# Integrated Biological and Behavioral Surveillance Survey among Female Sex Workers Kathmandu Valley

**Round III -2008** 







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- New ERA Study Team

#### STUDY TEAM MEMBERS

#### **Key Team Members**

Mr. Sidhartha Man Tuladhar
 Mr. Niranjan Dhungel
 Ms. Pranita Thapa
 Project Director
 Project Coordinator
 Research Officer

Ms. Nira Joshi
 Mr. Ramesh Dangi
 Senior Research Assistant
 Mr. Sachin Shrestha
 Ms. Sarmila Prasai
 Assistant Research Officer
 Senior Research Assistant
 Senior Computer Programmer

8. Mr. Laxmi Datt Joshi - Senior Counselor

#### **Field Study Team Members**

1. Mr. Shanti Ram Dahal Research Assistant 2. Mr. Bhim Prasad Upreti Research Assistant 3. Mr. Tara Shrestha Research Assistant Mr. Durga Prasad Acharya 4. Field Supervisor Mr. Manish Khadka Field Supervisor 5. Mr Chandra Bahadur Rai Field Supervisor 6. 7. Ms. Roshani Shrestha Field Supervisor Field Supervisor 8. Ms. Sapana Gautam Field Supervisor 9. Ms. Sita Acharya Ms. Sujaya Dhungel Field Supervisor 10. Ