugs while nine of them had injected in the past 12 months. All of them had injected drugs for the first time when they were between 15 and 19 years of age. Twenty percent of the respondents (2/10) had started injecting drugs for less than a year and 40 percent (4/10) had been injecting for the past 1-2 years. Others (4/10) had been injecting drugs for 3 or more years before the survey. The mean duration when the respondents had started injecting drugs was 32.1 weeks (Table 5.12). The trend in injecting history for the past four rounds of IBBS among FSWs in Kathmandu is illustrated in Table 12 (Annex-2).

	St	reet	Establi	ishment	Total	
Drug Using History	n	%	n	%	n	%
Ever Injected Drugs						
Yes	4	1.7	6	1.7	10	1.7
No	234	98.3	349	98.3	583	98.3
Total	238	100.0	355	100.0	593	100.0
Injected in Past 12 Months						
Yes	3	1.3	6	1.7	9	1.5
No	1	0.4	0	0.0	1	0.2
Never injected	234	98.3	349	98.3	583	98.3
Total	238	100.0	355	100.0	593	100.0
Respondent age when she first injected drugs						
15-19 yrs	4	100.0	6	100.0	10	100.0
Total	4	100.0	6	100.0	10	100.0
Time when respondents started injecting drugs						
Less than 1 yr	0	0.0	2	33.3	2	20.0
1-2 yrs	1	25.0	3	50.0	4	40.0
3-4 yrs	1	25.0	1	16.7	2	20.0
5 yrs and more	2	50.0	0	0.0	2	20.0

Table 5.12: Injecting History and Practices among Female Sex Workers

Dung Using History	Street		Establi	shment	Total		
Drug Using History	n	%	n	%	n	%	
Mean (weeks)	55.5		16	5.5	32	2.1	
Total	4	100.0	6	100.0	10	100.0	

This round of IBBS survey had additional beharvioral questions for those FSWs who had injected drugs at least once in the past month. Nine of the ten respondents who had ever injected drugs had injected in the past year, while eight of them had injected drugs in past one month and six had injected drugs within one week preceding the survey. Regarding the syringe, one of the six respondents had last injected with a previously used syringe, two had done so in the past month, and one of the respondents had shared a used needle in the past week (See Table 4 in Annex-2).

Over one-third of the injecting respondents (3/8) had injected 2-3 times in the past week. Additionally 62.5 percent (5/8) had injected once on the last day they injected. Three of the eight respondents (37.5%) had switched from injecting to oral drugs within last month, four of the eight respondents (50%) had switched from sharing to non-sharing practice in the past year, and two of the eight (25%) respondents had also received some treatment or help to quit drugs. Additionally six of the eight respondents (75%) could obtain a new or unused syringe/needle when necessary. One of the respondents who had injected in the past week had practiced unsafe injecting practice in the past week. The number of respondents being small (n=6), the responses are analysed in the Tables in the Annex-2.

CHAPTER 6.0: KNOWLEDGE OF HIV/AIDS AND STIS

HIV/AIDS awareness along with knowledge about STIs is crucial to reduce the risk of HIV transmission. This chapter deals with the level of knowledge among FSWs regarding HIV/AIDS and STIs.

6.1 Source of Knowledge of HIV/AIDS

Two of the total 593 respondents had not heard about HIV/AIDS. The most common sources of information on HIV/AIDS were television (89.7%), radio (87.5%), NGO staff (83.8%), and friends/relatives (83.6%). A considerable proportion of the respondents had also heard about HIV/AIDS from their work place (69.7%), pamphlets/posters (61.4%), and newspapers and magazines (50.3%) (Table 6.1).

6.2 FSWs' Knowledge on Major Ways to Avoid HIV

Table 6.1 further analyzes the comprehensive awareness of HIV/AIDs among the respondents. The proportion of sex workers reporting to be aware of **A** (abstinence from sex), **B** (being faithful to one partner or avoiding multiple sex partners), and **C** (consistent condom use or use of a condom during every sex act) as HIV preventive measures were 59.6 percent, 80.5 percent, and 88.7 percent, respectively.

	Stı	eet	Establi	shment	Total		
Statements Related to HIV/AIDS	n	%	n	%	n	%	
Had ever heard about HIV/AIDs							
Yes	236	99.2	355	100.0	591	99.7	
No	2	0.8	0	0.0	2	0.3	
Total	238	100.0	355	100.0	593	100.0	
HIV/AIDS information sources							
Television	207	87.7	323	91.0	530	89.7	
Radio	213	90.3	304	85.6	517	87.5	
People from NGOs	194	82.2	301	84.8	495	83.8	
Friends/relatives	200	84.7	294	82.2	494	83.6	
Workplace	148	62.7	264	74.4	412	69.7	
Client	152	64.4	237	66.8	389	65.8	
Pamphlet/poster	144	60.5	219	61.7	363	61.4	
Newspaper/magazine	102	43.2	195	54.9	297	50.3	
Billboard/signboard	112	47.5	172	48.5	284	48.1	
Health workers	100	42.4	133	37.5	233	39.4	
Cinema hall	64	27.1	60	16.9	124	21.0	
School/teacher	38	16.1	57	16.1	95	16.1	
Community event/training	32	13.6	39	11.0	71	12.0	
Community workers	21	8.9	40	11.3	61	10.3	
Street drama	23	9.7	30	8.5	53	9.0	
Comic book	12	5.1	33	9.3	45	7.6	
Video van	14	5.9	25	7.0	39	6.6	
Comprehensive knowledge indicators							
A. Can protect themselves through abstinence from sexual contact	136	57.6	216	60.8	352	59.6	
B. Can protect themselves through monogamous sexual	194	82.2	282	79.4	476	80.5	
C. Can protect themselves through condom use every time during sex	217	91.9	307	86.5	524	88.7	
D. A healthy-looking person can be infected with HIV	214	90.7	311	87.6	525	88.8	
E . A person can not get the HIV virus from mosquito bite	112	47.5	148	41.7	260	44.0	
F. A person can not get HIV by sharing meal with an HIV infected person	185	78.4	291	82.0	476	80.5	
Knowledge of all the three: ABC	110	46.6	172	48.5	282	47.7	

Table 6.1: Female Sex Workers' Knowledge on Major Ways to Avoid HIV and HIV/AIDS Information Sources

Statements Related to HIV/AIDS	Street		Establi	shment	Total	
	n	%	n	%	n	%
Knowledge of all five indicators: BCDEF	82	34.7	98	27.6	180	30.4
Total	236	*	355	*	591	*

The proportion of sex workers reporting to be aware of **A** (abstinence from sex), **B** (being faithful to one partner or avoiding multiple sex partners), and **C** (consistent condom use or use of a condom during every sex act) as HIV preventive measures were 59.6 percent, 80.5 percent, and 88.7 percent, respectively.

Overall, 47.7 percent of the respondents correctly identified all three **A**, **B**, and **C** as HIVpreventive measures. As mentioned above, a comparatively smaller proportion of FSWs had knowledge about **A**. Additionally, among the respondents, 88.8 percent knew that a healthylooking person can be infected with HIV (**D**), 44 percent of them identified that a person cannot get HIV from a mosquito bite (**E**), and 80.5 percent knew that one cannot get HIV by sharing a meal with an HIV-infected person (**F**). Overall, only 30.4 percent of the respondents were aware of all the five major indicators i.e. **BCDEF**. Lack of awareness of 'E' i.e mosquitoes do not carry HIV virus, has mostly contributed to this low awareness level of BCDEF. Furthermore, a higher proportion of street-based FSWs (34.7%) had a comprehensive knowledge about HIV and i.e BCDEF than their establishment-based counterparts (27.6%).

6.3 Knowledge on Major Ways of Transmitting HIV

Further, the respondents were asked if they knew any person infected with HIV or who had died of AIDS. 42 percent of the respondents answered affirmatively, which included 43.3 percent of the street-based and 41.1 percent of the establishment-based respondents. Among them, 10.4 percent of the total respondents had a close friend and 14.9 percent had a close relative that was HIV positive or had died due to AIDS. Comparatively, more of the street-based than establishment-based respondents had friends (12.6% vs 8.9%) and relatives (20.4% vs. 11%) living with or who had died from HIV/AIDS (Table 6.2).

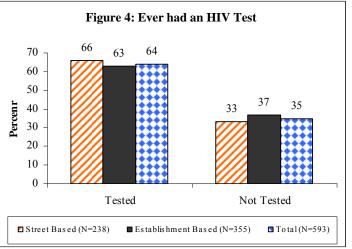
The respondents' understanding of HIV and AIDS and its different modes of HIV transmission were further tested with the help of certain questions relating to the topic (Table 6.2). As indicated by Table 6.2, a larger proportion (99%) of respondents perceived that HIV could be transmitted through the transfusion of blood from an infected person to another, and through the use of pre-used needles/syringes (97.1%). Almost 94 percent of them also mentioned that holding an HIV-infected person's hand did not pose a risk of HIV transmission, while 87.3 percent of them said that an infected pregnant woman could transmit the virus to her unborn child. Similarly, 66.7 percent of them reported that an HIV/AIDS-infected mother could transmit the virus to her child during breastfeeding. Among those sex workers who said that an infected mother could transmit the virus to her unborn child, 44.2 percent of them mentioned that they were unaware of any such measures that could minimize such risk while almost same proportion of them (42.6%) said that taking medicine would be helpful.

	Str	eet	Establ	ishment	Te	otal	
	n	%	n	%	n	%	
Know anyone who is infected with HIV or who has died of AII	DS						
Yes	103	43.3	146	41.1	249	42.0	
No	133	55.2	209	58.9	342	57.7	
Never heard about HIV/AIDs	2	0.8	0	0.0	2	0.3	
Total	238	100.0	355	100.0	593	100.0	
Relation with the person who is infected with HIV or has died	of AIDS						
Close friend	13	12.6	13	8.9	26	10.4	
Close relative	21	20.4	16	11.0	37	14.9	
No relation	69	67.0	117	80.1	186	74.7	
Total	103	100.0	146	100.0	249	100.0	
Awareness on HIV/AIDS							
Blood transfusion from an infected person to the other transmit	231	97.9	354	99.7	585	99.0	
HIV	231	97.9	334	99.7	282	99.0	
A person can get HIV, by using previously used needle/syringe	224	94.9	350	98.6	574	97.1	
Can not get HIV by holding an HIV infected person's hand	219	92.8	337	94.9	556	94.1	
An HIV positive pregnant woman can transmit the virus to her							
unborn	207	87.7	309	87.0	516	87.3	
child							
A An HIV positive woman can transmit the virus to her new-							
born	159	67.4	235	66.2	394	66.7	
child through breastfeeding							
Total	236	*	355	*	591	*	
Ways by which a pregnant woman can reduce the risk of trans				1			
Take medicine	91	44.0	129	41.7	220	42.6	
Don't Know	89	43.0	139	45.0	228	44.2	
Abort the child	13	6.3	23	7.4	36	7.0	
Can't do anything	12	5.8	13	4.2	25	4.8	
Seek treatment from hospital/take advice from health staff	1	0.5	3	1.0	4	0.8	
Others	1	0.5	2	0.6	3	0.6	
Total	207	100.0	309	100.0	516	100.0	

Table 6.2: Female	2 Sex Workers'	Knowledge on	Ways of Trans	mitting HIV/AIDS
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6.4 Perception of HIV Test

Table 6.3 divides the respondents according to their perceptions about the HIV test. Two respondents (0.3%) had never heard about HIV/AIDS. While 83.5 percent of the respondents knew at least one such place where HIV testing could be done, 71.8 percent of the respondents also pointed out that they were aware of the existence of at least one such confidential HIV testing facility their community in too.



Additionally, 64.4 percent of the respondents (66.4% street-based and 63.1% establishmentbased) had ever tested themselves for HIV (Figure 4). Among them, 86.1 percent of the respondents (84.8% street-based and 87.1% establishment-based) had taken up the test during the last 12 months preceding the survey, while others had done so more than a year before. Most of them (91.4%) had taken up the test voluntarily while others had been asked to test themselves. While most of them (97.9%) got their test results, 2.1 percent (8/382) did not collect them because they were required to wait too long for the report (3/8); they were afraid of the result (2/8); or they did not consider it necessary (2/8).

Domention of HIV test	St	reet	Establ	ishment	Total		
Perception of HIV test	n	%	n	%	n	%	
Confidential HIV test facility available in the community							
Yes	170	71.4	256	72.1	426	71.8	
No	34	14.3	56	15.8	90	15.2	
Don't Know	32	13.4	43	12.1	75	12.6	
Never heard about HIV/AIDs	2	0.8	0	0.0	2	0.3	
Total	238	100.0	355	100.0	593	100.0	
Known place for HIV testing							
Yes	197	82.8	298	83.9	495	83.5	
No	39	16.4	57	16.1	96	16.2	
Never heard about HIV/AIDs	2	0.8	0	0.0	2	0.3	
Total	238	100.0	355	100.0	593	100.0	
Ever had an HIV test							
Yes	158	66.4	224	63.1	382	64.4	
No	78	32.8	131	36.9	209	35.2	
Never heard about HIV/AIDs	2	0.8	0	0.0	2	0.3	
Total		100.0	355	100.0	593	100.0	
Voluntarily underwent the HIV test or because it was required	uired						
Voluntarily	147	93.0	202	90.2	349	91.4	
Required	11	7.0	22	9.8	33	8.6	
Total	158	100.0	224	100.0	382	100.0	
Received HIV test result							
Yes	155	98.1	219	97.8	374	97.9	
No	3	1.9	5	2.2	8	2.1	
Total	158	100.0	224	100.0	382	100.0	
Reason for not receiving the test result							
Afraid of result	0	0.0	2	40.0	2	25.0	
Felt unnecessary	1	33.3	1	20.0	2	25.0	
Report took too long to reach/was asked to come after 1	1		2		3	275	
month	1	33.3	2	40.0	3	37.5	
Others	1	33.3	0	0.0	1	12.5	
Total	3	100.0	5	100.0	8	100.0	
Most recent HIV test							
Within Last 12 months	134	84.8	195	87.1	329	86.1	
Between 1-2 years	16	10.1	14	6.3	30	7.9	
Between 2-4 years	7	4.4	14	6.3	21	5.5	
More than 4 years ago	1	0.6	1	0.4	2	0.5	
Total	158	100.0	224	100.0	382	100.0	
Had HIV test in the past one year							
Yes	134	84.8	195	87.1	329	86.1	
No	24	15.2	29	12.9	53	13.9	
Total	158	100.0	224	100.0	382	100.0	
Had received result of HIV test							
Yes	132	98.5	192	98.5	324	98.5	
No	2	1.5	3	1.5	5	1.5	
Total	134	100.0	195	100.0	329	100.0	

Table 6.3: Perception on HIV Test

6.5 Access to HIV/AIDS Awareness Messages

From the time FHI started intervention programs in Nepal to bring awareness about HIV/AIDS among high-risk groups of people, various messages regarding the use of condoms for the prevention of AIDS were aired on the radio and on television. Elevated hoarding boards and posters were also put up with pictorial and written messages at different places, including health posts and along the roadside in the Kathmandu Valley. In an effort to review the coverage of such interventions, the sex workers were asked about their awareness of such information. Table 6.4 illustrates the messages and the responses provided by the sex workers regarding their awareness of the messages. Most of the respondents were aware of messages like "HIV/AIDS Bare Aajai Dekhi Kura Garau" (73.9%), "Condom Bata Suraksha, Youn Swasthya Ko Raksha" (62.9%), and "Maya Garau Sadbhav Badaun" (53.5%). Messages like "Ek Aapas Ka Kura," "Ramro sangha prayog gare jokhim huna dinna, bharpardo chhu santosh dinchhu jhanjat manna hunna," and "Youn rog ra AIDS bata bachnalai rakhnu parchha sarbatra paine condom lai" had also reached a considerable proportion of the respondents (37.1% and 30.4%) respectively. (Table 6.4).

As high as 96.8 percent of the respondents reported that these messages had made them understand that the use of condoms prevents the transmission of HIV/AIDS, around 61.6 percent of them also said that these the message had made them aware that the use of condoms prevents STIs, and 55 percent mentioned that the messages made them aware that condoms are family planning devices (Table 6.4).

Messages about HIV/AIDs	St	reet	Estab	lishment	To	otal
	n	%	n	%	n	%
Heard/Seen/Read the following messages/characters in						
past one year						
HIV/AIDS Bare Aajai Dekhi Kura Garau	170	71.4	268	75.5	438	73.9
Condom Bata Suraksha, Youn Swasthya Ko Raksha	142	59.7	231	65.1	373	62.9
Maya Garaun Sadbhav Badaun	126	52.9	191	53.8	317	53.5
Ek Apas Ka Kura	98	41.2	140	39.4	238	40.1
Ramro Sangha Prayog Gare Jokhim Huna Dinna Bharpardo Chhu Santosh Dinchhu Jhanjat Manna Hunna	82	34.5	138	38.9	220	37.1
Youn Rog Ra AIDS Bata Bachnalai Rakhnu Parchha Sarbatra Paine Condom Lai	68	28.6	112	31.5	180	30.4
Des Pardes	67	28.2	99	27.9	166	28.0
Condom Kina Ma Bhaya Hunna Ra	62	26.1	82	23.1	144	24.3
Jhilke Dai Chha Chhaina Condom	57	23.9	85	23.9	142	23.9
Others	69	29.0	116	32.7	185	31.2
Total	238	*	355	*	593	*
Information derived from the messages						
Use Condom Against AIDS	229	96.2	345	97.2	574	96.8
Use Condom Against STI	143	60.1	222	62.5	365	61.6
Use Condom for Family Planning	123	51.7	203	57.2	326	55.0
Total	238	*	355	*	593	*

Table 6.4: HIV/AIDS Awareness Ccharacter/Messages Seen/Heard By Female Sex Workers

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

6.6 Knowledge of STIs, Experienced Symptoms, and Treatment in the Past Year

Due to the nature of their work, sex workers are at risk of getting STIs. Any program targeting this particular group should focus on STI awareness and treatment options. In order to assess the extent of the problem among the respondents, they were asked about their understanding of STIs and whether they had experienced any STI symptoms during the past year. For 78.1 percent of the respondents, STI meant genital discharge, while almost the same number of them (77.1%) considered an itching sensation in the vagina a symptom of a STI. At the same time, 49.1 percent of the respondents perceived blisters and ulcers around the vagina to be STI symptoms, while 42.5 percent mentioned lower abdominal pain was also a STI symptom. They also mentioned other symptoms such as syphilis/gonorrhea, HIV/AIDS, unusual bleeding from vagina, and vaginal pain to be the symptoms of STIs. However, 6.7 percent of street-based and 2.5 percent of establishment-based FSWs did not have knowledge about any of the symptoms of STIs (Table 6.5).

Perception on STI, Reported STI Symptoms and	Str		Establishment			tal
Treatment	n	%	n	%	n	%
Understanding of STI						
White/Pus/Dhatu flow Discharge	187	78.6	276	77.7	463	78.1
Itching in Vagina	172	72.3	285	80.3	457	77.1
Blisters and Ulcers Around Vagina	115	48.3	176	49.6	291	49.1
Lower Abdominal Pain	97	40.8	155	43.7	252	42.5
AIDS/HIV	42	17.6	64	18.0	106	17.9
Syphilis (Bhiringi)/Gonorrhea	31	13.0	51	14.4	82	13.8
Swelling of Vagina	30	12.6	49	13.8	79	13.3
Pain in Vagina	16	6.7	37	10.4	53	8.9
Weight loss/get thinner	16	6.7	30	8.5	46	7.8
Bleeding	14	5.9	17	4.8	31	5.2
Don't know	16	6.7	9	2.5	25	4.2
Others (Fever, Weakness, etc.)	0	0.0	2	0.6	2	0.3
Total	238	*	355	*	593	*
Types of STI symptoms experienced in the past year						
Vaginal Itching	77	32.4	78	22.0	155	26.1
Vaginal Discharge	66	27.7	83	23.4	149	25.1
Vaginal Odor	56	23.5	76	21.4	132	22.3
Lower Abdominal Pain	53	22.3	71	20.0	124	20.9
Painful Sex	32	13.4	59	16.6	91	15.3
Dysuria	33	13.9	48	13.5	81	13.7
Genital Ulcer or Sore	22	9.2	33	9.3	55	9.3
Polyuria	20	8.4	26	7.3	46	7.8
Genital Warts	5	2.1	7	2.0	12	2.0
Unusual Vaginal Bleeding	5	2.1	3	0.8	8	1.3
Other	1	0.4	2	0.6	3	0.5
Any of the Above Symptoms	113	47.5	145	40.8	258	43.5
None of the Above Symptoms	125	52.5	210	59.2	335	56.5
Total	238	*	355	*	593	*
Places visited for treatment of STI symptoms in the past						
year SACTS	5.4	(2.1	45	20.0	99	40.5
	54	62.1	45	39.8		49.5
Community Action Center Private Clinic	16 8	18.4 9.2	30 18	26.5 15.9	46 26	23.0
Hospital	-	9.2 5.7	18		13	
Pharmacy	5 5	5.7	8 4	7.1 3.5	9	6.5 4.5
Women Acting Together for Change	0	0.0	2	3.3 1.8	2	4.3
PALUWA	0	0.0	1	0.9	1	0.5
Amda	1	1.1	0	0.9	1	0.5
Health post/Health Center	1	1.1	0	0.0	1	0.5
Satellite Clinic (SACTS/Step Nepal)	7	8.0	16	14.1	23	11.5
Others	2	2.3	10	0.9	3	1.5
Total	<u> </u>	*	113	*	200	*
10001	0/	· ·	115	I	400	

Table 6.5: Knowledge of STI, Symptoms Experienced in the Past Year and Treatment Sought

Perception on STI, Reported STI Symptoms and	Str	eet	Establi	shment	Total	
Treatment	n	%	n	%	n	%
Received counseling to avoid the problem from the place of Treatment						
Yes	85	97.7	107	94.7	192	96.0
No	2	2.3	6	5.3	8	4.0
Total	87	100.0	113	100.0	200	100.0
Types of counseling received						
Take Medicine Regularly	65	76.5	97	90.7	162	84.4
Use Condom	54	63.5	67	62.6	121	63.0
Regular Check-up	50	58.8	50	46.7	100	52.1
Reduce Number of Sexual Partners	20	23.5	27	25.2	47	24.5
Not to Make Sexual Contact while Using Medicine	17	20.0	24	22.4	41	21.4
Total	85	*	107	*	192	*

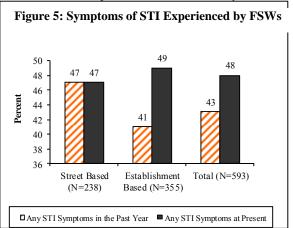
In response to the question on whether they had experienced any STI symptoms in the past year, 43.5 percent of the FSWs (47.5% street-based and 40.8% establishment-based) reported having had experienced at least one STI symptom; 26.1 percent of them (32.4% street-based and 22% establishment-based) reported vaginal itching and 25.1 percent of the respondents had experienced vaginal discharge (27.7% street-based and 23.4% establishment-based) in the past year. Other symptoms experienced by the respondent in the year preceding the survey were vaginal odor (22.3%), lower abdominal pain (20.9%), painful sex (15.3%), and dysuria (13.7%) among others. Around 22 percent of the respondents (58/258) who experienced the symptoms in the past year did not seek treatment, while those who underwent treatment had mostly visited SACTS (49.5%), CAC (23%), and private clinics (13%) (Table 6.5).

Ninety-six percent of the respondents who sought medical attention for the STI symptoms had also received counseling to avoid the problem in the future (Table 6.5). They were mostly counseled to take medicines regularly (84.4%), to consistently use condoms during sex (63%), and to go for regular check ups (52.1%). Some were also advised to reduce the number of their sex partners (24.5%) and not to have sexual partners while under treatment (21.4%) (See Table 8 in Annex 2 for the list of symptom for which the respondents sought treatment).

6.7 Existing STI Symptom/s and Treatment

Apart from their past year's experiences, the sex workers were also asked if they had been experiencing any STI symptoms at the time of the survey. There were 48.2 percent of

respondents who reported that they were experiencing at least one of the STI symptoms during the survey period (Table 6.6). Some of the symptoms reported by them were vaginal discharge (26.8%), vaginal itching (23.3%), lower abdominal pain (21.2%), vaginal odor (20.7%), painful sex (16.2%), and dysuria (12.1%). Other symptoms such as polyuria, genital ulcers, genital warts, and unusual vaginal bleeding were also mentioned. Out of 286 respondents who had been experiencing at least one STI symptom during the survey



period, only 8.7 percent had sought treatment. 60 percent of these respondents had waited 2-5 weeks to seek treatment, eight percent had waited six or more weeks, while 32 percent of them had sought treatment within one week or earlier after experiencing symptoms of STIs. 44 percent of these respondents had sought treatment from satellite clinics run by SACTS/STEP Nepal, 32 percent of them from SACTS or VCT centers, and 16 percent had received treatment from CAC and hospital each.

Sixty-four percent of the respondents who had sought treatment for the STI symptoms experienced (16/25) at the time of survey had received a prescription for medicine to be used, and 87.5 percent of them (14/16) had been able to obtain all the medicines prescribed to them. Most of them (13/14) had used all medicines that they were advised to take. While 42.9 percent of the respondents (3/4 street-based and 3/10 establishment-based) had obtained the medicines free of cost, others had paid for their medicines.

Figure 5 shows respondents with STI symptoms in the past year and at the time of the survey. A slightly higher proportion of street-based respondents (47.5%) versus those based in establishments (40.8%) had at least one STI symptom in the past year. On the contrary, a little higher proportion of establishment-based respondents compared to street-based (49% vs 47.1%) had at least one STI symptom at the time of survey. 51.8 percent of respondents did not have any such symptoms at the time of the survey.

Evisting STI Symptoms and Turst	St	reet	Establishment		Total	
Existing STI Symptoms and Treatment	n	%	n	%	n	%
Types of STI symptoms experienced currently						
Vaginal Discharge	67	28.2	92	25.9	159	26.8
Vaginal Itching	56	23.5	82	23.1	138	23.3
Lower Abdominal Pain	50	21.0	76	21.4	126	21.2
Vaginal Odor	46	19.3	77	21.7	123	20.7
Painful Sex	41	17.2	55	15.5	96	16.2
Dysuria	27	11.3	45	12.7	72	12.1
Polyuria	26	10.9	29	8.2	55	9.3
Genital Ulcer or Sore	14	5.9	19	5.4	33	5.6
Genital Warts	9	3.8	5	1.4	14	2.4
Unusual Vaginal Bleeding (Discharge)	2	0.8	1	0.3	3	0.5
Others	0	0.0	4	1.1	4	0.7
Any of the Above Symptoms	112	47.1	174	49.0	286	48.2
None of the Above Symptoms	126	52.9	181	51.0	307	51.8
Το	al 238	*	355	*	593	*
Went for treatment for any of above symptoms						
Yes	10	8.9	15	8.6	25	8.7
No	102	91.1	159	91.4	261	91.3
Tot	al 112	100.0	174	100.0	286	100.0
Duration, respondent waited to received treatment after experiencing STI symptom						
Less than 1 week	2	20.0	1	6.7	3	12.0
After 1 week	2	20.0	3	20.0	5	20.0
2-5 week	6	60.0	9	60.0	15	60.0
6 and more weeks	-	-	2	13.3	2	8.0
Mean week	1	.7		2.8	2.4	
Το	al 10	100.0	15	100.0	25	100.0

 Table 6.6: Reported Existing STI Symptom/s and Treatment

Existing CTI Summtones and Treatment	Str	eet	Establ	ishment	Total	
Existing STI Symptoms and Treatment	n	%	n	%	n	%
Satellite clinic (SACTS/STEP Nepal)	3	30.0	8	53.3	11	44.0
SACTS	3	30.0	5	33.3	8	32.0
CAC	3	30.0	1	6.7	4	16.0
Hospital	1	10.0	3	20.0	4	16.0
Private Clinic	0	0.0	2	13.3	2	8.0
Pharmacy	1	10.0	0	0.0	1	4.0
Others	1	10.0	0	0.0	1	4.0
Total	10	100.0	15	100.0	25	100.0
Received medicine prescription						
Yes	5	50.0	11	73.3	16	64.0
No	5	50.0	4	26.7	9	36.0
Total	10	100.0	15	100.0	25	100.0

CHAPTER 7.0: EXPOSURE TO STI/HIV/AIDS AWARENESS PROGRAMS

This chapter discusses and explores the exposure of FSWs to the ongoing HIV/AIDS awareness programs and their participation in those activities. The respondents in the survey were asked several questions relating to some of the most important components of current HIV/AIDS related programs run by several organizations. Information provided by them has been analyzed in the following sections.

7.1 Peer/Outreach Education

One of the major components of the ongoing STI/HIV/AIDS intervention is the mobilization of outreach and peer educators (OEs and PEs) to educate the target population on STI/HIV/AIDS and preventive measures. The majority of the respondents (83.8%) - 82.4 percent of the street-based and 84.8 percent of the establishment-based FSWs - had met or interacted with PEs/OEs representing different organizations. It was further stated that their meetings/discussions were mostly focused on HIV/AIDS transmission (94.8%), condom use (76.5%), and STI transmission (72.8%). Some (47.7%) even had a condom-use demonstration. The respondents had mostly met OE/PEs from STEP Nepal and CAC (54.1% and 44.9%, respectively). Further it has been noticed that street-based FSWs mostly interacted with OE/PEs from CAC Nepal (81.1%), while the establishment-based FSWs mostly met with STEP Nepal OE/PEs (76.7%) and SWAN Nepal (7.6%). It was further noticed that the sex workers met OEs/PEs quite often, as around 48 percent had seen them four or more times (Table 7.1).

Peer Educator/Outreach Education	Sti	reet	Establ	ishment	To	tal
	n	%	n	%	n	%
Met or discussed or interacted with Peer Educators (PE) or Outreach Educators (OE) in the last 12 months						
Yes	196	82.4	301	84.8	497	83.8
No	42	17.6	54	15.2	96	16.2
Total	238	100.0	355	100.0	593	100.0
Activities involved in with OEs/PEs						
Discussion on how HIV/AIDS is/isn't transmitted	182	92.9	289	96.0	471	94.8
Regular/non-regular use of condom	152	77.6	228	75.7	380	76.5
Discussion on how STI is/isn't transmitted	142	72.4	220	73.1	362	72.8
Demonstration on using condom correctly	88	44.9	149	49.5	237	47.7
Counseling on reducing number of sex partner	12	6.1	22	7.3	34	6.8
STI treatment/cure after treatment	8	4.1	21	7.0	29	5.8
Training on HIV and STI, Condom day, AIDS day, participation in discussions and interaction programs	11	5.6	17	5.6	28	5.6
Total	196	*	301	*	497	*
Organizations represented by OEs/PEs						
STEP Nepal	38	19.4	231	76.7	269	54.1
CAC	159	81.1	64	21.3	223	44.9
SWAN Nepal	15	7.7	23	7.6	38	7.6
Chhahari Nepal	14	7.1	1	0.3	15	3.0
SACTS	7	3.6	4	1.3	11	2.2
WATCH	1	0.5	2	0.7	3	0.6
Richmond Fellowship	1	0.5	1	0.3	2	0.4
Change Nepal	1	0.5	0	0.0	1	0.2
GWP	0	0.0	1	0.3	1	0.2
Others	0	0.0	2	0.7	2	0.4
Total	196	*	301	*	497	*
Number of meeting with OEs/PEs in the past year						

Table 7.1: Meeting/Interaction of FSWs with Peer/Outreach Educators

Peer Educator/Outreach Education	Street		Establishment		Total	
	n	%	n	%	n	%
2-3 times	94	48.0	130	43.2	224	45.1
4-6 times	48	24.5	88	24.8	136	27.4
7-12 times	27	13.8	34	11.3	61	12.3
More than 12 times	15	7.7	26	8.6	41	8.2
Total	196	100.0	301	100.0	497	100.0

7.2 Drop-in-Centers Visiting Practice

Drop-in-Centers (DICs) are another important component of HIV prevention programs. The DICs not only provide a safe space for the target communities to socialize but are also the site for educational and counseling activities. About 34 percent of the respondents had visited a DIC in the year preceding the survey. Street-based FSWs were more likely than their counterparts based in establishments to visit and socialize at DICs; 43.7 percent of the street-based and 27 percent of establishment-based FSWs had visited a DIC in the past year. They had mostly visited DICs to watch films on HIV/AIDS (74.5%), to learn the correct way of using a condom (56.5%), to collect free condoms (35.5%), and to participate in discussions on HIV transmission (35%). Most of the respondents had visited DICs run by SACTS (45%), CAC (35.5%), and STEP Nepal (22.5%). Among those who visited DICs, almost 73 percent had visited more than once (Table 7.2).

DIC Visiting Practices of Female Sex Workers	Street		Establishment		Total	
	n	%	n	%	n	%
DIC visit in the last 12 months						
Yes	104	43.7	96	27.0	200	33.7
No	134	56.3	259	73.0	393	66.3
Total	238	100.0	355	100.0	593	100.0
Activities involved in at DIC						
Went to watch film on HIV/AIDS	78	75.0	71	74.0	149	74.5
Went to learn the correct way of using condom	55	52.9	58	60.4	113	56.5
Went to collect condoms	45	43.3	26	27.1	71	35.5
Participated in discussion on HIV transmission	31	29.8	39	40.6	70	35.0
Participated in discussion on STI transmission	17	16.3	24	25.0	41	20.5
Participated in training, interaction and discussion programs on HIV/AIDS and STI	6	5.8	17	17.7	23	11.5
Went for STI treatment	8	7.7	15	15.6	23	11.5
Took friend with me	9	8.7	13	13.5	22	11.0
Went to collect IEC materials	4	3.8	5	5.2	9	4.5
Others	0	0.0	1	1.0	1	0.5
Total	104	*	96	*	200	*
Name of organizations that run DIC visited by them						•
SACTS	49	47.1	41	42.7	90	45.0
CAC	40	38.5	31	32.3	71	35.5
STEP Nepal	19	18.3	26	27.1	45	22.5
Swan Nepal	7	6.7	11	11.5	18	9.0
Chhahari Nepal	5	4.8	0	0.0	5	2.5
Change Nepal	1	1.0	0	0.0	1	0.5
WATCH	0	0.0	1	1.0	1	0.5
INF/PALUWA	0	0.0	1	1.0	1	0.5
AMDA	1	1.0	0.0	0.0	1	0.5
Others	1	1.0	3	3.1	4	2.0
Total	104	*	96	*	200	*
Number of visits to the DICs in the past year						
Once	30	28.8	24	25.0	54	27.0
2-3 times	56	53.8	51	53.1	107	53.5
4-6 times	15	14.4	18	18.8	33	16.5
7-12 times	3	2.9	1	1.0	4	2.0
More than 12 times	0	0.0	2	2.1	2	1.0
Total	104	100.0	96	100.0	200	100.0

Table 7.2: DIC Visiting Practice of Female Sex Workers

7.3 STI Clinic Visiting Practices

Prompt detection and treatment of STIs can prevent many health hazards. Several STI clinics are being run by different organizations to facilitate timely detection and urgent treatment of STIs. The survey respondents were also asked if they had visited any STI clinics in the past year. Around 44 percent of them had visited a STI clinic in the past year. Mostly, the respondents had physical examinations for identifying STIs (78.8%) and had their blood tested for STIs (65%) in the clinics that they visited in the past year. Additionally, some (44.2%) were advised to use a condom during each act of sexual intercourse, while some of them (42.7%) were advised to take medicine on a regular basis. The most frequently visited STI clinic was SACTS (55.4%) and CAC (21.5%). Among those who visited an STI clinic, 55.4 percent had visited the clinic more than once (Table 7.3).

STI Clinic Visiting Practices of Female Sex Workers	Street		Establishment		Total	
	n	%	n	%	n	%
Visited any STI clinic in the last 12 months						
Yes	109	45.8	151	42.5	260	43.8
No	129	54.2	204	57.5	333	56.2
Total	238	100.0	355	100.0	593	100.0
Activities involved in at STI clinic						
Physical examination conducted for STI identification	86	78.9	119	78.8	205	78.8
Blood tested for STI	68	62.4	101	66.9	169	65.0
Was advised to take complete and regular medicine	43	39.4	68	45.0	111	42.7
Was advised to use condom in each sexual intercourse	56	51.4	59	39.1	115	44.2
Took friend with me	6	5.5	9	6.0	15	5.8
Was suggested to reduce number of sexual partners	7	6.4	4	2.6	11	4.2
Others	1	0.9	1	0.7	2	0.8
Total	109	*	151	*	260	*
Name of organizations that run STI clinic visited by them						
SACTS	75	68.8	69	45.7	144	55.4
CAC	21	19.3	35	23.2	56	21.5
Satellite Clinic (STEP/SACTS)	13	11.9	38	25.2	51	19.6
Private Clinic	3	2.8	17	11.3	20	7.7
Hospital	4	3.7	8	5.3	12	4.6
SWAN Nepal	2	1.8	3	2.0	5	1.9
Pharmacy	3	2.8	2	1.3	5	1.9
WATCH	0	0.0	2	1.3	2	0.8
GWP	0	0.0	1	0.7	1	0.4
INF/PALUWA	0	0.0	1	0.7	1	0.4
Others	1	0.9	1	0.7	2	0.8
Don't know	1	0.9	0	0.0	1	0.4
Total	109	*	151	*	260	*
Number of visits to STI clinics in the past year						
Once	48	44.0	68	45.0	116	44.6
2-3 times	56	51.4	75	49.7	131	50.4
4-6 times	4	3.7	7	4.6	11	4.2
More than 7 times	1	0.9	1	0.7	2	0.8
Total	109	100.0	151	100.0	260	100.0

Table 7.3: STI Clinic Visiting Practice of Female Sex Workers

7.4 VCT Centers Visiting Practice

It was reported that about 53.5 percent of the FSWs had visited Voluntary Counseling and Testing (VCT) centers during the past 12 months. Among them, 90.9 percent had taken advantage of the HIV testing facilities and 68.5 percent had gone back to receive their HIV test results. Similarly, some respondents had also received pre- and post-test counseling (66.9% and 46.7%, respectively). Other activities that the respondents participated in at the VCT centres are summarized in Table 7.4. The most frequently visited VCT centers were, again, run by SACTS (61.8%) and CAC (22.1%). While 36.3 percent of the respondents had paid one visit to a VCT center, 54.9 percent of them had been there 2-3 times. Others went there quite often (Table 7.4).

Those respondents who had not visited a VCT center even once in the past year were further asked reasons for not making such visits. Forty-nine percent of the respondents mentioned that they did not feel the need to be tested (30.1% street-based and 59.5% establishment-based) while 33 percent of them said they did not know about any VCT centers (40.8% street-based and 28.3% establishment-based). Some of the other reasons reported by the respondents for not paying a visit to the VCT center in the past year were fear of exposure (20.6%), because they did not feel that they had any symptoms of HIV (18.5%), and there were no VCTs nearby (12.7%) because they already knew their HIV status (6.2%).

VCT visiting practices of Female Sex Workers	Sti	reet	Establi	ishment	Тс	otal
	n	%	n	%	n	%
Visited VCT center in the last 12 months Yes	135	56.7	182	51.3	317	53.5
No	103	43.3	173	48.7	276	46.5
Total	238	100.0	355	100.0	593	100.0
Activities involved in at VCT	230	100.0	555	100.0	373	100.0
Blood sample taken for HIV test	125	92.6	163	89.6	288	90.9
Received HIV test result	91	67.4	105	69.2	217	68.5
Received pre-HIV test counseling	85	63.0	120	69.8	217	66.9
Received post HIV test counseling	63	46.7	85	46.7	148	46.7
Got information on HIV/AIDS window period	35	25.9	59	32.4	94	29.7
Received counseling on using condom correctly in each						
sexual Intercourse	40	29.6	46	25.3	86	27.1
Took a friend with me	7	5.2	19	10.4	26	8.2
Others	1	0.7	0	0.0	1	0.3
Total	135	*	182	*	317	*
Name of the organization that run the VCTs visited by	them					
SACTS	96	71.1	100	54.9	196	61.8
Satellite Clinic (STEP/SACTS)	28	20.7	75	41.2	103	32.5
CAC	28	20.7	42	23.1	70	22.1
SWAN Nepal	2	1.5	3	1.6	5	1.6
WATCH	0	0.0	2	1.1	2	0.6
AMDA	1	0.7	0	0.0	1	0.3
GWP INF/PALUWA	0	0.0	1	0.5	1	0.3
Others	2	0.0	1 2	0.5	4	0.3
		1.5		*		1.5
Total Number of visits to VCTs in the past year	135	÷	182	*	317	*
Once	44	32.6	71	39.0	115	36.3
2-3 times	80	59.3	94	51.6	174	54.9
4-6 times	10	7.4	15	8.2	25	7.9
7-12 times	1	0.7	1	0.5	2	0.6
More than 12 times	0	0.0	1	0.5	1	0.3
Total	135	100.0	182	100.0	317	100.0
Reason for not visiting VCT center in the last12 months						
Do not feel the need to be tested	31	30.1	103	59.5	134	48.6
Do not know about VCT center	42	40.8	49	28.3	91	33.0
Fear of exposure	31	30.1	26	15.0	57	20.6
Do not have any symptoms of HIV	14	13.6	37	21.4	51	18.5
No VCT near by	13	12.6	22	12.7	35	12.7
Have already tested and know status	6	5.8	11	6.4	17	6.2
Lack of time/busy	3	2.9	5	2.9	8	2.9
Others	4	3.9	8	4.6	12	4.3
Total	103	*	173	*	276	*
Respondents had been ever approached and explained	100		210		270	
about need of VCT by health workers/ outreach workers Yes	183	76.9	281	79.2	464	78.2
No Total	55 238	23.1 100.0	74 355	20.8 100.0	129 593	21.8 100.0
Topics discussed by the health/outreach workers	230	100.0	555	100.0	575	100.0
Visit VCT incase of any problems	161	88.0	255	90.7	416	89.7
Visit VCT once in a month in any case						
	101	55.2	161	57.3	262	56.5
Topics relating to sex partners	52	28.4	85	30.2	137	29.5
Others	3	1.6	2	0.7	5	1.1
Total	183	*	281	*	464	*

Table 7.4: VCT Visiting Practice of FSWs

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

The respondents in this round of survey were questioned further to see if they had ever been approached and explained to about the need of a VCT by any health workers/outreach workers. It was found that 78.2 percent of the respondents had been approached by health workers/outreach workers to explain to them about the need of VCTs. These health/outreach workers had told them to visit a VCT center in case of any problems (89.7%), and to visit a VCT center at least once a month (56.5%). Some had also talked to them about their sex partners (29.5%). However, 21.8 percent of the respondents (23.1% street-based and 20.8% establishment-based) had never been approached and engaged in a discussion by any heath or outreach workers (Table 7.4).

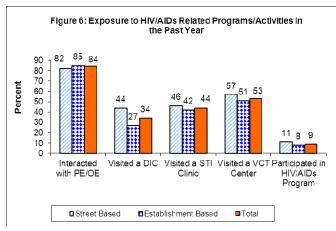
7.5 Participation in STI/HIV/AIDS Awareness Programs

The respondents were further asked if they had participated in any HIV/AIDS awareness raising programs or community events in the past year. The reported participation of the respondents in such activities was minimal with only 9.3 percent having done so (11.3% street-based and 7.9% establishment-based FSWs). Some of the activities that the FSWs had participated in were group discussions (49.1%), condom use demonstrations (41.8%), Condom Day celebrations (34.5%), AIDS Day celebrations (32.7%), HIV/AIDS-related training (27.3%), and video show (21.8%). While 49.1 percent of the respondents had participated in such activities just once, 45.5 percent of them had been part of various programs 2-3 times in the past year. Others (5.4%) had participated even more often (Table 7.5).

Participations in HIV/AIDS Awareness Programs	St	reet	Establis	shment	Т	otal
i articipations in fit v/mibb riwareness i rograms	n	%	n	%	n	%
Participated in HIV/AIDS awareness raising program or co	mmunit	y events				
Yes	27	11.3	28	7.9	55	9.3
No	211	88.7	327	92.1	538	90.7
Total	238	100.0	355	100.0	593	100.0
Activities participated in	N=27		N=28		N=55	
Group discussions	9	33.3	18	64.3	27	49.1
Condom use demonstrations	8	29.6	15	53.6	23	41.8
Condom Day	15	55.6	4	14.3	19	34.5
AIDS Day	12	44.4	6	21.4	18	32.7
HIV/AIDS related training	7	25.9	8	28.6	15	27.3
Video shows	4	14.8	8	28.6	12	21.8
Street drama	1	3.7	1	3.6	2	3.6
HIV/AIDS related Workshops	2	7.4	0	0.0	2	3.6
Total	27	*	28	*	55	*
Name of the organizations that organized such activities						
CAC	13	48.1	13	46.4	26	47.3
SACTS	11	40.7	11	39.3	22	40.0
Others	3	11.1	3	10.7	6	10.9
Steps Nepal	1	3.7	3	10.7	4	7.3
SWAN Nepal	1	3.7	3	10.7	4	7.3
AMDA	1	3.7	0	0.0	1	1.8
NRCS	1	3.7	0	0.0	1	1.8
Don't Know	1	3.7	0	0.0	1	1.8
Total	27	*	28	*	55	*
Frequency of such participation in the past year						
Once	10	37.0	17	60.7	27	49.1
2-3 times	16	59.3	9	32.1	25	45.5
4-6 times	1	3.7	1	3.6	2	3.6
7-12 times	0	0.0	1	3.6	1	1.8
Total	27	100.0	28	100.0	55	100.0

Table 7.5: Participation of FSWs in STI/HIV/AIDS Awareness Program

As seen in Figure 6, not much variation is noticed between street-based FSWs and establishment-based FSWs with regards to HIV/AIDS program exposure in the past year. However a higher proportion of street-based than establishment- based FSWs (43.7% vs. 27%) had visited a DIC in the past year. Respondents had mostly interacted with PEs/OEs followed by paying visits to a VCT. Participation in any of the HIV/AIDS programs was the both lowest amongst street and establishment-based FSWs.



It is likely that those FSWs who come into contact with OE/PE also come to know about other services from them. Further analysis was done to understand what proportion of FSWs who had met/interacted with OE/PE and also had visited the service centers in the past year. Among the FSWs who had met OE/PE in past year, 63.2 percent had been to a VCT center, 50.5 percent of them had visited a STI clinic and 39.8 percent had been to a DIC while only 10.1 percent had participated in HIV/AIDS awareness program (See Table 11 in Annex 2).

7.6 Stigma and Discrimination

People living with HIV/AIDS are often ostracized in society. The respondents' perceptions of HIV-positive persons and the stigma associated with the disease was examined with the help of a series of questions, as shown in Table 7.6.

It was noted that the majority of the respondents were willing to take care of any of their male relative (92.4%) or a HIV-positive female relative (93.9%) at their home if necessary. However, 66.3 percent of FSWs said that if a family member had HIV they would keep it confidential and would rather not talk about it.

Stigma and Discrimination		reet 238)	Establia (N=3			Total (=593)
	n	%	n	%	n	%
Willing to take care of HIV positive male relative in the hou	sehold					
Yes	222	93.3	326	91.8	548	92.4
No	15	6.3	28	7.9	43	7.3
Don't Know	1	0.4	1	0.3	2	0.3
Willing to take care of HIV positive female relative in the h	ousehold					
Yes	224	94.1	333	93.8	557	93.9
No	13	5.5	21	5.9	34	5.7
Don't Know	1	0.4	1	0.3	2	0.3
Willing to maintain confidentiality of a HIV positive family	member					
Yes	165	69.3	228	64.2	393	66.3
No	72	30.3	125	35.2	197	33.2
Don't Know	1	0.4	2	0.6	3	0.5
Total	238	100.0	355	100.0	593	100.0

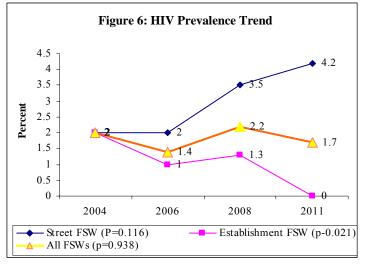
Table 7.6: Stigma and Discrimination

CHAPTER 8.0: COMPARATIVE ANALYSIS

This chapter analyzes the trends between the four rounds of IBBS surveys by comparing the data on selected indicators from all four rounds. It specifically compares the prevalence of HIV and STIs, condom-use practices, knowledge of HIV/AIDS, and exposure to HIV/AIDS prevention/awareness programs among FSWs. This comparison is possible only because the same sampling design, same sample size, and same sampling procedures were used in all four rounds of the IBBS survey.

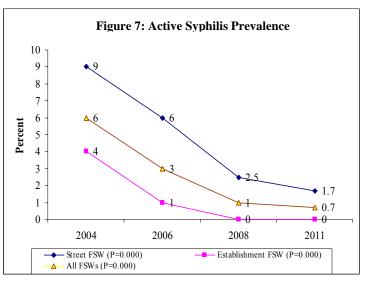
8.1 Prevalence of HIV and Syphilis Infection

The HIV prevalence rate was 1.7 percent in this round of IBBS. Previous rounds had detected 2 percent in 2004, 1.4 percent in 2006, and 2.2 percent in 2008. Unlike the previous rounds, none of the establishment-based FSWs had HIV in this round of the survey (2.0% in 2004, 1% in 2006, 1.3% in 2008, none in 2011) (Figure 7). However, the HIV prevalence has increased among street-based FSWs since the first round (2% each in 2004 to 4.2% in 2011). However, this difference in



prevalence is not statistically significant at a 95 percent confidence level (Table 10 in Annex 2).

Syphilis infection, on the other hand, has decreased significantly over the years. Active syphilis has decreased from six percent in 2004, to 0.7 percent in 2011. Prevalence of syphilis history is 2.5 percent (8.8 % in 2004). In both cases, the decrease in prevalence rate is significant (p=<0.05). Prevalence of both active syphilis and syphilis history have significantly decreased since the first round among street as well as establishment-based FSWs (p<0.05) (Figure 8).



8.2 Socio Demographic Characteristics of FSWs

Table 8.1 analyzes the trend in the socio-demographic characterisitics of FSWs since the first round of the survey. The age composition of the respondents does not show significant change, as in all the four rounds. Percentage of FSWs whose age was less than 20 years has remained stable around 30 percent.

Over 70 percent of the respondents in all the four rounds were ever married. However, there has been a significant increase in the proportion of street-based FSWs who had attended some years of schooling since the first round.

	2004	2006	2008	2011	P Value
Age of respondents		Less	than 20		
Street	16.0	21.5	14.0	17.6	0.849
Establishment	40.4	36.0	37.3	35.5	0.275
Total	30.6	30.2	28.0	28.3	0.314
Marital status		Ever	married		
Street	89.0	82.0	83.0	84.9	0.340
Establishment	60.0	71.7	62.7	69.6	0.088
Total	71.6	75.8	70.8	75.7	0.351
Education	I	Attended some	years of schoo	ling	
Street	33.5	40.5	40.5	46.6	0.015
Establishment	65.0	67.0	63.0	65.9	0.944
Total	52.4	56.4	54.0	58.2	0.110
Age at first sex	Less t	han 20			
Street	92.5	92.0	83.0	88.2	0.031
Establishment	90.3	92.3	90.7	92.7	0.422
Total	91.2	92.2	87.6	90.9	0.385
Duration of sexwork		<1	year		
Street	25.0	27.0	26.5	23.1	0.603
Establishment	39.3	45.0	38.7	30.7	0.005
Total	33.6	37.8	33.8	27.6	0.011

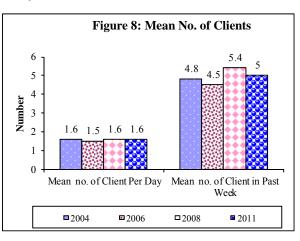
Table 8.1: Trend Analysis of Socio Demographic Characterisitics of FSWs

2004,2006,2008 Surveys N=500(Street=200, Establishment=300), 2011 Survey N=393 (Street=238, Establishment=355)

It was also observed that a considerable proportion of the FSWs had their first sexual encounter at the age of less than 20 years. Although no significant change was noticed in this regard among establishment-based sex workers, the street-based sex workers reporting to have been engaged in first sexual contact at less than 20 years has significantly decreased since the first round of the survey (92.5% in 2004 to 88.2% in 2011). At the same time, the proportion of respondents who had entered the sex trade recently i.e. less than a year before has decreased in the fourth round; although the decreasing trend is not so prominent among street based sex workers, the change is statistically significant among establishment based respondents (39.3% in 2004 to 30.7% in 2011).

8.3 Average Number of Clients Served by FSWs

Figure 9 shows average number of clients served by FSWs in one day and in the past week. As seen in figure, there has not been much change in the number of clients served by the FSWs. The respondents on average served around five clients in the week preceding the survey in all the four rounds, while the mean number of clients that the respondents had in one day was around 2 across all of the four rounds.



8.4 Condom Carrying Practice and HIV Testing

Although condom carrying behaviour among street based FSWs has not changed over the four rounds of IBBS, it has significantly improved among establishment based FSWs since the first round (4.7% in 2004 to 16.9% in 2011). The proportion of respondents reporting to have taken HIV testing at least once has also has significantly increasing tren since the second round of the survey indicating that more and more FSWs are growing aware of the need to know their HIV status with every passing year. The trend has improved with the street as well as establishment FSWs. Overall, around two-fifths of FSWs had taken HIV testing in 2006 (40.6%) and 2008(40.2%), while over two-thirds of them (64.4%) reported doing so in 2011.

	2004	2006	2008	2011	P Value
Respondents carry condom usually					
Street	30.0	43.0	46.5	27.7	0.602
Establishment	4.7	25.7	14.7	16.9	0.006
Total	14.8	32.6	27.4	21.2	0.152
Ever had an HIV test					
Street	*	47.5	42.5	66.4	0.000
Establishment	*	36.0	38.7	63.1	0.000
Total	*	40.6	40.2	64.4	0.000

Table 8.2: Trend Analysis of Condom Carrying Practice and HIV Test Taken among FSWs

2004, 2006, 2008 Surveys N=500(Street=200, Establishment=300), 2011 Survey N=393 (Street=238, Establishment=355) *data not collected in 2004

8.5 Condom Use with Different Sex Partners

Data from the survey showed that consistent condom using behavior has significantly improved among the FSWs. A significant increase in the use of condoms with last client was observed among the respondents in the current survey since the previous rounds (74% in 2004 to 82.6% in 2011). Condom use with last client had specifically improved among establishment based sex workers. A considerable improvement is found amongst street as well as establishment-based FSWs. Likewise, a significantly higher proportion of the respondents in 2011 reported consistent condom use with their clients in the year preceding the survey than reported in the previous rounds (56.6% in 2004 to 73.4% in 2011). The

practice of using condoms consistently with clients in the year preceding the survey showed significant signs of improvement amongst both street and establishment-based FSWs (p<0.05). Similarly, the practice of using condoms in each sexual act with partners other than clients, husbands, and male friends has increased significantly among both street and establishment-based respondents over the years. Consistent use of condoms with regular clients has improved since the first round of the survey; this was true especially in case of establishment based sex workers (60.5% in 2004 to 74.7% in 2011). However, the practice of using condom consistently with non-paying regular partners has overall decreased among ther respondents with significant decrease among establishment based sex workers (Table 8.3).

	2004	2006	2008	2011	P Value
Use o	f condom with	most recent client	t		
Street	80.5	72.5	72.5	83.6	0.351
Establishment	69.7	80.3	76.7	82.0	0.001
Total	74.0	77.2	75.0	82.6	0.002
Consistent use	of condom with	n the cl ient in the	past year		
Street	57.5	52.5	51.5	71.8	0.002
Establishment	56.0	58.7	55.3	74.4	0.000
Total	56.6	56.2	53.8	73.4	0.000
Consistent use of	condom with r	egular clients in t	he past year		
Street	65.7	67.8	59.9	74.5	0.176
Establishment	60.5	63.4	55.3	74.7	0.003
Total	62.5	65.1	57.2	74.6	0.001
Consiste	ent use of condo	om with non-payi	ng regular partne	r in the past ye	ar
Street	17.4	6.1	7.4	12.8	0.279
Establishment	18.7	7.9	3.9	10.9	0.011
Total	18.1	7.2	5.4	11.6	0.008
Consistent use of	condom with p	artner other than	ı client, husband,	male friend in	
	the past	year			
Street	*	56.3	61.4	74.0	0.010
Establishment	*	59.7	38.1	79.0	0.000
Total	*	58.5	49.2	76.9	0.000

Table 8.3: Trend Analysis of Consistent Condom Use with Different Sex Partners in the Past Year

*data from 2004 surveynot comparable

Note = N include those FSWs who had sexual contact with the specified partners in the past year

8.6 Comprehensive Knowledge of HIV/AIDS

Table 8.4 compares the comprehensive knowledge on ways of HIV/AIDS transmission among the respondents since the second round of IBBS. Data from the first round is incomparable, as these questions were not read out to the respondents in the first round as in the following three rounds. No significant change was noticed in the awareness level of the respondents across the three rounds with regards to "BCDEF". However, the proportion of respondents who understood that they could prevent themselves from HIV by abstaining from sexual contact has significantly dropped since the second round. It is because of this indicator that the proportion of respondents with knowledge of all of ABC has decreased significantly since 2006 (55.2% in 2006 to 47.7% in 2011). Knowledge of BCDEF is also still quite low.

	2006	2008	2011	P Value
A. Can protect themselves through abstin	ence from sexual	contact		
Street	70.0	71.0	57.1	0.003
Establishment	65.3	68.0	60.8	0.000
Total	67.2	69.2	59.6	0.004
B. Can protect themselves through monog	amous sexual	I		
Street	82.0	79.0	81.5	0.000
Establishment	76.7	84.7	79.4	0.438
Total	79.2	82.4	80.5	0.699
C Can protect themselves through condom	n use every time	during sex		
Street	86.5	86.0	91.2	0.119
Establishment	86.3	95.7	86.5	0.886
Total	86.4	91.8	88.7	0.817
D. A healthy-looking person can be infect	ed with HIV	· · ·		
Street	89.5	91.0	89.9	0.903
Establishment	93.3	93.0	87.6	0.019
Total	91.8	92.2	88.8	0.055
E. A person can not get the HIV virus from	m mosquito bite	· ·		
Street	45.5	39.0	47.1	0.770
Establishment	47.3	51.3	41.7	0.124
Total	46.6	46.4	44.0	0.350
F. A person can not get HIV by sharing n	neal with an HIV	infected person		
Street	79.0	76.0	77.7	0.775
Establishment	85.0	86.0	82.0	0.268
Total	82.6	82.0	80.5	0.315
Knowledge of ABC				
Street	60.0	57.0	46.2	0.003
Establishment	52.0	59.3	48.5	0.30
Total	55.2	58.4	47.6	0.008
Knowledge of BCDEF				
Street	29.0	27.5	34.5	0.198
Establishment	31.0	42.3	27.6	0.268
Total	30.2	36.4	30.4	0.950

Table 8.4: Trend Analysis of Knowledge of Modes of HIV/AIDS Transmission

*Data from 2004 surveynot comparable.

2006, 2008 Rounds N=500(Street=200, Establishment=300), 2011 Round N=393 (Street=238, Establishment=355)

8.7 Exposure to HIV/AIDS Program

Table 8.5 compares the exposure of the respondents to different components of HIV/AIDS prevention and awareness programs. In all the three rounds, a considerable proportion of the respondents had met or interacted with PE/OEs (83.2% in 2006, 59.6% in 2008, and 83.3% in 2011). Not much change is noticed in DIC visiting practices among the respondents since the second round. However, the practice of visiting an STI clinic and a VCT center has significantly improved over the years amongst street-based as well as establishiment-based FSWs. On the contrary, participation in HIV/AIDS awareness raising program has significantly decreased since the second round of the survey (28% in 2006 to 9.3% in 2011).

	2006	2008	2011	P Value
Met or discussed with OEs/PEs				
Street	79.5	61.5	82.4	0.346
Establishment	85.7	58.3	84.4	0.868
Total	83.2	59.6	83.3	0.464
Visited DIC				
Street	35.0	26.5	43.7	0.040
Establishment	28.7	18.3	27.0	0.740
Total	31.2	21.6	33.7	0.259
Visited STI clinic				
Street	31.0	32.5	45.8	0.001
Establishment	26.0	24.7	42.5	0.000
Total	28.0	27.8	43.8	0.000
Visited VCT center				
Street	38.5	39.5	56.7	0.000
Establishment	21.3	28.3	51.3	0.000
Total	8.2	32.8	53.5	0.000
Participated in HIV/AIDs awareness raising	g program			
Street	32.0	5.5	11.3	0.000
Establishment	25.3	7.7	7.9	0.000
Total	28.0	6.8	9.3	0.000

Table 8.5: Trend Analysis on Exposure to HIV/AIDs/STI related programs/activities

* no information relating to program exposure was collected in 2004 survey. 2006, 2008 Rounds N=500(Street=200, Establishment=300), 2011 Round N=393 (Street=238, Establishment= 355)

CHAPTER 9.0: SUMMARY OF MAJOR FINDINGS

Prevalence of HIV and STIs

Of the 593 respondents who participated in the survey, 10 (1.7%) were infected with HIV. This prevalence was only seen in street-based FSWs, where 4.2 percent of the (10/238) were HIV-positive. Of the 355 establishment-based FSWs who participated in the survey none were HIV-positive. Previous IBBS rounds found 2.2 percent in 2008, 1.4 percent in 2006, and 2 percent in 2004.

Syphilis history (RPR +ve and RPR titre < 1:8) was found in 2.5 percent and current syphilis (RPR+ and RPR titre \ge 1:8) was 0.7 percent for both street and establishment-based FSWs. Four of the 238 street-based respondents (1.7%) were currently infected with high titre syphilis at the time of the survey, while no cases of active syphilis were detected among the 355 establishment-based respondents. The prevalence of both active syphilis and a history of syphilis has significantly decreased since the first round was conducted among street and establishment-based FSWs (p<0.05)

Socio-Demographic Characteristics

The age of the FSWs in the Kathmandu valley ranged from 16 to 48 years with a median age of 23 years. The average age of establishment-based respondents was younger than the street-based respondents.

Thirty-one percent of the respondents were illiterate with a higher proportion among streetbased FSWs (41.2%) than among those based in establishments (24.2%).

Marriage at an early age is a prevalent trend and 64.4 percent of the married respondents were married between 15-19 years of age. A large proportion (75.7%) of FSWs had been married at least once and a higher proportion of the street-based FSWs (85%) were married compared to their establishment-based counterparts (70%). Overall, 52.4 percent of the respondents were currently married.

Child Birth and Use of Family Planning

Eighty-one percent of the respondents who were or had been married had given birth to a child, 14.9 percent (67/449) had had at least one miscarriage, while 40.1 percent (180/449) had terminated/aborted pregnancies.

On family planning, all the respondents had heard of condoms and more than nine in ten respondents had heard about injectables (99.2%), pills (97.3%), female sterilization (97.1%), and male sterilization (96.8%). Additionally, 87 percent of the respondents had been using some form of family planning to delay or avoid pregnancy at the time of the survey. The majority of (86.4%) had been using condoms. Among other methods, some were using injectables (17.4%) or taking pills (10.9%),

Sexual Behavior and Condom Use

Around 71 percent of the respondents had their first sexual contact from 15-19 years of age. There were some (20.4%) who had their first sexual contact between 11-14 years. The mean number of months for which the respondents were involved in the sex trade was 30 months, with 40.3 percent of them having entered the sex trade in the past year. A higher proportion of establishment-based FSWs had joined the sex industry in the past year (establishment 43.4%; street-based 35.7%). Both the street as well as establishment-based respondents had had an average of 5.5 sex partners during the prior to the survey. Around 83 percent of the respondents had used a condom during their last sexual contact with a client. The practice of consistent condom use was lowest with non-paying regular partners. Common reasons cited by both street and establishment-based FSWs for not using condoms with all partners were because the 'partner objected' and/or because they had 'used other contraceptives.' Additionally, it is evident that a slightly higher proportion of establishment-based FSWs used condoms consistently with clients (establishment 74.4%; street-based 71.8%), occasional sex partners (establishment 79%; street-based 74%), and regular clients (establishment74.7%; street-based 74.5%) in the past year.

Condom Use and Accessibility

Around five percent of the respondents had never used a condom. Additionally, 48.7 percent reported that they obtained free condoms all the time; 12.6 percent always purchased them; and 34.1 percent obtained them both by getting them for free and buying them. A slightly higher proportion of establishment-based FSWs (51.8%) than street-based FSWs (44.1%) reported that they had access to free condoms. Among those respondents who reported obtaining free condoms, 76.4 percent said that they received them from NGO/health workers or volunteers, 63.7 percent said that their clients brought condoms with them, and 24.6 percent reported that their peers/friends usually gave condoms to them.

Use of Alcohol and Drugs by FSWs and Clients

The majority of respondents (76.6%) consumed alcohol in the past month (78.9% establishment-based FSWs and 73.1% street-based FSWs) and 29.2 percent of them (32.7% establishment and 23.9% street-based) consumed alcohol everyday. Around nine percent of the sex workers had also used drugs at least once in the past month. Additionally among the 593 sex workers, 19.7 percent said that they knew someone who injected drugs. Overall, two percent of the respondents (12/593) knew that their sex partners (including clients and spouse) injected drugs. Ten of the 593 respondents (1.7%) had injected drugs at least once. All of them had injected drugs for the first time when they were 15-19 years of age.

Source of Knowledge of HIV/AIDS

Two of the total 593 respondents had not heard about HIV/AIDS. The most common sources of information on HIV/AIDS were television (89.7%), radio (87.5%), NGO staff (83.8%), and friends/relatives (83.6%).

The proportion of sex workers who reported that they were aware of A (abstinence from sex), B (being faithful to one partner or avoiding multiple sex partners), and C (consistent condom use or use of a condom during every sex act) as HIV preventive measures were 59.6 percent, 80.5 percent, and 88.7 percent, respectively. Overall, 47.7 percent of the respondents correctly identified all three A, B, and C as HIV-preventive measures. Further, among the respondents, 88.8 percent knew that a healthy-looking person can be infected with HIV (D), 44 percent of them identified that a person cannot get HIV from a mosquito bite (E), and 80.5

percent knew that one cannot get HIV by sharing a meal with an HIV-infected person (F). Overall, however, only 30.4 percent of the respondents were aware of all the five major indicators- BCDEF, low awarenss of "E" i.e. mosquitoes do not carry the HIV virus has primarily contributed to this.

Additionally, 64.4 percent of the respondents (66.4% street-based and 63.1% establishment-based) had ever tested themselves for HIV.

Knowledge of STIs, Experienced Symptoms, and Treatment in the Past Year

Genital discharge, itching vagina, genital blisters/ulcers, abodominal pain were some of the symptoms that the respondents perceived as symptoms of STIs. However, 6.7 percent of street-based and 2.5 percent of establishment-based FSWs could not identify any symptoms of STIs. Additionally, 43.5 percent of the FSWs (47.5% street-based and 40.8% establishment-based) had experienced at least one STI symptom in the past year; among them 77.5 percent had sought treatment from Voluntary Counseling and Testing (VCT) centers, clinics, or pharmacies.

Around 48 percent reported that they were experiencing at least one of the symptoms which they perceived to be a symptom of STIs at the time of survey. Out of 286 respondents who had experienced at least one STI symptom during the survey period, only 8.7 percent sought treatment.

Exposure to STI/HIV/AIDS awareness programs

The majority of the respondents (83.8%) had met or interacted with peer educators/outreach educators (PEs/OEs) representing different organizations - about 34 percent of them had visited a drop-in center (DIC), around 44 percent had visited a STI clinic, and 53.5 percent of the FSWs had visited a Voluntary Counseling and Testing center (VCT). However, only 9.3 percent of the respondents had participated in any HIV/AIDS prevention/awareness programs. Additionally, 78.2 percent of respondents had been approached by and/or had received an explanation about the need for VCT centers by health workers/outreach workers before the survey.

In all the three rounds, a considerable proportion of the respondents had met or interacted with PE/OEs (83.2% in 2006, 59.6% in 2008, and 83.3% in 2011). There's been very little change in the DIC visiting practices among the respondents since the second round. However, the practice of visiting an STI clinic and a VCT center have significantly improved over the years. On the contrary, participation in HIV/AIDS awareness has significantly decreased since the second round of the survey (28% in 2006, 6.8% in 2008, and 9.3% in 2011).

Over 50 percent of those FSWs reached by OE/PEs have sought services run by HIV and AIDS programs such as VCT services (63.2%) and STI clinics (50.5%) in the past year. Additionally 39.8 percent of those who had met/interacted with PE/OE had been to a DIC while only 10.1 percent had participated in a HIV/AIDS awareness program.

CHAPTER 10.0: CONCLUSION AND RECOMMENDATIONS

A series of IBBS surveys among most at risk populations such as sex workers, injecting drug users, migrant workers, and men who have sex with men have been conducted under the leadership of NCASC and the technical support of ASHA Project funded by USAID. This survey provides an insight into the estimated prevalence of HIV/STIs among these vulnerable groups and is also an assessment of general sexual and other risk behaviours prevalent in the survey populations. With concerted efforts and programs launched for HIV/AIDS awareness and prevention, there has been an immense effort to reach out to the MARPs. The survey reveals that the level of awareness of HIV/AIDS and risk behaviours among the survey population is quite high. However, an in-depth assessment of comprehensive knowledge about HIV/AIDS has revealed some knowledge gaps among street as well as establishment-based FSWs. This section briefly discusses conclusions derived from some of the study's most important discoveries.

Socio demographic characteristics: The age of the FSWs in the Kathmandu Valley ranged from 16 to 48 years with a median age of 23 years. The establishment-based respondents are likely to be younger than the street-based respondents. Illiterate respondents were 31 percentand a higher proportion of the street-based FSWs (41.2%) than those based in establishments (24.2%) were illiterate. Marriage at quite an early age was a trend, as 64.4 percent of the respondents who had ever been married, were married between 15-19 years. A total of 66.4 percent of the FSWs (72.7% street, 62.3% establishment) reported that they had dependents, either children or adults, on their income.

HIV/Syphilis prevalence: Of 593 respondents who participated in the survey, 10 (1.7%) were infected with HIV. The prevalence was seen among 4.2 percent of the street-based FSWs (10/238) while none of the 355 establishment-based FSWs who participated in the survey were HIV positive.

Both active syphilis as well as syphilis history was higher amongst street-based FSWs.. Four of the 238 street-based respondents (1.7%) were currently infected with high titre syphilis at the time of the survey while no case of active syphilis was detected among any of the 355 establishment-based respondents. At the same time, 4.2 percent (10/238) of the street-based sex workers had a history of syphilis, while 1.4 percent (5/355) of establishment-based respondents had syphilis history with <1:8 titre.

Association of Socio-Demographic Characteristics with HIV Infection: It was observed that FSWs belonging to the older age group (≥ 20) were at a significantly higher risk of HIV infection than their younger counterparts (p<0.05). Furthermore, the FSWs who had been in the sex trade for two or more years were at a significantly higher risk of HIV infection (p<0.05).

Knowledge on HIV/AIDS: The level of knowledge on HIV/AIDS was found to be relatively satisfactory. However, there were two respondents who had never heard about HIV/AIDS. At the same time only 47.7 percent of the respondents had knowledge of the entire ABC to prevent contracting HIV/AIDS (abstinence from sex - A, being faithful to one sexual partner-B and consistent condom use-C protect from HIV). A smaller proportion of the respondents (30.4%) knew the entire BCDEF (A healthy looking person can be HIV positive – D, and a person can not get the HIV virus from mosquito bite – E, and sharing meal with HIV positive person – F).

No significant change is noticed in the awareness level of the respondents across the three rounds with regard to "BCDEF". However, the proportion of respondents who understood that they could prevent HIV by abstaining from sexual contact has significantly dropped since the first round. Due to this, the indicator on the proportion of respondents with knowledge of all of ABC has decreased significantly since 2006 (55.2% in 2006, 58.4% in 2008 and 47.7% in 2011).

HIV test: Although 71.8 percent of the respondents knew about a facility in their community where they could have a confidential HIV test, only 64.4 percent had ever taken a HIV test.

Knowledge of Condoms: While all of the respondents knew about male condoms, only 46 percent of them had heard about female condoms. Radio and television were the most popular sources of information on condoms for street as well as establishment-based respondents. Only four percent of those respondents who had heard about female condoms had ever used one.

Condom accessibility and use: Consistent condom use was reported lowest (11.6%) with non-paying regular partners compared to clients (73.4%), regular clients (74.6%), and other occasional partners (76.9%) in the year preceding the survey. The respondents mostly had easy access to condoms - 82.6 percent of them could get one in 10 minutes or less.. Additionally 48.7 percent obtained free condoms all of the time. A slightly higher proportion of establishment-based FSWs (51.8%) versus street-based FSWs (44.1%) reported that they use free condoms all the time.

STI symptoms experienced: Knowledge of STI symptoms was quite high among the sex workers in the Kathmandu Valley. Around 44 percent of the respondents (47.5% street-based and 40.8% establishment-based) had experienced at least one STI symptom in the year preceding the survey; 77.5 percent of them had visited different clinics/pharmacy and health centers to seek treatment.

Violence against FSWs: Violence against FSWs is not an uncommon phenomenon. These survey findings have shown that street-based FSWs are more likely to face different forms of violence compared to those based in different establishments. A higher proportion of street-based FSWs were subjected to objectionable activities such as forceful sex (27.3% street-based and 18.3% establishment-based); were physically assaulted (21% street-based and 15.8%); had clients performing objectionable activities (34% street-based and 26.2% establishment-based).

Exposure to HIV/AIDS related program/activity: The respondents are most likely to meet and interact with PE/OEs as 83.8 percent of them had done so in the past year. A considerable proportion had also paid a visit to VCT center (53.5%) followed by visit to a STI clinic (43.8%). Participation in any of the HIV/AIDS programs was the lowest (9.3%). Although, not much variation is noticed between street-based FSWs and establishment-based FSWs with regards to HIV/AIDS program exposure in the past year, the street-based FSWs are more likely to visit a DIC than their establishment counterparts (43.7% street-based and 27% establishment-based had visited a DIC in the past year). Further, over 50 percent of those FSWs reached by OE/PEs have sought services run by HIV programs like VCT services (63.2%) and STI clinic (50.5%) in the past year. Additionally 39.8 percent of those who had met/interacted with PE/OE had been to a DIC while only 10.1 percent had participated in a HIV/AIDS awareness program.

RECOMMENDATIONS

- 1. The survey shows that street-based FSWs are at greater risk of HIV and syphilis than those who work in establishments. It is important that interpersonal behavior change communication and availability and utilization to HIV and STI services continue for all FSWs, with a greater focus on reaching those who are street-based.
- 2. There are a high of new FSWs joining the profession annually, with a greater number among establishment-based FSWs. Therefore, many of the girls and young women entering sex work for the first time may not be informed about the risks of HIV and STI, locations of HIV related service sites and the importance of consistent condom use with all partners. Continuous education and information sharing must be available for all FSWs. Additional community and peer-based efforts are required to identify and reach new FSWs early on and a special prevention package and extra support is needed for new comers. Further investigation is required to understand the factors behind these findings.
- 3. A high proportion of FSWs are under 20 years and in Kathmandu they are more likely to be establishment-based (30%). Internal migration is high, as most are from outside the surveyed districts (87%), which puts them at high risk of HIV and STI and vulnerable to other health and socio-economic problems. Youth-and migrant-friendly services for FSWs, that give them access to information on HIV and STI, sexual and reproductive health services and psycho-social support, should be made available. Linkages should be established for alternative livelihood opportunities. Establishment managers and peers need to be mobilized to provide HIV prevention information and support to new comers.
- 4. Almost half of the FSWs in Kathmandu are currently married, and HIV prevalence was seen among those ever married, which means their husbands are also at risk of HIV infection if safer sex is not always practiced. About 40% of FSWs in had ever terminated pregnancies, an indication of unwanted pregnancies and the need for family planning counseling. There is a need to provide education on HIV and STI to these FSWs, along with the importance of consistent and correct condom use for dual protection with all partners, family planning counseling and access to services and education on prevention of mother-to-child transmission (PMTCT) of HIV. Those who are using other forms of contraception need to know about and use condoms for HIV and STI protection.
- 5. Knowledge of female condoms is moderate at around 50%, although use is very low (about 4%) and female condoms are not widely available free of cost. Education should be provided on female condoms, along with increased availability and linkages with social marketing.
- 6. Consistent condom use is reasonably high among FSWs with their paying and occasional partners, more than 70% in Kathmandu, and is significantly lower among their non-paying regular partners i.e. husbands and boyfriends is 12%. This puts both them and their partners at risk of HIV and STI. The emphasis on current consistent condom use practices and focus on improved communication and negotiation among couples, especially non-paying regular partners, needs to be strengthened through continuous education outreach. Also condom distribution should be adequate for the need.

- 7. Condom carrying behavior is still low among FSWs, around 30% among street-based FSWs in Kathmandu and establishment-based is even lower at 17%. However, the trend is increasing significantly among establishment-based FSWs. This implies that greater emphasis is required on the importance of condom-carrying behavior through improved outreach education and communication and negotiation skills for FSWs. Strengthened efforts are required to create an enabling environment for condom-carrying behavior.
- 8. Although knowledge on HIV and STI is high, the health seeking behavior of FSWs is comparatively low especially for the uptake of STI services. Outreach education and referral to services should be strengthened and a comprehensive package on SRH needs of FSWs should be developed.
- 9. Street-based FSWs are more vulnerable to various forms of violence compared to establishment-based FSWs. They are more likely to be subjected to forceful sex (27.3% street-based and 18.3% establishment-based), to be physically assaulted (21% street-based and 15.8% establishment-based) and to have clients performing objectionable acts (34% street-based and 26.2% establishment-based). Prevention, treatment and care programs designed for FSWs must be made available, along with access to legal services.
- 10. Exposure to multiple risks is observed such as injecting drugs, frequent alcohol consumption and/or sex partners being IDUs. Hence, FSWs with multiple risks need to be identified by programs and a national comprehensive package should be designed to include components on all the ways to reduce the risk of HIV e.g. prevention of sexual transmission, harm reduction etc.

REFERENCES

NCASC. 2010. Factsheet -HIV epidemic in Nepal, 2010.

NCASC. 2010. *National Estimates of HIV Infections 2009 Nepal*. National Centre for AIDS and STD Control.

New ERA/SACTS/FHI. 2005. Integrated Bio-Behavioral Survey among Female SexWorkers, and Behavioral Surveillance Survey (BSS) among Clients in Kathmandu Valley; Round I-2004, New ERA/SACTS, Kathmandu. A Report submitted to Family Health International/Nepal.

New ERA/SACTS/FHI. 2006. Integrated Bio-Behavioral Survey among Female Sex Workers, Pokhara Valley; Round II-2006, New ERA/SACTS, Kathmandu. A Report submitted to Family Health International/Nepal.

New ERA/SACTS/FHI. 2006. Integrated Bio-Behavioral Survey among Female Sex Workers, Kathmandu Valley; Round II-2006, New ERA/SACTS, Kathmandu. A Report submitted to Family Health International/Nepal.

New ERA/SACTS/FHI. 2009. Integrated Bio-Behavioral Survey among Female Sex Workers in Kathmandu Valley; Round III-2008, New ERA/SACTS, Kathmandu. A Report submitted to Family Health International/Nepal.

NCASC, 2006. Sexually Transmitted Infection National Programme Review Nepal 2006-Accessed from: <u>www.ncasc.gov.np/pics/reports/sexually</u> transmitted infection_national program review

Navadeh S, Steps of Bio-behavioral Surveillance Survey (BSS) among population at increased risk of HIV/AIDS. Accessed from: www.hivhub.ir/en/document-center/doc.../154-biobehavioral-survey

ANNEXES

ANNEX – 1: INDICATORS FOR MONITORING AND EVALUATION OF HIV PREVENTION INTERVENTION

Prevention 1: HIV related risk and transmission among Female Sex Workers	Street (N=238) % (95% CI)	Establishment (N=355) % (95% CI)	Total (N=593) % (95% CI)
Impact/Outcome Indicators			
Percentage of FSWs who are HIV infected	4.2 (1.7-6.8)	0.0 (0)	1.7 (0.7-2.7)
Percentage of FSWs reporting the use of a condom with their most recent client	83.6 (78.9-88.3)	82.0 (78.0-86.0)	82.6 (79.6-85.7)
Percentage of FSWs reporting consistent condom use with their clients over the past 12 months	71.8 (66.1-77.6)	74.4 (69.8-78.9)	73.4 (69.8-76.9)
Percentage of FSWs who both correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV transmission	34.4 (28.4-40.5)	27.6 (23.0-32.3)	30.4 (26.7-34.1)
Output/Coverage Indicators			
Percentage of FSWs reached with HIV prevention service programs (BCC with OE/PE or DIC or STI Clinics or VCT or community events / trainings or drug treatment or rehabilitation)	83.6 (78.1-88.2)	86.8 (83.2-90.3)	85.5 (82.7-88.3)
Percentage of FSWs reached with HIV prevention programs (Knows where to receive HIV test and received condoms)	60.5 (54.3-66.7)	59.7 (54.6-64.8)	60.0 (56.1-64.0)
Percentage of FSWs who received an HIV test in the last 12 months and who know their results	55.5 (49.1-61.8)	54.1 (48.9-59.3)	54.6 (50.6-58.6)

ANNEX – 2: RESULTS OF SELECTED ISSUES IN TABLES

		R	egula	r Clie	nt		Client						Husband or Living in Male Partner						Other Partner					
	Str	reet	Es	td.	To	otal	Sti	eet	Es	std.	To	otal	Str	reet	Es	td.	To	otal	Sti	eet	Es	td.	То	otal
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Reason for not using condom during last sexual contacts with																								
1. Partner objected	23	71.9	36	66.7	59	68.6	23	59.0	42	65.6	65	63.1	32	30.5	67	41.4	99	37.1	13	86.7	12	66.7	25	75.8
2.Used other contraceptive	6	18.8	12	22.2	18	20.9	14	35.9	26	40.6	40	38.8	47	44.8	62	38.3	109	40.8	0	0.0	6	33.3	6	18.2
3. Didn't think of it	1	3.1	2	3.7	3	3.5	5	12.8	10	15.6	15	14.6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
4. Not available	0	0.0	3	5.6	3	3.5	5	12.8	6	9.4	11	10.7	2	1.9	0	0.0	2	0.7	1	6.7	0	0.0	1	3.0
5. Trust partner	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	13	12.4	20	12.3	33	12.4	0	0.0	0	0.0	0	0.0
6. Wish to have a child	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	15	14.3	19	11.7	34	12.7	0	0.0	0	0.0	0	0.0
7. Client offered more money	3	9.4	0	0.0	3	3.5	4	10.3	7	10.9	11	10.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
8. Others	2	6.3	1	1.9	3	3.5	3	7.7	6	9.4	9	8.7	5	4.8	4	2.5	9	3.4	1	6.7	1	5.6	2	6.1
Total	32	*	54	*	86	*	39	*	64	*	103	*	105	*	162	*	267	*	15	*	18	*	33	*

Table 1: Reason for not Using Condom uring Last Sex with Different Types of Partners

			Regula	r Client	t		Client						Husband or Living in Male Partner						Other Partner					
	Sti	reet	Es	std	Total		Street		Estd		Total		Street		Estd		Total		Street		Estd		Total	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Reason for not using condom during all sexual contacts with																								
1. Partner objected	38	77.6	62	83.8	100	81.3	58	86.6	71	78.0	129	81.6	58	49.6	104	57.5	162	54.4	25	92.6	25	83.3	50	87.7
2.Used other contraceptive	17	34.7	26	35.1	43	35.0	23	34.3	32	35.2	55	34.8	53	45.3	87	48.1	140	47.0	7	25.9	12	40.0	19	33.3
3. Didn't think of it	2	4.1	7	9.5	9	7.3	6	9.0	11	12.1	17	10.8	3	2.6	4	2.2	7	2.3	2	7.4	4	13.3	6	10.5
4. Not available	1	2.0	3	4.1	4	3.3	7	10.4	5	5.5	12	7.6	4	3.4	5	2.8	9	3.0	4	14.8	3	10.0	7	12.3
5. Trust partner	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	36	30.8	52	28.7	88	29.5	0	0.0	0	0.0	0	0.0
6. Wish to have a child	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	19	16.2	23	12.7	42	14.1	0	0.0	0	0.0	0	0.0
7. Client offered more money	0	0.0	0	0.0	0	0.0	10	14.9	15	16.5	25	15.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
8. Others	12	24.5	9	12.2	21	17.1	9	13.4	11	12.1	20	12.7	5	4.3	18	9.9	23	7.7	1	3.7	7	23.3	8	14.0
Total	49	*	74	*	123	*	67	*	91	*	158	*	117	*	181	*	298	*	27	*	30	*	57	*

Table 2: Reason for not Using Condom Consistently during all Sexual Contact with Different Types of Partners

Table 3: Knowledge of Partners being IDUs

Knowledge of sex partner being IDU		Sti	reet	Establis	nment	Te	otal
Respondents' husband inject drugs*		n	%	n	%	n	%
Yes		1	33.3	0	0.0	1	33.3
No		2	66.7	0	0.0	2	66.7
	Total	3	100.0	0	0.0	3	100.0
Respondents have regular clients who injects drugs**							
Yes		3	100.0	2	28.6	5	50.0
No		0	0.0	5	71.4	5	50.0
	Total	3	100.0	7	100.0	10	100.0
Ever known that clients injects drugs***							
Yes		4	100.0	7	87.5	11	91.7
No		0	0.0	1	12.5	1	8.3
	Total	4	100.0	8	100.0	12	100.0

* n= married respondent with knowledge on any of sex partner being IDUs.
 ** n= respondents having regular client with knowledge on any of sex partners being IDUs.
 ***n=respondents with knowledge on any of sex partners being IDUs.

Table 4: Injecting History and Practice

Injecting Practice	St	reet	Establi	shment	Total		
Respondents had injected drugs in the past one month	n	%	n	%	n	%	
Yes	2	66.7	6	100.0	8	88.9	
No	1	33.3	0	0.0	1	11.1	
Total	3	100.0	6	100.0	9	100.0	
Respondents had injected drugs in the past one week							
Yes	1	50.0	5	83.3	6	75.0	
No	1	50.0	1	16.7	2	25.0	
Total	2	100.0	6	100.0	8	100.0	
Respondents had last used a needle or syringe that had previously been used by someone else							
Yes	0	0.0	1	20.0	1	16.7	
No	1	100.0	4	80.0	5	83.3	
Total	1	100.0	5	100.0	6	100.0	
Frequency of use of needle or syringe that had previously been used by someone else in the past one month							
Every Time	0	0.0	1	20.0	1	16.7	
Sometimes	0	0.0	1	20.0	1	16.7	
Never	1	100.0	3	60.0	4	66.7	
Total	1	100.0	5	100.0	6	100.0	
Frequency of sharing used needle in the past one- week							
Almost every-times	0	0.0	1	20.0	1	16.7	
Never used	1	100.0	4	80.0	5	83.3	
Total	1	100.0	5	100.0	6	100.0	

	St	reet	Estab	lishment	Т	otal
	n	%	n	%	n	%
Frequency of drug injections within the past one-week			•	•	•	
2-3 times a week	1	50.0	2	33.3	3	37.5
4-6 times a week	0	0.0	1	16.7	1	12.5
Once a day	0	0.0	1	16.7	1	12.5
2-3 times a day	0	0.0	1	16.7	1	12.5
Not injected in the last week	1	50.0	1	16.7	2	25.0
Total	2	100.0	6	100.0	8	100.0
Frequency of drug injection on the last injected day					•	
Once	2	100.0	3	50.0	5	62.5
2 times	0	0.0	2	33.3	2	25.0
Missing	0	0.0	1	16.7	1	12.5
Total	2	100.0	6	100.0	8	100.0
Frequency of drug injecting on the previous day						
Not injected	2	100.0	2	33.3	4	50.0
Once	0	0.0	2	33.3	2	25.0
2 times	0	0.0	2	33.3	2	25.0
Total	2	100.0	2	100.0	8	100.0

Table 5: Frequency of Drug Injection

	Stree	t(N=2)	Estal	olishment(N=6)	Tot	al(N=8)
	n	%	n	%	n	%
Ever switched from injecting to oral drugs within the last month						
Yes	1	50.0	2	33.3	3	37.5
No	1	50.0	6	66.7	5	62.5
Switching from sharing to non sharing practice in the past one yes	ar					
Yes	1	50.0	3	50.0	4	50.0
No	1	50.0	3	50.0	4	50.0
Access to new or unused syringe /needle at the time of need						
Yes	2	100.0	4	66.7	6	75.0
No	0	0.0	2	33.3	2	25.0
Respondent ever received/ receiving treatment because of being drug user						
Received treatment but not now	1	50.0	1	16.7	2	25.0
Had never received treatment	1	50.0	5	83.3	6	75.0
Total	2	100.0	6	100.0	8	100.0

	Street	(N=1)	Establishn	nent(N=5)	Tota	al(N=6)
	n	%	n	%	n	%
Frequency of sharing syringe/needle picked from public place in the past one-week:						
Sometimes	0	0.0	1	20.0	1	16.7
Never	1	100.0	4	80.0	5	83.3
Sharing of syringe/needle with different persons in the past one -week:						
With a friend	0	0.0	1	20.0	1	16.7
Never Shared	1	100.0	4	80.0	5	83.3
Frequency of different partners with whom syringe/needle was shared in the past one-week:			·			
Alone injected	1	100.0	4	80.0	5	83.3
3 persons	0	0.0	1	20.0	1	16.7
Frequency of giving self used syringe/needle to someone else in the past one-week:						
Almost every-times	0	0.0	1	20.0	1	16.7
Never	1	100.0	4	80.0	5	83.3
Ever injected with a pre-filled syringe un the past one-week:						
No	1	100.0	5	100.0	6	100.0
Taking drugs by syringe squirted by someone else from their used syringe in the past one-week:						
Sometimes	0	0.0	1	20.0	1	16.7
Never	1	100.0	4	80.0	5	83.3
Sharing of Cooker/Vail/Container, Cotton/Filter or Rinse Water in the past one -week:						
Almost every-times	0	0.0	1	20.0	1	16.7
Never	1	100.0	4	80.0	5	83.3
Drawing up the drug solution from a Common Container in the past one -week:						
Sometimes	0	0.0	1	20.0	1	16.7
Never	1	100.0	4	80.0	5	83.3
Total	1	100.0	5	100.0	6	100.0

Table 7: Injecting behaviors of Female Sex Workers in the Past Week

Table 8: Problems/Symptoms	for Which Res	pondents Received	Treatment during Past-year	

Drickland Commentance			Treatme	nt sought		
Problem/Symptoms	St	reet	Establ	ishment	Total	
Problems/Symptoms for which respondents received treatment during past-year:	n	%	n	%	n	%
Pain in the lower abdomen	40	75.5	53	74.6	93	75.0
Pain during urination	23	69.7	38	79.2	61	75.3
Frequent urination	16	80.0	20	76.9	36	78.3
Pain during sex	27	84.4	48	81.4	75	82.4
Ulcer or sore in the genital area	18	81.8	29	87.9	47	85.5
Itching in or around the vagina	62	80.5	64	82.1	126	81.3
Vaginal odor or smell	47	83.9	62	81.6	109	82.6
Vaginal bleeding (unusual)	3	60.0	3	100.0	6	75.0
Unusual heavy vaginal discharge and foul vaginal discharge	53	80.3	64	77.1	117	78.5
Genital Warts	3	60.0	6	85.7	9	75.0
Others	0	0.0	2	100.0	2	66.7

HIV Positive respondents who knew their status	Street	(N=10)		blish- (N=0)	Total (N=10)		
111 v 1 ostive respondents who knew their status	(9	%)	(%)		(%)		
Know Status							
Yes	8	80.0	0	0.0	8	80.0	
No (test not done)	2	20.0	0	0.0	2	20.0	
Total	10	100.0	0	0.0	10	100.0	

Table 9: HIV Positive Respondents who Had Taken Up HIV Test Before and Knew their Status

Table 10: HIV and Syphilis Prevalence among Female Sex Workers

	Fir	st Round (20	04)	Seco	nd Round (2	2006)	Thi	rd Round (2	008)	Four	th Round (2	2011)	Test of
STI Infection	Street (N=200)	Establish- ment (N=300)	Total (N=500)	Street (N=200)	Establish- ment (N=300)	Total (N=500)	Street (N=200)	Establish- ment (N=300)	Total (N=500)	Street (N=238)	Establish- ment (N=355)	Total (N=593)	Significance of the three years trend
	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	*
HIV+ve	4 (2.0)	6 (2.0)	10 (2.0)	4 (2.0)	3 (1.0)	7 (1.4)	7 (3.5)	4 (1.3)	11 (2.2)	10(4.2)	0(0.0)	10(1.7)	0.938
Active Syphilis	18 (9.0)	12 (4.0)	30 (6.0)	12 (6.0)	3 (1.0)	15 (3.0)	5 (2.5)	0 (0.0)	5 (1.0)	4(1.7)	0(0.0)	4(0.7)	0.000
Syphilis History	36 (18.0)	8 (2.7)	44 (8.8)	33 (16.5)	16 (5.3)	49 (9.8)	9 (4.5)	2 (0.7)	11 (2.2)	10(4.2)	5(1.4)	15(2.5)	0.000

p value calculated for total percent over the years

Respondents reached by services in past year	Sti	reet	Establish- ment		Total	
Respondentes reacted by services in pust year	n=	196	n=	301	n=49'	7
DIC visit	n	%	n	%	n	%
Yes	104	53.1	94	31.2	198	39.8
No	92	46.9	207	68.8	299	60.2
STI clinic visit						
Yes	107	54.6	144	47.8	251	50.5
No	89	45.4	157	52.2	246	49.5
VCT visit						
Yes	134	68.4	180	59.8	314	63.2
No	62	31.6	121	40.2	183	36.8
Participated in HIV/AIDS awareness program activities						
Yes	27	13.8	27	9.0	54	10.9
No	169	86.2	274	91.0	443	89.1
Total	196	100.0	301	100.0	497	100.0

Table 12: Injectingdrug history trend among Female Sex Workers

	First Round (2004)				nd Round (2006)	Third Round (2008) Fourth Round (20				2011)	
Injecting drug	Street (N=200)	Establish- ment (N=300)	Total (N=500)	Street (N=200)	Establish- ment (N=300)	Total	Street (N=200)	Establish- ment (N=300)	Total (N=500)	Street (N=238)	Establish- ment (N=355)	Total (N=593)
	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)
Ever injected	-	-	-	2 (1)	2 (0.7)	4 (0.8)	1 (0.5)	1 (0.3)	2 (0.4)	4 (1.7)	6 (1.7)	10 (1.7)
Injected in last 12 months	2 (1.0)	4(1.3)	6(1.2)	2 (1)	1 (0.3)	3 (0.6)	0	1 (0.3)	1 (0.2)	3 (1.3)	6 (1.7)	9 (1.5)

ANNEX – 3 FSW QUESTIONNAIRE

Integrated Biological and Behavioral Surveillance Survey Among Female Sex Workers in Kathmandu and Pokhara

CONFIDENTIAL

Namaste! My name is, I am here from New ERA to collect data for a research study. This study is being conducted by National Centre for AIDS and STD Control (NCASC), Ministry of Health and Population with support from New ERA and Intrepid/Nepal. FHI's ASHA Project and USAID are providing technical assistance for the study. As explained in the consent taking process during this interview, I will ask you some questions that will be about sexual behavior, use and promotion of condoms, STI/HIV/AIDS and drug use. I believe that you will provide correct information. We will also draw about 5-7 ml blood for HIV and syphilis testing. If you have any STI symptoms, we will provide treatment for free of charge. We also will treat for syphilis on the basis of RPR test on the same day of interview. The information given by you will be strictly treated as confidential. Nobody will know whatever we talk because your name will not be mentioned in this form and blood sample. It will take about 60 minutes to complete the interview and blood sample collection and another 60 minutes if you want to be treated for syphilis and get the HIV test result on the same day. It depends on your wish to participate in this survey or not. You are free to quit the survey any time you want to. You do not have to answer questions that you do not want to answer. But I hope, you will participate in this survey and make it success by providing correct answers of all the questions. Would you be willing to participate?
1. Yes 2. No
Signature of Interviewer: Date: / /2067 DD/ MM
Establishment based: 1 Street based: 2
Definition of Respondent "Women aged 16 years and above reporting having been paid in cash or kind for sex with a male within the last 6 months."
Has someone interviewed you from New ERA with a questionnaire in last few weeks?
1. Yes 2. No (Continue Interview) ↓ When?

_____ Days ago (STOP INTERVIEW) Name of interviewer: ______ Code No. of Interviewer: ______ Checked by the supervisor: Signature: ______ Date: / __/ 2067 DD/ MM

Data Entry # 1: Clerk's name:_	 Date: /_	//2067 / MM
Data Entry # 2: Clerk's name:	 Date: /_	//2067 / MM

1.0 GENERAL INFORMATION

Q. N.	Questions and Filters	Coding Categories	Skip to
101	Respondent ID No.		
101.1	Write down how you contacted the		
	respondent?	Met personallyI	
		Through known FSW2	
		Through PE3	
		Through ORE from Red Cross4	
		Other (Specify)96	
		Since (Speensy)	
102	Where is the respondent (sex worker) based?		
		Disco1	
		Dance Restaurant2	
		Cabin Restaurant3	
		Call Girl4	
		Massage Parlor5	
		House Settlement	
		Bhatti Pasal7	
		Street8	
		Garment/Carpet Factory9	
		Squatter/Refugee 10	
		Restaurant/Tea shop 11	
		Dohori Restaurant 12	
		Hotel/Lodge	
		Other (Specify)96	
103	Interview Starting Time		
	Interview Completion Time (fill at the end of interview)		

Q. N.	Questions and Filters	Coding Categories	Skip to
104	Where were you born?		
		District	
		VDC/Municipality	
		Ward No	
		Village/Tole	

Q. N.	Questions and Filters	Coding Categories	Skip to
105	Where do you live now?		
	(Name of Current Place of Residence)		
		District	
		VDC/Municipality	
		Ward No.	
		Village/Tole	
106	How long have you been living continuously at this location?		201
		Month	_
		Always (since birth)0	
		Since less than a month	
107	Before you moved here, where did you live?	District	
		VDC/Municipality	
		Ward No.	
		Village/Tole	

2.0 PERSONAL INFORMATION

Q. N.	Questions and Filters	Coding Categories	Skip to
201	How old are you?		
		Age	
		(Write the completed years)	
202	What is your caste?		
	(Specify Ethnic Group/Caste)	Ethnicity/Caste	
	(Speerly Etime Group/Caste)	(Specify)	
		Code No	
203	What is your educational status?		
	Code:	Illiterate0	
	Passed class $1-9 = 01-09$ Test Passed = 9		
	S.L.C. passed = 10	Literate	
	Passed certificate/12 class = 11		
	Passed B.A and above =12		
		Grade	
204		(Write the completed grade)	
204	What is your present marital status?	_	► 204.2
		Married1	
			204.3
		Divorced/Permanently Separated2	
		Widow	
			►
		Never married4	
204.1	How old were you when you got		204.3
	divorced/separated/widowed?		
			₽
		Age	
		(Write the completed years)	
204.2	Are you presently living with your		▶ 205
	husband?	Yes1	
		No2	

Q. N.	Questions and Filters	Coding Categories	Skip to
204.3	Who are you living with now?		
	(Multiple answers. DO NOT READ the possible answers)	Male friend1	
		Relatives2	
		Other females	
		Children 4	
		<i>Alone</i>	
		Others (Specify) 96	
	[Note: If answer in Q. 204 is 'never married	' Go to Q. 205.13]	
205	At what age were you married for the first time?		
		Years old	
		(Write Complete Years)	
205.1	Have you ever given birth to children? (Include all live births even those who died after sometime, and also still births)	Yes1	205.3
		No	•
205.2	If yes, how many were live births? (Include all live births even those who died after sometime but don't include still		
	births)	Sons	
		Daughters	
205.3	Have you had miscarriage during your any pregnancies?	Yes1	205.5
		No2	→
205.4	If yes, total number of miscarriage		
		# Terminations	

Q. N.	Questions and Filters	Coding Categories	Skip to
205.5	Have you done termination/abortion of your any pregnancies?	Yes1	205.8
		No	→
205.6	If yes, total number of pregnancy terminated/aborted	# Terminations	
205.7	Who assisted you at last abortion		
		Doctor	
		Nurse2Midwife3TBA4Traditional healer5	
		Friend	
205.8	Do you want to have a child in the next two years?	Yes1	
		No2	
205.8.1	Do you want to have a child in the next 6 months?	Yes1	
		No2	
205.9	Were you pregnant in the last 12 months? (Include currently pregnant women too)	Yes1	205.13
		No	•
205.10	(Don't ask 205.10, 205.11 and 205.12 to those who are currently pregnant and skip to 205.13)	Live Birth1	205.13
	If Yes, What was the outcome of the last	Still Birth	205.13
	pregnancy? If the response is 3 or 4 check Q.N. 205.6 or 205.7)	Spontaneous abortion3	►
		Forced Abortion4	-

Q. N.	Questions and Filters	Coding Categories	Skip to
205.11	Who assisted your last delivery?	Doctor1	
		Nurse2	
		<i>Midwife</i> 3	
		<i>TBA</i> 4	
		Traditional healer5	
		Friend6	
		Nobody7	
		Others (Specify)96	
		Don't know	
205.12	Where did you deliver your last child?	Home1Health Post (HP)2Sub Health Post (SHP)3Primary Health Center (PHC)4District Hospital5	
205.12		Other (Specify)96	
205.13	can use to delay or avoid a pregnancy	ing – the various ways or methods that a couple	
	Which ways or methods have you heard abo	put?	
	(Lead the each Questions, Multiple answe	ers Possible)	
01	FEMALE STERILIZATION- women can have an operation to avoid having any more children	Yes1 No2	
02	MALE STERILIZATION- men can have an operation to avoid having any more children	Yes1 No2	
03	PILL- women can take a pill every day to avoid becoming pregnant	Yes1	
		No2	
04	IUD – women can have a loop or coil placed inside tem by a doctor or a nurse	Yes1	
		No2	

Q. N.	Questions and Filters	Coding Categories	Skip to
05	INJECTABLES – women can have an		
	injection by a health provider that stops	Yes1	
	them from becoming pregnant for one or more months	No2	
0.6			
06	IMPLANTS- women can have several small rods placed in their upper arm by a	Yes1	
	doctor or a nurse which can prevent	1651	
	pregnancy for one or more years	No2	
	Implants:		
07	CONDOM – men can put a rubber sheath on their penis before sexual intercourse	Yes	
	on then penns before sexual intercourse	<i>Tes1</i>	
		No2	
08	RHYTHM METHOD – Every month that		
00	a woman is sexually active she can avoid	Yes1	
	pregnancy by not having sexual intercourse		
	on the days of the month she is not likely to	No2	
	get pregnant Rhythm Method:		
09	WITHDRAWAL – Men can be careful and		
	pull out before climax	Yes1	
		No2	
		1902	
10	Have you heard any other ways or method	Y I	
	that women or men can use to avoid pregnancy?	Yes1	
	prognancy :		
		(Specify)	
		(Specify)	
		No2	
205.14	Are you currently doing something or		
	using any method to delay or avoid getting	Yes1	206
	pregnant?	~	▶
		No2	
205.15	If yes, which method are you using currently		
01	(Multiple answers possible, Do NOT REA FEMALE STERILIZATION- women can	AD the Possible answers)	
01	have an operation to avoid having any	Yes1	
	more children		
		No2	
02	MALE STERILIZATION- men can have		
	an operation to avoid having any more	Yes1	
	children	No2	
62		2	
03	PILL- women can take a pill every day to avoid becoming pregnant	Yes	
	avoid becoming pregnant	1 [1]	
		No2	

Q. N.	Questions and Filters	Coding Categories	Skip to
04	IUD – women can have a loop or coil	County Outroporton	p to
	placed inside tem by a doctor or a nurse	Yes1	
		No2	
05	INJECTABLES – women can have an injection by a health provider that stops them from becoming pregnant for one or	Yes1	
	more months	No2	
06	IMPLANTS- women can have several small rods placed in their upper arm by a doctor or a nurse which can prevent	Yes1	
	pregnancy for one or more years	No2	
07	CONDOM – men can put a rubber sheath on their penis before sexual intercourse	Yes1	
		No2	
08	RHYTHM METHOD – Every month that a woman is sexually active she can avoid pregnancy by not having sexual intercourse	Yes1	
	on the days of the month she is not likely to get pregnant	No2	
09	WITHDRAWAL – Men can be careful and pull out before climax	Yes1	
		No2	
10	Are you currently using any method that women or men can use to avoid pregnancy?	Yes1	
		(Specify)	
		(Specify)	
		No2	
	• • • •	anently/separated (2), widow (3) or never skip to Q.N. 207	
206	Does your husband have co-wife now?	Var	
		Yes1	
207		No2	
207	Are there people who are dependent on your income?	Yes1	208
		No2 ⁻	•

Q. N.	Questions and Filters	Coding Categories	Skip to
207.1	How many are dependent on your income? (Adults are those who have completed 18 years)		
	J)	Adults	
		Children	
208	How long have you been exchanging sexual intercourse for money or other things?		
	(If answer is less than 6 months stop interview)	Months	
		Don't know98	
208.1	Did you have any sexual intercourse during past 12 months?	Yes1	Stop Interview
		No2	•
209	How many months have you been working here as a sex worker at this place?		
		Months	
210	Where else have you worked as a sex worker?	Discothèque1	
	(For example: <i>Bhatti</i> shop, Cabin	Dance restaurant2	
	Restaurant, Discotheques etc.) Mention location in the space provided	Cabin restaurant3	
	(Multiple answers. DO NOT READ the possible answers)	Call girl4	
		Massage parlor5	
		House6	
		Bhatti Pasal7	
		Road8	
		Garment/carpet factory9	
		Squatter settlement/refugee10	
		Restaurant11	
		Dohori restaurant12	
		Hotel/lodge13	
		Did not work anywhere else0	
		Others (Specify)	

Q. N.	Questions and Filters	Coding Categories	Skip to
211	Have you ever been engaged in this		
	profession in other locations too?	Yes1	213
		_	•
		No2	
211.1	Where did you work?		
	(List all the places mentioned by the	District VDC/Municipality Village/Tole	
	respondent)	1	
		2	
		3	
212	In the past one-year have you followed		
	this profession in other locations also?	Yes1	213
		-	•
		No2	
212.1	Where did you follow such profession?		
		District VDC/Municipality Village/Tole	
	(List all the places)		
		1	
		2	
		4	
213	Have you ever followed this profession even in India?		216
		Yes1	210
			►
010.1		No	
213.1	Where did you work in India?		
	(List all the locations worked in India)	Name of Places Name of Nearby City	
		1	
		2	
		4	
214	In total, for how many months did you		
217	work as a sex worker in India?		
		Months	
215	Were you coerced to go there or you went there on your free will?		
	lifere on your nee win?	<i>Coerced1</i>	
		<i>On my own</i>	
216	What is your average weekly income from	Cash	
	commercial sex?	CashRs.	
	[Note: If there is '0' in both cash and gift	Gift equivalent toRs.	
	equivalent, probe for the reasons]		

Q. N.	Questions and Filters	Coding Categories	Skip to
		Others (Specify)96	
		TotalRs.	
217	Do you have any other work besides sex work?	Yes1	218
		No	▶
217.1	What do you do?	Waiter 1	
		Housemaid/restaurant employee	
		(dish cleaner, cook, washerwoman,	
		<i>etc.</i>)2	
		Wage laborer3	
		Own restaurant/Bhatti Pasal4	
		Masseuse5	
		Dancer	
		Business (retail store, fruit shop etc.)7	
		Knitting /tailoring8	
		Peer educator9	
		Job (teacher, peon etc)10	
		Others (Specify)	
217.2	What is your average weekly income from the above-mentioned sources?	Rupees	
218	Have you ever encountered any client who refused to give money after having sex?	Yes	301
	refused to give money after having sex?	No	•
218.1	How many such incidents have occurred in the past six months?		
	are pust on monuto.	Times	

Q. N.	Questions and Filters	Coding Categories	Skip to
301	How old were you at your first sexual		
	intercourse?		
		Year's old	
		Don't know/Can't recall	
302	Among all of your partners, how many of them had sex with you in exchange for		
	money in the past week?		
	5 1		
		Number	
		Don't know	
303	Among all of your partners, how many of		
	them had sex with you without paying any money in the past week? (Include sexual		
	contacts with spouse and live-in sexual		
	partners)	Number	
		Don't know	
304	With how many different sexual partners in		
	total have you had sex during the past week?		
	(Note: Check total number of partners		
	in Q. 302 + Q. 303 to match with Q 304)	Number	
		Don't know	
305	Usually, how many clients visit you in a		
	day?		
		Number	
305.1	With how many clients did you have sexual		
	intercourse yesterday?		
		Number	
205.2			
305.2	With how many clients did you have sexual intercourse in the past week?		
	intercourse in the past week:		
		Number	
306	In the past month, with which		
	profession's client did you mostly have	Bus, truck or tanker worker1	
	sex?	Taxi, jeep, microbus or minibus	
		worker	
	(Encircle three most reported types of		
	client. DO NOT READ the possible		

3.0 INFORMATION ON SEXUAL INTERCOURSE

Q. N.	Questions and Filters	Coding Categories	Skip to
	answers)	Industrial/wage worker 3	
		Police 4	
		Soldier/Army 5	
		Student 6	
		Rickshawala7	
		Service holder	
		Businessmen9	
		Mobile Businessmen10	
		Migrant worker/lahurey11	
		Contractor 12	
		Foreigner (Indian and other	
		Nationals)14	
		Farmer	
		Others (Specify)	
		Don't know	
306.1	What was the professional background of your last client?		
		Bus, truck or tanker worker 1 Taxi, jeep, microbus or minibus	
		worker	
		Industrial/wage worker 3	
		<i>Police</i> 4	
		Soldier/Army 5	
		<i>Student</i> 6	
		Rickshawala7	
		Service holder	
		Businessmen9	
		Mobile Businessmen10	
		Migrant worker/lahurey11	
		<i>Contractor</i> 12	
		Foreigner (Indian and other	

Q. N.	Questions and Filters	Coding Categories	Skip to
		Nationals14	
		Farmer 15	
		Others (Specify)	
		Don't know	
307	How many days in a week (on an average) do you work as a sex worker?		
		Days	
308	When did you have the last sexual intercourse with a client? (Write '00' if Today)	Days before	
309	How many partners did you have sexual intercourse with on that day?	Number	
310	How much rupees or other items did the last client pay you?	Cash Rs.	
	(Note: If there is '00' in both cash and gift equivalent, mention the reasons)	Gift equivalent toRs.	
		<i>Others (Specify)</i>	
		TotalRs.	

4.0 USE OF CONDOM AND INFORMATION ON SEX PARTNERS

Condom use with Clients

Q. N.	Questions and Filters	Coding Categories	Skip to
401	The last time you had sex with your client, did he use a condom?	Yes1	401.2
		No2	→
401.1	Who suggested condom use at that time?	Myself1	402
		My Partner2	J
		<i>Don't know</i> 98	
401.2	Why didn't your client use a condom at that time?	Not availableI	
		Too expensive2	
	(Multiple answers. DO NOT READ the possible answers)	Partner objected3	
	F	I didn't like to use it4	
		Used other contraceptive5	
		Didn't think it was necessary6	

Q. N.	Questions and Filters	Coding Categories	Skip to
		Didn't think of it7	
		Client offered more money8	
		Didn't know / not aware about	
		condom9	
		Others (Specify)	
		Don't know 98	
402	How often did your clients use condom over the past 12 months?	All of the time1	→ 403
		Most of the time2	
		Some of the time3	
		Rarely4	
		Never5	
402.1	Why didn't your client use condom always?	Not available1	
	(Multiple answers. DO NOT READ the possible answers)	Too expensive2	
	possible misteris)	Partner objected3	
		I didn't like to use it4	
		Used other contraceptive5	
		Didn't think it was necessary6	
		Didn't think of it7	
		Client offered more money8	
		Didn't know / not aware about	
		Condom9	
		Others (Specify)	
		Don't know 98	

403 Do you have any client who visits you on regular basis? Yes	Q. N.	Questions and Filters	Coding Categories	Skip to
404 Did your regular client use condom in the last sexual contact with you? Yes 1 404.2 404.1 Who suggested condom use at that time? Yes 1 405.2 404.1 Who suggested condom use at that time? Myself 1 405 404.2 Who suggested condom use at that time? Myself 1 405 404.2 Why didn't your regular client use a condom at that time? Not available 1 1 7 Condom at that time? Not available 1 1 100 expensive 2 98 Vot available 1 1 100 expensive 2 2 2 93 I didn't like to use it 1 1 100 expensive 5 1 1 100 expensive 5 1 1 1 100 expensive 5 1		Do you have any client who visits you on		-
404 Did your regular client use condom in the last sexual contact with you? Yes				F 400
last sexual contact with you? Yes	404	Did your gooylog alight you can dom in the	1102	
404.1 Who suggested condom use at that time? Myself I I 405 404.2 Why didn't your regular client use a condom at that time? Not available I I 404.2 Why didn't your regular client use a condom at that time? Not available I I 1 Too expensive 2 Partner objected 3 I 1 Idin't like to use it	404		Yes1-	→ 404.2
404.2 Why didn't your regular client use a condom at that time? Not available 1 404.2 Why didn't your regular client use a condom at that time? Not available 1 100° t know 98 98 1 1 100° t know 98 1 1 1 100° t know 98 1 1 1 100° t know 98 1 1 1 100° t know 1 1 1 1 100° t know 12 1 1 1 100° t know 1 1 1 1 100° t know 1 1 1 1 100° t know 1 1 1 1			No2	
404.2 Why didn't your regular client use a condom at that time? Not available I 1 Too expensive 2 Partner objected 3 I I didn't like to use it 4 Used other contraceptive 5 Didn't think of it. 7 Client offered more money 8 Didn't know / not aware about condom 9 Others (Specify) 96 Don't know 98 405 How often did your regular clients use condom with you over the past 12 months? All of the time 1 Most of the time 2	404.1	Who suggested condom use at that time?	Myself1	405
404.2 Why didn't your regular client use a condom at that time? Not available			My Partner2	
condom at that time? Not available 1 Too expensive 2 Partner objected 3 I didn't like to use it 4 Used other contraceptive 5 Didn't think it was necessary 6 Didn't think of it 7 Client offered more money 8 Didn't know / not aware about condom 9 Others (Specify) 96 Don't know 98 405 How often did your regular clients use condom with you over the past 12 months? All of the time 1 Most of the time 2			Don't know	
405 How often did your regular clients use condom with you over the past 12 months? 405 How often did your regular clients use condom with you over the past 12 405 How often did your regular clients use condom with you over the past 12 405 How often did your regular clients use condom with you over the past 12 405 How often did your regular clients use condom with you over the past 12 405 How often did your regular clients use condom with you over the past 12 405 How often did your regular clients use condom with you over the past 12 405 How often did your regular clients use condom with you over the past 12 405 How often did your regular clients use condom with you over the past 12 405 All of the time	404.2		Not available1	
405 How often did your regular clients use condom with you over the past 12 months?			Too expensive2	
405 How often did your regular clients use condom with you over the past 12 months? All of the time			Partner objected3	
405 How often did your regular clients use condom with you over the past 12 months? All of the time			I didn't like to use it4	
405 How often did your regular clients use condom with you over the past 12 months? 405 How often did your regular clients use condom with you over the past 12 months?			Used other contraceptive5	
405 How often did your regular clients use condom with you over the past 12 months? All of the time			Didn't think it was necessary6	
405 How often did your regular clients use condom with you over the past 12 months? All of the time			Didn't think of it7	
405 How often did your regular clients use condom with you over the past 12 months? All of the time			Client offered more money8	
405 How often did your regular clients use condom with you over the past 12 months? All of the time			Didn't know / not aware about condom	
405 How often did your regular clients use condom with you over the past 12 months? All of the time			9	
405 How often did your regular clients use condom with you over the past 12 months? All of the time			Others (Specify)	
condom with you over the past 12 All of the time			Don't know 98	
Most of the time2	405	condom with you over the past 12	All of the timeI	→ 406
			Most of the time2	
Some of the time			Some of the time	
Rarely			Rarely4	
Never			Never5	
405.1 Why didn't they use condom always? Not available	405.1	Why didn't they use condom always?	Not availableI	
(Multiple answers. DO NOT READ the possible answers) Too expensive			Too expensive2	
Partner objected		possion anomalo	Partner objected	

Condom use with Regular Client

Q. N.	Questions and Filters	Coding Categories	Skip to
		I didn't like to use it4	
		Used other contraceptive5	
		Didn't think it was necessary6	
		Didn't think of it7	
		Client offered more money8	
		Others (Specify)	
		Don't know 98	

Condom use with Non-Paying Cohabiting Partner (Husband or Male Friend)

Q. N.	Questions and Filters	Coding Categories	Skip to
406	Did you have sexual intercourse with your husband or a male friend in past six months?	Yes1- No2	→ 409
407	Think about your most recent sexual intercourse with your husband or male partner. How many times did you have sexual intercourse with this person over the last 30 days? (Write '00'for none intercourse in past one month)	Number of times Don't know	
408	The last time you had sex with your husband or male friend staying to gather, did your sex partner use a condom?	Yes1- No2	→ 408.2
408.1	Who suggested condom use that time?	Myself	409

Q. N.	Questions and Filters	Coding Categories	Skip to
408.2	Why didn't your partner use a condom that time?	Not available1	
		Too expensive2	
		Partner objected3	
		I didn't like to use it4	
		Used other contraceptive5	
		Didn't think it was necessary6	
		Didn't think of it7	
		Trust partner8	
		Wish to have child9	
		<i>Others (Specify)</i>	
		Don't know	
409	How often did all of your non-paying partners use condoms over the last 12	All of the time1	▶ 410
	months?	Most of the time2	
		Some of the time	→ 410
		Rarely4	410
		Never5	
		Did not have sexual intercourse	
		in the last 12 months6	
409.1	Why didn't they use condom always?	Not available1	
	(Multiple answers. DO NOT READ the possible answers)	Too expensive2	
		Partner objected3	
		I didn't like to use it4	
		Used other contraceptive5	
		Didn't think it was necessary6	
		Didn't think of it7	
		Trust partner8	
		Wish to have child9	

Q. N.	Questions and Filters	Coding Categories	Skip to
		Others (Specify)	
		Don't know	

Q. N.	Questions and Filters	Coding Categories	Skip to
410	During the past one year, did you have sexual intercourse with a person other than your client, husband/ male friend?	Yes1 No2	► 412.2
411	Did he use condom when he had last sexual contact with you?	Yes1	412.2
		No2_	→ 411.2
411.1	Who suggested condom use at that time?	Myself1	412
		My Partner2	J
		Don't know	
411.2	Why didn't he use condom at that time?	Not available 1	
		Too expensive2	
		Partner objected3	
		I didn't like to use4	
		Used other contraceptive5	
		Didn't think it was necessary6	
		Didn't think of it7	
		Others (Specify)	
		Don't know98	
412	How often did your other partners use condom with you over the past 12 months?	All of the time1	▶412.2
		Most of the time2	
		Some of the time3	
		Rarely4	
		Never	

Condom use with sex partners other than clients, husbands and male friends living together

Q. N.	Questions and Filters	Coding Categories	Skip to
412.1	Why did your other partners not use condom regularly?	Not available 1	
	(Multiple answers. DO NOT READ the	Too expensive2	
	possible answers)	Partner objected3	
		I didn't like to use4	
		Used other contraceptive5	
		Didn't think it was necessary6	
		Didn't think of it7	
		Others (Specify)	
		Don't know98	

Knowledge and Use of Female Condom

Q. N.	Questions and Filters	Coding Categories	Skip to
412.2	Have you heard about condoms that can be used by women?	Yes1	
	(If the respondent has not heard about female condom, explain what they are before asking questions)	No2	▶ 412.7
412.3	If yes, from where did you know about this?	Radio1	
		<i>TV</i> 2	
	(Multiple answers. DO NOT READ the	Pharmacy3	
	possible answers)	Health Post/Health Center4	
		Hospital5	
		Health Workers/Volunteers6	
		Friends/Relatives/Neighbors7	
		NGO staff8	
		Newspapers/Posters9	
		Video Van 10	
		Street Drama 11	
		Cinema Hall 12	
		Community interaction/training 13	
		Bill Board/Sign Board14	

Q. N.	Questions and Filters	Coding Categories	Skip to
		<i>Comic Book</i> 15	
		Community Workers	
		Others (Specify)	
412.4	Have you ever used female condoms?	Yes1	412.7
		No2	→
412.5	When was the last time you used female condom?	Within a month1	
		1-5 months before2	
		6-11 months before3	
		More than 12 months before4	
		Don't remember/know	
412.6	Who was your sex partner when you used female condom last time?	Regular partner1	
		<i>Client</i> 2	
		Regular client3	
		Others (Specify)4	
		Don't know	
412.7	In your opinion are female condoms useful for women like you?	Yes1	
		No2	
413	With whom did you have your last sexual intercourse in the past one year?	Client	
		Husband/male friend2	
		Other male	
		Others (Specify)	
413.1	Did you use condom at that time?	Yes1	
		No2	

Condom Accessibility

Q. N.	Accessibility Questions and Filters	Coding Categories	Skip to
414	Do you usually carry condoms with you?		
		Yes1	415
		No2	→
414.1	At this moment, how many condoms do you have at-hand with you? (Observe and write)	Number	
415	Which places or persons do you know from where/whom you can obtain condoms?	Health Post/ health center1	
		Pharmacy2	
	(Multiple answers. DO NOT READ the possible answers)	General retail store (Kirana Pasal)3	
		Private clinic4	
		Paan shop5	
		Hospital6	
		FPAN clinic7	
		Peer/friends8	
		NGO/health workers/volunteers9	
		Hotel/lodge10	
		Client/other sex partner11	
		Massage parlor 12	
		Bhatti Pasal13	
		<i>Other</i> (<i>Specify</i>)96	
		Don't know 98	
415.1	How long does it take for you to obtain a condom from the nearest spot from your house or your working place?	Minutes	
		No knowledge/not aware of	
		condom	
416	How do you usually obtain condoms?	Always free of cost1	
	(Buy, obtain free of cost or both ways)	Purchase2	→ 416.3
		Obtain both ways3	
		Condom never used4	→ 418

Q. N.	Questions and Filters	Coding Categories	Skip to
416.1	From where do you often obtain free		t
	condoms?	Health Post/Health Center1	
	(Multiple answers. DO NOT READ the	Hospital2	
	possible answers)	FPAN clinics	
		Peers/friends4	
		Community events5	
		NGO/Health Workers/Volunteers	
		Client/other sex partner7	
		Massage parlor8	
		Hotel/lodge/restaurant9	
		Bhatti Pasal 10	
		Others (Specify)	
416.2	Which would be the most convenient place/s for you to obtain free condoms?	Health Post/Health Center1	
	(Multiple answers. DO NOT READ the	Hospital	
	possible answers)	FPAN clinics	
	possible answers)	Community events	
		NGO/Health Workers/Volunteers	
		Client/other sex partner7	
		Massage parlor8	
		Hotel/lodge/restaurant9	
		Bhatti Pasal10	
		Others (Specify)	
416.3	In the last 12 months, have you been given condoms by any organizations?	Yes - free1	
		<i>Yes – on cash</i> 2	
		No3	

Q. N.	Questions and Filters	Coding Categories	Skip to		
	Note: If response is '1' in Q416 Go to Q418 after 416.3				
417	From where do you often purchase condoms?	Pharmacy1			
	(Multiple answers. DO NOT READ the	General retail store (Kirana Pasal)2			
	possible answers)	Private clinic			
		Pan Shop4			
		Hotel/lodge/restaurant5			
		Others (Specify)			
417.1	Which would be the most convenient place/s for you to purchase condoms?	Pharmacy1			
	(Multiple answers. DO NOT READ the	General retail store (Kirana Pasal)2			
	possible answers)	Private clinic			
		Pan Shop4			
		Hotel/lodge/restaurant5			
		Others (Specify)96			

Type of Sex Practices

Q. N.	Sex Practices Questions and Filters	Coding Categories	Skip to
418	During the past one-year, did any of your sexual partners force you to have sex with them against your wish?	Yes1	
		No2	
419	Did any person physically assault you (for any reason) in the past year?	Yes1	
		No2	
420	In the past year, did any of your clients perform such act/s that you did not like?	Yes1	422
		No2	→
421	If yes, what were they?	Oral sex 1 Masturbation 2 Anal sex 3 Beaten up 4 Snatched /stole money 5 Used abusive language 6 Ran away without paying 7 Burnt with cigarette 8 Forced to have sex after drinking alcohol 9 Others (Specify) 96	
422	In the past year, did you have other type of sexual intercourse other than vaginal? (INSTRUCTION TO INTERVIEWER: Explain the other types of sexual intercourse besides vaginal (such as oral, anal)	Yes1 No2 ⁻	501
422.1	If yes, what type of sexual act/s were they? (Multiple answers. DO NOT READ the possible answers)	Oral1	
		Anal2	

Q. N.	Questions and Filters	Coding Categories	Skip to
		Masturbation3	
		Others (Specify) 96	
422.2	What type of sexual contact did you have with your last client?	Oral1	
	(Multiple answers. DO NOT READ the possible answers)	Anal2	
		Masturbation3	
		Vaginal4	
		<i>Others (Specify)</i>	

5.0 AWARENESS OF HIV/AIDS

Q. N.	Questions and Filters	Coding C	ategories	Skip to
501	Have you ever heard of HIV/AIDS?	Yes No	2	601 -►
502	Of the following sources of information, from information on HIV/AIDS within the past on	e-year?		
	Source of Information	Yes	No	
	1. Radio	1	2	
	2. Television	1	2	
	3. Newspapers/Magazines	1	2	
	4. Pamphlets/Posters	1	2	
	5. Health Workers	1	2	
	6. School/Teachers	1	2	
	7. Friends/Relatives	1	2	
	8. Work Place	1	2	
	9. People from NGO	1	2	
	10. Video Van	1	2	
	11. Street Drama	1	2	
	12. Cinema Hall	1	2	
	13. Community Event/Training		2	
	14. Bill Board/Sign Board		2	
	15. Comic Book	1	2	
	16. Community Workers	1	2	
	96. Others (Specify)	I	2	

Knowledge, Opinion and Misconception about HIV/AIDS

Q. N.	Questions and Filters	Coding Categories	Skip to
503	Do you know anyone who is infected with HIV or who has died of AIDS?	Yes1	
		No2	505
504	Do you have a close relative or close friend who is infected with HIV or has died of AIDS?	Yes, a close relative1	
		Yes, a close fried2	
		No3	
505	Can people protect themselves from HIV by keeping sexual contact with only one uninfected faithful sex partner?	Yes1	
	Å	No2	
		Don't know 98	
506	Can people protect themselves from HIV, virus-causing AIDS, by using condom correctly in each sexual	Yes1	
	contact?	No2	

Q. N.	Questions and Filters	Coding Categories	Skip to
		Don't know 98	
507	Do you think a healthy-looking person can be infected with HIV?	Yes1	
		No2	
		Don't know 98	
508	Can a person get the HIV virus from mosquito bite?	Yes1	
		No2	
		Don't know 98	
509	Can a person get HIV by sharing a meal with an HIV infected person?	Yes1	
		No2	
		Don't know 98	
510	Can a pregnant woman infected with HIV/AIDS transmit the virus to her unborn child?	Yes1	
		No2_	h
		Don't know 98 -	5 ₁₂
511	What can a pregnant woman do to protect her child from HIV transmission?	Cannot do anything/cannot	
		protect the child0	
		Take Medication1	
		Abort the child2	
		Other (Specify)96	
		Don't know 98	
512	Can a woman with HIV/AIDS transmit the virus to her new-born child through breastfeeding?	Yes1	
	erousinee ang.	No2	
		Don't know 98	
513	Can people protect themselves from HIV virus by abstaining from sexual intercourse?	Yes1	
		No2	
		Don't know 98	
514	Can a person get HIV by holding an HIV infected person's hand?	Yes1	

Q. N.	Questions and Filters	Coding Categories	Skip to
		No2	
		Don't know 98	
515	Can a person get HIV, by using previously used needle/syringe?	Yes1	
		No2	
		Don't know 98	
516	Can blood transfusion from an infected person to the other transmit HIV?	Yes1	
		No2	
		Don't know	
517	Is it possible in your community for someone to have a confidential HIV test?	Yes1	
		No2	
		Don't know 98	
517.1	Do you know where can you go for HIV testing?	Yes1	
		No2	
518	I don't want to know the result, but have you ever had an HIV test?	Yes1	601
		No2	→
519	Did you voluntarily undergo the HIV test or because it was required?	Voluntarily1	
		Required2	
520	Please do not tell me the result , but did you find out the result of your test?		→ 522
		No2	
521	Why did you not receive the test result?	Sure of not being infected1	
		Afraid of result2	
		Felt unnecessary3	
		Forgot it4	
		Other (Specify)96	
522	When did you have your most recent HIV test?	Within last 12 months1	

Q. N.	Questions and Filters	Coding Categories	Skip to
		Between 1-2 years2	
		Between 2-4 years3	
		More than 4 years ago4	
523	Have you taken up HIV testing in the past 12 months?	Yes1	601
		No2	→
524	I don't want to know the results, but did you receive the results of that test?	Yes1	
		No2	

6.0 **PROMOTION OF CONDOM**

6.0	PROMOTION OF CONDOM Ouestions and Filters	Coding	ataganiag	Skip to
Q. N. 601	Questions and Filters In the past one-year have you seen, read or l		Categories	Skip to
001	from the following sources? (READ THE			
	Sources of Information	Yes) No	
	1. Radio	1	2	
	2. TV	1	2	
		1		
	3. Pharmacy	1	2	
	4. Health Post/ Health Center	1	2	
	5. Hospital	l	2	
	6. Health Workers/Volunteers	1	2	
	7. Friends/Neighbors	1	2	
	8. NGOs	1	2	
	9. Newspapers/Posters	1	2	
	10. Video Van	1	2	
	11. Street Drama	1	2	
	12. Cinema Hall	1	2	
	13. Community Event/Training	1	2	
	14. Bill Board/Sign Board	1	2	
	15. Comic Book	1	2	
	16. Community Workers	1	2	
	96. Others (Specify)	1	2	
	90. Others (Speeny)	1	2	
602	What message did you get from the			
002	advertisement?	Condoms should be u	sed to	
	advertisement?			
	Maltinha and DO NOT DEAD that	avoia HIV/AIDS	1	
	(Multiple answers. DO NOT READ the		7 .	
	possible answers)	Condoms should be u	sed to	
		avoid STI	2	
		Condoms should be u	sed for	
			-	
		family planning, oth	er family	
		planning messages.	3	
		president of messel gest		
		Other (Specify)	96	
		omer (speegy)		
03	In the past one-year, have you ever seen,	heard or read followin	ig messages?	
	Messages/Characters	Yes	No	
	1. Jhilke Dai Chha Chhaina Condom	1	2	
	2. Condom Kina Ma Bhaya Hunna Ra	1	2	
	3. Youn Rog Ra AIDS Bata Bachnalai			
	Rakhnu Parchha Sarbatra Paine	1	2	
	Condom Lai			
	4. Ramro Sanga Prayog Gare Jokhim			
	Huna Dinna Bharpardo Chhu Santosh	1	2	
	Dinchhu Jhanjhat Manna Hunna			
	5. Condom Bata Surakchhya, Youn			
	Swasthya Ko Rakchhya AIDS Ra			
	Younrog Bata Bachna Sadhai	1	2	
	Condom Ko Prayog Garau			
	6. HIV/AIDS Bare Aajai Dekhee Kura	1	2	
	Garau	1	-	
	7. Ek Apas Ka Kura	1	2	
	8. Maya Garaun Sadbhav Badaun	1	2	
	9. Des Pardes	1		
	7. Des raiues	1	2	

Q. N.	Questions and Filters	Coding Categories	Skip to
603.1	Besides above messages have you seen, heard or read any other messages relating to STI/HIV/AIDS Prevention or Condom Uses?	Yes1 No2	604 -►
603.2	What are they?	Advertisement on No.1condom1 Condom lagaun, AIDS bhagaun2 Others (Specify)96	
604	During the past one-year what brand of condoms did you use most of the time? (Record first three)	Never used condom0Number One1Dhaal2Panther3Kamasutra4Jodi5Black cobra6Condom with no brand name6Condom with no brand name7Lilly8Vega9Skin less10Play Vet11Did not use in the past 12 months95	
		Others(Specify)96	

Knowledge of and Participation in STI and HIV/AIDS Programs

Q. N.	Questions and Filters	Coding Categories	Skip to
605	Have you met or discussed or interacted with peer educators (PE) or outreach educators (OE) in the last 12 months?	Yes1	609
		No2	→
		No response 99	
606	When you met/discussed/interacted with PE or OE, what activities did they involve you in?	Discussion on how HIV/AIDS is/isn't	

Q. N.	Questions and Filters	Coding Categories	Skip to
	(Multiple answers. DO NOT READ the possible answers)	transmitted 1 Discussion on how STI is/isn't 2 transmitted 2 Regular/non-regular use of condom 3 Demonstration on using condom correctly4 STI treatment/cure after treatment 5 Counseling on reducing number of sex partner 6 Training on HIV and STI, Condom day, AIDS day, participation in discussions and interaction programs 7 Others (Specify) 96	

Q. N.	Questions and Filters	Coding Categories	Skip to
607	Do you know from which organization were they?	AMDA1	
	(Multiple answers. DO NOT READ	<i>GWP</i> 2	
	the possible answers)	Trinetra3	
		WATCH	
		ICH5	
		NSARC	
		NRCS7	
		INF/Paluwa8	
		Siddhartha Club9	
		CAC 10	
		SACTS 11	
		NFCC	
		NAPN 13	
		SPARSHA 14	
		Change Nepal 15	
		PSI 16	
		Sathi Sanstha 17	
		Indreni Sewa Samaj 18	
		Step Nepal 19	
		Swan Nepal 20	
		<i>Others (Specify)</i>	
		Don't know 98	
608	How many times have you been visited by PE and/or OE in the last 12 months?	Once1	
		2-3 times2	
		4-6 times3	
		7-12 times4	
		More than 12 times5	

Q. N.	Questions and Filters	Coding Categories	Skip to
609	Have you visited or been to any drop in		(10)
	center (DIC) in the last 12 months?	Yes1	613
		No2	→
610	What did you do at DIC?		
	(Multiple answers. do not read the	Went to collect condoms1	
	possible answers)	Went to learn the correct way	
		of using condom2	
		Went to watch film on HIV/AIDS	
		Participated in discussion on HIV transmission4	
		Participated in discussion on	
		STI transmission5	
		Participated in training, interaction	
		and discussion programs on HIV/AIDS and STI6	
		Went to collect IEC materials	
		Went for STI treatment8	
		Took friend with me	
611	Do you know which organizations run	Other (Specify) 96	
011	those DICs ?	AMDA1	
	(Multiple answers. DO NOT READ the	<i>GWP</i> 2	
	possible answers)	Trinetra3	
		WATCH4	
		ICH	
		NSARC6	
		NRCS7	
		INF/Paluwa8	
		Siddhartha Club9	
		CAC 10	
		SACTS 11	
		NFCC 12	
		NAPN 13	
		SPARSHA 14	
		Change Nepal 15	
		Indreni Sewa Samaj 16	
		PSI	
		Sathi Sanstha 18	

Q. N.	Questions and Filters	Coding Categories	Skip to
		Step Nepal 19	
		Swan Nepal 20	
		<i>Others</i> (<i>Specify</i>)	
		Don't know 98	
612	How many times have you visited such DICs in the last 12 months?	Once1	
		2-3 times2	
		4-6 times3	
		7-12 times4	
		More than 12 times5	
613	Have you visited any STI clinic in the last 12 months?	Yes1	617
		No2	→
614	What did you do at such STI clinics?	Blood tested for STI1	
	(Multiple answers. do not read the possible answers given below)	Physical examination conducted for STI identification2	
		Was advised to use condom in	
		each sexual intercourse3	
		Was advised to take complete	
		and regular medicine4	
		Was suggested to reduce number	
		of sexual partners5	
		Took friend with me 6 Other (Specify)	
615	Do you know which organizations run those STI clinics?	AMDA	
		NSARC2	
	(Multiple answers. do not read the possible answers)	NRCS	
		INF Paluwa4	
		Siddhartha Club5	
		SACTS	
		NFCC7	

Q. N.	Questions and Filters	Coding Categories	Skip to
		WATCH8	
		<i>GWP</i> 9	
		Private clinic 10	
		Hospital11	
		Pharmacy 12	
		CAC 13	
		Indreni Sewa Samaj 14	
		Trinetra 15	
		Others (Specify)96	
		Don't know	
616	How many times have you visited such STI clinic in the last 12 months?	Once1	
		2-3 times2	
		4-6 times3	
		7-12 times4	
(17	TT ** 1 1 /	More than 12 times	
617	Have you visited any voluntary counseling and testing (VCT) centers in the last 12 months?	Yes1	620.1
		No2	→
618	What did you do at such VCT centers?	Received pre-HIV/AIDS test	
	(Multiple answers. DO NOT READ the	counseling1	
	possible answers)	Blood sample taken for	
		HIV/AIDS test2	
		Received post HIV/AIDS	
		test counseling3	
		Got information on HIV/AIDS	
		window period4	
		Received HIV/AIDS test result5	
		Received counseling on using	
		Condom correctly in each	

Q. N.	Questions and Filters	Coding Categories	Skip to
		sexual intercourse6	
		Took a friend with me7	
		<i>Other</i> (<i>Specify</i>)96	
619	Do you know which organizations run those VCT centers?	AMDA1	
	(Multiple answers. DO NOT READ the	NSARC2	
	possible answers)	NRCS	
		INF/Paluwa4	
		Siddhartha Club5	
		SACTS6	
		NFCC7	
		WATCH8	
		CAC9	
		NNSWA 10	
		GWP 11	
		Indreni Sewa Samaj12	
		Trinetra 13	
		Others (Specify)	
		Don't know	
620	For how many times have you visited VCT center in the last 12 months?	Once1	
		2-3 times2	620.2
		4-6 times	J
		7-12 times4	
		More than 12 times5	
620.1	If not visited VCT in the last 12 months, what is the reason for this?	Do not know about VCT center1	
	(Multiple answers. DO NOT READ the	I do not think I need to be tested2	
	possible answers)	I have no symptoms of HIV3	
		No VCT near by4	

Q. N.	Questions and Filters	Coding Categories	Skip to
		I have already tested and know	
		my status5	
		No money to go to VCT center6	
		Fear that people will see me	
		visiting VCT7	
		Fear that family members/friend/ clients will know it8	
		<i>Others (Specify)</i>	
620.2	Have you ever been approached by HIV/AIDS related health workers/	Yes1	621
	outreach workers to explain you about the need of VCT?	No2	→
620.3	If you were approached by health workers/outreach workers, what did they advise you?	Talked about my sex partners1	
	(Multiple answers. DO NOT READ the possible answers)	Advised to visit VCT if I have some problems2	
	possible allswers)	Advised me to visit VCT once in a month in any case3	
		Did not talk about HIV testing4	
		Others (Specify)	
621	Have you ever participated in HIV/AIDS awareness raising program or community events in the last 12 months?	Yes1	701
		No2	→
622	WHAT WERE THE ACTIVITIES THAT YOU PARTICIPATED IN?	Street drama1	
		<i>AIDS Day</i> 2	
	(Multiple answers. DO NOT READ the possible answers)	Condom Day3	
	the possible answers)	Video Shows4	
		Group discussions5	
		Talk programs6	
		HIV/AIDS related training7	
		HIV/AIDS related Workshops8	
		Condom use demonstrations9	
		Others (Specify)96	

Q. N.	Questions and Filters	Coding Categories	Skip to
623	DO YOU KNOW WHICH		
	ORGANIZATIONS ORGANIZED THOSE	AMDA1	
	ACTIVITIES?	<i>GWP</i> 2	
		TRINETRA3	
	(Multiple answers. DO NOT READ the possible answers given below)	WATCH4	
		ICH5	
		NSARC	
		NRCS7	
		INF/Paluwa8	
		Siddhartha Club9	
		CAC 10	
		SACTS 11	
		NFCC 12	
		NAPN13	
		Sparsa14	
		Naulo Ghumti 15	
		Mahila Uddhar Samuha 16	
		Maiti Nepal 17	
		Indreni Sewa Samaj 18	
		<i>Others (Specify)</i>	
		Don't know 98	
624	How many times have you participated in such activities in the last 12 months?	Not participated0	
		Once1	
		2-3 times2	
		4-6 times3	
		7-12 times4	
		More than 12 times5	

701			ng Categories		Skip to
	Which diseases do you understand by		<u> </u>		•
	STI?	White discharge/discharge of			
	(Multiple answers. DO NOT READ the possible answers)	Pus/dhatu flow.		1	
		Itching around vagina2			
		Lower abdomina	l pain	3	
		Syphilis (Bhiring	i)/gonorrhea.	4	
		HIV/AIDS		5	
		Painful urination		6	
		Swelling of vagin	a	7	
		Pain in vagina		8	
		Unusual bleeding	g from vagina	9	
		Ulcer or sore arou	nd vagina		
		Fever		11	
		Burning during u	rination		
		Weight loss/ get th	hinner		
		Don't know			
		Other (Specify) _			
702	Do you currently have any of the following s Symptoms	symptoms?	Yes	No	
-	Symptoms 1. Pain in the lower abdomen		1	2	
-	2. Pain during urination		1	2	
-	3. Frequent urination		1	2	
-	4. Pain during sex		1	2	
-	5. Ulcer or sore in the genital area		1	2	
	6. Itching in or around the vagina		1	2	
	7. Vaginal odor or smell		1	2	
_	8. Vaginal bleeding (unusual)		1	2	
-	9. Unusual heavy, foul smelling vaginal di	scharge	1	2	
-	10. Genital Warts 96. Others (Specify)		1	2 2	
-	(If answer is 'No' to all in t	ha () No. 702 () a	1	2	
703	Have you gone through medical treatment for any of these symptoms?	Yes			710
	, , , , , , , , , , , , , , , , , , ,	No		_	→
703.1	If yes, for how long did you wait to go				
703.1	for the treatment?				
	(Write '00' if less than a week)				

7.0 STI (SEXUALLY TRANSMITTED INFECTION)

Q. N.	Questions and Filters	Coding Categories	Skip to
		Week	
704	Where did you go for the treatment? (Multiple answers. DO NOT READ the possible answers)	Private Clinic1 AMDA Clinic2	
		NFCC3	
		SACTS4 FPAN Clinic5	
		Health Post/ Health Center6	
		Hospital7 Pharmacy8	
		Self Treatment (Specify)9	
		Others (Specify)	

Q. N.	Questions and Filters	Coding Categories	Skip to
705			
	For which symptoms did you get treatmen	t? Specify the treatment.	
	Symptoms	Treatment	
	1. Pain in the lower abdomen		
	2. Pain during urination		
	3. Frequent urination		
	4. Pain during sex		
	T uni during sex		
	5. Ulcer or sore in the genital area		
	6. Itching in or around the vagina		
	7. Vaginal odor or smell		
	8. Vaginal bleeding (unusual)		
	9. Unusual heavy, foul smelling		
	vaginal discharge		
	10. Genital Warts		
	06 Others (Snacify)		
	96. Others (Specify)		
706	Did you receive a prescription for		
	medicine?	Yes1	710
		No2	→
707	Did you obtain all the medicine prescribed?	Yes I obtained all of it1	
	r		710
		I obtained some but not all2	ſ
708	Did you take all of the medicine	I obtained none3	→ 709
/08	Did you take all of the medicine prescribed?	Yes1	▶ 709
		No2	

Q. N.	Questions and Filters	Coding C	ategories	Skip to
708.1	If not, why did you not take all of the medicine prescribed?	Forgot to take	1	
		-		
		Felt cured	2	
		Medicine did not help	3	
		Others (Specify)	96	
709	How much did you pay for the medicine	Rs		
	that you took? [If not paid mention the reasons]			
		Reason		
-10				
710	Did you have any of the following symptom	s in the past year?		
	Symptoms			
		Yes	No	
	1. Pain in the lower abdomen	1	2	
	2. Pain during urination	1	2	
	3. Frequent urination	1	2	
	4. Pain during sex	1	2	
	5. Ulcer or sore in the genital area	1	2	
	6. Itching in or around the vagina	1	2	
	7. Vaginal odor or smell	1	2	
	8. Vaginal bleeding (unusual)	1	2	
	 Unusual heavy, foul smelling vaginal discharge 	1	2	
	10. Genital Warts	1	2	
	96. Others (Specify)	1	2	
	(If answer is 'No' to all in (Q. No. 710, Go to Q. N	o. 801)	
	1			

). N.	Questions and Filters	Coding	Categories	Skip to
711	Have you gone through medical treatment for any of these symptoms in the past year?			
	Symptoms	Yes	No	
	1. Pain in the lower abdomen	1	2	
	2. Pain during urination	1	2	
	3. Frequent urination	1	2	
	4. Pain during sex	1	2	
	5. Ulcer or sore in the genital area	1	2	
	6. Itching in or around the vagina	1	2	
	7. Vaginal odor or smell	1	2	
	8. Vaginal bleeding (unusual)	1	2	
	9. Unusual heavy vaginal discharge and foul vaginal discharge	1	2	
	10. Genital Warts	1	2	1
	96. Others (Specify)	1	2	1

712	Where did you go for the treatment?		
		Private clinic1	
	(Multiple answers. Do not read the possible answers).	AMDA clinic2	
		NFCC	
		SACTS	
		FPAN clinic5	801
		Health post/ health center6	801
		Hospital7	
		Pharmacy8	
		Self treatment (Specify)9	→
		GWP 10	
		Siddhartha club clinic 11	
		WATCH clinic 12	
		CAC 13	
		NSARC 14	
		Trinetra 15	
		Indreni Sewa Samaj 16	
		Others (Specify)	
713	Did anyone from the place where you went for treatment counsel you about how to avoid the problem?	Yes1	
		No2	→ ₈₀₁
713.1	What did he/she tell you?	Told me to use condom1	
	(Multiple answers, DONOT READ the	Told me to reduce number of	
	possible answers)	sexual partners2	
		Told me to take medicine regularly3	
		Told me not to have sexual contact	
		during medicine taking period4	
		Advised me to come for regular	
		check up5	
		Others (Specify)	

USE OF DRUGS AND INJECTION

Q. N.	DRUGS AND INJECTION Questions and Filters	Coding Categories	Skip to
801	During the last 30 days how often did		•
	you have drinks containing alcohol?	Everyday1	
		2-3 times a week2	
		At least once a week	
		Less than once in a week4	
		Never5	
		Don't know	
802	Some people take different types of drugs. Have you also tried any of those drugs in the past 30 days?	Yes1	
	(Ganja, Bhang, Nitroson, Nitrovet E.)	No2	
		Don't know	
803	Some people inject drugs using a syringe. Have you ever-injected drugs? (Do not count drugs injected for	Yes1	809
	medical purpose or treatment of an illness)	No2	}
	inness)	Don't know	
803.1	How old were you when you first injected drugs?	Age	
		Don't know	
803.2	How long have you been injecting		
	drugs? (Include self-injection or injection by	Years	
	others)	Months	
904		No response	
804	Have you injected drugs in last 12 months?	Yes1	800
	(Do not count drugs injected for medical purposes or treatment of an		809 L
	illness)	Don't know	J
804.1	Have you injected drugs in the past one month?	Yes1	809
		No2	→
804.2	Have you injected drugs in the past one week?	Yes1	809
		No2	→
805	Are you currently injecting drugs?	Yes1	809
		No2	r.

Q. N.	Questions and Filters	Coding Categories	Skip to
806	Think about the last time you injected drugs. Did you use a needle or syringe that had previously been used by	Yes1	l
	someone else?	No2	l
		Don't know 98	
807	Think about the time you injected drugs during the past one month. How often was it with a needle or syringe that had	Every Time1	l
	previously been used by someone else?	Almost Every Time2	l
		Sometimes3	1
		Never4	l
		Don't Know 98	L
808	Usually how do you obtain a syringe/needle?	My friend/relative give it to me	
		after use1	
		Unknown person give it to me2	1
		I pick it up from a public place	1
		used and left by others3	l
		I pick it up from a public place where I leave my syringes4	l
		I use a new needle/syringe given by NGO/volunteer5	l
		I purchase a new needle/syringe6	l
		Sex partner give it to me7	l
		<i>Others</i> (Specify)	1

Q. N.	Questions and Filters	Coding Categories	Skip to
809	Have you ever exchanged sex for drugs?	Yes	
		No2	
810	Have you ever exchanged sex for money so that you can buy drug?	Yes1	
		N- 2	
811	To your knowledge, have any of your	No2	
011	sex partners injected drugs?	Yes1	812
		No2	→
811.1	(For Married SW only) Does your		
	husband inject drug? (Check with Q. 204)	Yes1	
		No2	
		Don't know 98	
811.2	(For female having regular client) Did your regular client inject drug?	V	
	(Check with Q. 403)	Yes1	
		No2	
		Don't know	
811.3	(For all) Do you know any of your client ever injecting drugs?	Yes1	
	cheft ever injecting drugs:		
		No2	
		Don't know 98	
812	Do you know anyone who injects drugs?	Yes	901
			→
812.1	If yes, how are you related to her/him?	No2	
012.1	(Multiple answers, Do NOT READ the	Client1	
	Possible answers)	Friend2	
		Family3	
		Relative4	
		Neighbor/male from village/	
		someone not related to5	
		<i>Other</i> (Specify)	
	l	l	

9.0 STIGMA AND DISCRIMINATION

Q. N.	Questions and Filters	Coding Categories	Skip to
901	If a male relative of yours gets HIV, would you be willing to take care of him in your household?	Yes1	
		No2	
		Don't know 98	
902	If a female relative of yours gets HIV, would you be willing to take care of her in your household?	Yes1 No2	
		Don't know 98	
903	If a member of your family gets HIV, would you want it to remain a secret?	Yes1	
		No2	
		Don't know 98	

10.0 DRUG USE

Q.N.	Questions	Coding Categories	Skip to
	Ask this section to those respondent who	have injected drugs at least once in the	
	past1month, Check question no 804.1 = 1		
1001	Have you used non-sterile injecting	Yes1	
	equipment at any time in the last month?	No2	
1002	In the last month, did you switch from	Yes1	
	injecting to oral drugs?	No2	
1003	How many times would you say you		
	injected drugs yesterday?	Timer	▶ 1007
		Times0	
1004	Would you like to tell me why you did	~	
1004	not inject yesterday?	1	
	not inject yesterday?	2	
1005		3	
1005	How many days ago did you get injected?		
		Days ago	
1006	How many times would you say you		
	injected drugs on the last day?	Times	
1007	During the past one-week how often	Once a week1	
	would you say you injected drugs?	2-3 times a week2	
		4-6 times a week	
		Once a day4	
		2-3 times a day5	
		4 or more times a day6	
		Not injected in the last week7	
		Don't know98	
		No response99	

11.0 NEEDLE SHARING BEHAVIORS

Q.N.	Questions	Coding Categories	Skip to
1101	Think about the times, you have injected drugs yesterday/last day. How many times did you inject drugs on that day? (Fill the number from answer to Q. 1003 or 1006 and verify by asking the respondent)	Times	
1102	The last time you injected, how did you get that syringe/needle? (Public place means places other than the IDU's home that are used to hide syringe/needle)	My friend/relative gave it to me after his use 1 Unknown person gave it to me after he use 2 I picked it up from a public place which was left there by others ⁺ J picked it up from a public place which was left there by myself ⁺ 4 I used a new needle/syringe given by NGO staff/volunteer 5 (write the name of Organization) I used a needle/syringe which I purchased 0 1 reused my own needle/syringe 7 My friend gave new needle/syringe 8 Others (Specify) 98	
1102.1	If you were in a group the last time that you injected, how many different people in the group do you think used the same needle?	No response 99 Nos. Injected alone	
1103	Think about the times, you have injected drugs during the past one-week. How often was it with a needle or syringe that had previously been used by someone else?	Every times1Almost every-times2Sometimes3Never used4Not injected in the last week5-Don't know98No response99	→1111
1103.1	When you injected drug during the past week, how often did you use a syringe/ needle that had been left in public place? (Public place means places other than the IDU's home that are used to hide syringe/needle)	Every times1Almost every-times2Sometimes3Never4Don't know98No response99	

Q. N.	Questions and Filters	Coding Categories				Skip to
1104		you ever share needles and syringes with any of the following			ollowing?	
	Read out list. Multiple answers possible	Yes	No	DK	NR	
	Your usual sexual partner	1	2	98	99	
	A sexual partner who you did not know	1	2	98	99	
	A friend	1	2	98	99	
	A drugs seller	1	2	98	99	
	Unknown Person	1	2	98	99	
	96. Other (Specify)	1	2			
1105	With how many different injecting partners did you share needles or syringes in the past one-week? (Count everyone who injected from the same syringe)	Don't kno	of partners w			
1106	In the past one-week, how often did you		es			
	give a needle or syringe to someone else,		very-times			
	after you had already used it?	Sometime	es			
			w			
		No respon	nse			
1107	In the past-week, did you ever inject with a pre-filled syringe?	No			2	
	(By that I mean a syringe that was filled		ow			
1100	without you witnessing it)		1se			
1108	In the past one-week, how often did you		les			
	inject drugs using a syringe after someone		very-times es			
	else had squirted drugs into it from his/her used syringe?		S			
	(Front-loading/back-loading/splitting)					
	(Front-toading/back-toading/spitting)		nse			
1109	In the past one-week, when you injected		les			
1107	drugs, how often did you share a cooker/		very-times			
	vial/container, cotton/filter, or rinse water?		S			
			w			
			1se			
1110	In the past one-week, how often you drew		es			
	up your drug solution from a common		very-times			
	container used by others?		s			
			W			
		No respon	nse			
1111	In the past one year have you switched from					
	sharing to non-sharing practice?					
1112	Can you obtain new, unused needles and					
	syringes when you need them?					
			ow			L ¹¹¹⁴
		No respon	nse			μ

Q. N.	Questions and Filters	Coding Categories	Skip to
1113	Where can you obtain new unused needles	Drugstore1	
	and syringes?	Other shop	
		Health worker	
		Hospital 4	
		Drug wholesaler/drug agency	
	(Do not read out list. Multiple answers	Family/relatives	
	possible. Probe only with "Anywhere	Sexual partner7	
	Else?")	Friends	
		Other drugs users	
		Drugs seller 10	
		Needle exchange program of 11	
		Steal from legitimate source	
		(hospital/pharmacy) 12	
		Buy on streets	
		Other (Specify) 96	
1114	In the past one-year, did you ever inject	Yes1	
	drug in another city/district (or another	No2	
	country)?	Don't' remember	
		No response	
1114.1	In the last 12 months, have any of outreach	Yes 1	
	workers, a peer educator or a staff from a	No	
	needle exchange program given you a new	Don't' remember	
	needle/syringe?	No response	
1115	Are you currently under treatment (or	Currently under treatment1	
	receiving help) or have you ever received	Was in treatment but not now2	
	treatment (or help) because of your drug	Have never received treatment	End the
	use?	No response	Sinterview
1116	How many months ago did you last receive		
	treatment or help for your drug use?	Months	
		Don't know	
		No response	
1117	What kind of treatment or help you received?		
111/	(Do not read out the responses, probe asking,		
	you've received?") (Multiple Answers Poss		
-	• • • • • • •	Name of Institutions	
	Types of Treatments 1. Outpatient counseling		-
	2. Self-help groups		-
	3. Detoxification w/methadone		-
_	4. Maintenance w/methadone		-
			-
	5. Detoxification w/other drugs		-
	6. Detoxification with no drug		-
	7. Residential rehabilitation		4
	8. Helped for <i>cold turkey</i> without medicine		4
	9. Forced for <i>cold turkey</i> by others without		
	treatment		4
	96. Others (Specify)		4
	99. No response		

ANNEX - 4

FEMALE CLINICAL/LAB CHECKLIST

Respondent ID Number:			
Name of Clinician:		Date: 2065/	/
Name of Lab Technician:			
(A) Clinical Information	(B)	Specimen col	lection
		<u>Yes</u>	<u>No</u>
Weight: Kg	Pre-test counseled	1	2
B.P. : mm of Hg	Blood collected for HIV & Syphilis	1	2
Pulse :	Date & place for post-test results given	1	2
Temperature : ° F	Condom given	1	2
	Vitamins given	1	2
	Gift given	1	2
	IEC materials given	1	2

1.0 <u>Syndromic Treatment Information</u>

101. Has any of your sexual partner had urethral discharge in the past 3 months?

- 1. Yes
- 2. No
- 98. Don't Know

			Now		In the Past Month	
	Symptoms		No	Yes	No	
		Yes				
1.	Pain in the lower abdomen	1	2	1	2	
2.	Pain during urination	1	2	1	2	
3.	Frequent urination	1	2	1	2	
4.	Pain during sex	1	2	1	2	
5.	Ulcer or sore in the genital area	1	2	1	2	
6.	Itching in or around the vagina	1	2	1	2	
7.	Vaginal odor or smell	1	2	1	2	
8.	Vaginal bleeding (unusual)	1	2	1	2	
9.	Unusual heavy, foul smelling vaginal discharge	1	2	1	2	
10.	Genital Warts	1	2	1	2	
11.	Others (Specify)	1	2	1	2	

102. Do you now have or have you had any of the following symptoms in the past month?

(If yes to any of above, give vaginal discharge syndrome treatment)

- 103. Do you now have or have you had in the past month any sores or ulcer on or near your genitals?
 - 1. Yes (If yes, Refer)
 - 2. No
- 104. Has any of your sexual partner had sore around genital areas in the past 3 months?
 - 1. Yes (If yes, Refer)
 - 2. No
 - 98. Don't know

ANNEX – 5 ORAL INFORMED CONSENT FORM FOR FEMALE SEX WORKERS

Family Health International (FHI), Nepal

Oral Informed Consent Form for Female Sex Workers

Title:	Integrated Biologic and Behavioral Surveillance Survey among Female Sex Workers in Kathmandu Valley
Sponsor:	ASHA Project- FHI/Nepal and USAID/Nepal
Principal Investigator/	s: Dale Davis, MPHM, FHI/Nepal Laxmi Bilas Acharya, PhD, FHI/Nepal
Address:	GPO Box 8803, Gopal Bhawan, Anamika Galli, Ward No. 4, Baluwatar, Kathmandu, Nepal Phone: +977 1 443 7173; Fax: +977 1 441 7475 Email: <u>DDavis@fhi.org</u> ; lacharya@fhi.org

Introduction

We are asking you to take part in a 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 track the trend in the prevalence of HIV and Syphilis among the populations like you. We want to be sure that you understand the purpose of the research and your responsibilities before you decide if you want to participate in the study. This discussion is important. You can listen and learn about the study, ask questions, and then decide if you want to participate. If you choose to participate, one person will explain the study to you and another person will witness and make sure you understand the study. Both people will sign the form. You will not be asked to sign the form. You can ask us to explain any words or information that you may not understand.

Information about the Research and Your Role

This study selects its study participants from the Kathmandu valley who are female sex workers using a random process from Kathmandu Valley. You are in the pool of possible candidates, but the final selection would be based on your choice. In total 560 women like you will be selected for this study from Kathmandu Valley. If you agree to participate in the study we will interview you using a structured questionnaire and then ask you to provide about 5-7 ml blood sample for HIV and Syphilis test. We will draw blood from the vein. If you have any STI symptom, we will provide free treatment. You will be provided your confirmatory HIV test results and RPR titer test result on the same day if you want to receive it. Test results will be provided with counseling by a qualified counselor. If you are RPR reactive, a confirmatory test result for syphilis will be provided at the nearest VCT clinic in Kathmandu and you will be informed about the time and clinic where you need to obtain those results.

You will have to spend about 60 minutes with us if you decide to participate in this research. You will have to wait another 60 minutes if you want to collect the HIV test result on the same day. Further, if you decide to participate in the "on the spot treatment plan" for syphilis based on the RPR test you may then need to spend about 60 minutes more after you are given the Penicillin injection for observation by medical doctor for any adverse reactions. 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. Providing blood sample does not put you at any other risk. Some of the questions we ask might make you feel awkward or uncomfortable to answer them. You are free not to answer such questions and also to stop participating in the research 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 and after the test for HIV through a qualified counselor. He/she will provide information and address for seeking assistance for any mental stress you may have.

There is a small risk of being socially discriminated if people know that you have participated in a HIV related study. But we will keep all the information confidential so that such risk would be minimal.

Possible Benefits

You will be provided with free treatment, if currently you have any STI symptoms. Further, if you are tested positive for Syphilis and provide consent for treatment, we will provide you Penicillin injection in the presence of a medical doctor. You will be given lab test results and made aware of how STI/HIV is transmitted and how it can be prevented and controlled. We would refer you for treatment for HIV in case you would be found to have HIV, but study team will not provide this treatment for you. Follow up treatment costs will not be paid by the research team. You will be provided with information on safe sex. 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 infections.

After the blood sample collection it will be tested for HIV and Syphilis infection. You can collect your test results of HIV on the same day. For syphilis test results confirmed by TPPA test you will be given time and venue to come back for collecting test results. A qualified counselor with pre and post test counseling will give test result. Study ID card will be issued to you before the interview. 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, we cannot give you the results because we will not have your name written anywhere.

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 the health services you are seeking now and you would normally receive from the study centre.

Confidentiality

We will protect information collected about you and your taking part in this study to the best of our ability. We will not use your name in any reports. 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 or sign on this form, but only ask you to agree verbally (with spoken words). We will be responsible and serious about confidentiality during interview, STI examination and treatment. We assure you that all the activities will be confidential.

Payment

We will not pay you for your participation but you will be given condom and reading materials about STI/HIV/AIDS as compensation for your participation in the research. We will provide NRs 100.00 as a local transportation for coming to study centre for interview and test result collection.

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:

Dale Davis, ASHA project- FHI/Nepal, Baluwatar, Kathmandu, Phone: 01-4437173; 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: **Ethical Review Board**, **Nepal Health Research Council**, **Ram Shah Path**, **P.O. Box 7626** Phone: **977-1-4254220/4227460** Email: <u>nhrc@healthnet.org.np</u>

Or you may contact **Mahesh Shrestha**, FHI CO Nepal: GPO Box: 8803, Gopal Bhawan, Anamika Galli Ward No: 4, Baluwatar, Kathmandu Tel: 977-1-4437173. Email: mshrestha@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 – 6 BASIC EQUATION USED IN SAMPLE DESIGN

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

- n= required minimum sample size per survey round or comparison groups
- D = design effect (assumed in the following equations to be the default value of 2
- P_1 = the estimated number of an indicator measured as a proportion at the time of the first survey or for the control area
- P_2 = the expected level of the indicator either at some future date or for the project area such that the quantity (P₂-P₁) is the size of the magnitude of change it is desired to be able to detect
- Z_{α} = the Z-score corresponding to the degree of confidence with which it is desired to be able to conclude that an observed change of size (P₂-P₁) would not have occurred by chance (α the level of statistical significance), and
- Z_{β} = the Z-score corresponding to the degree of confidence with which it is desired to be certain of detecting a change of size (P₁-P₂) if one actually occurred (β statistical power).

ANNEX – 7 STUDY CENTERS

Districts	Lab Centers	No. of Centers	Sample Covered	Total	
Kathmandu Valley	Gaushala		125		
	Jamal	4	246	593	
	Koteshwor		144		
	Gongabu		78		

ANNEX – 8 POST TEST COUNSELING PROVIDED

Post Test Counseling	Courseling Contor	Ermosted Client	Client Counseled	
Date	Counseling Center	Expected Client	Ν	%
16 January 2011- 06 March 2011	Study Site	593	525	88.5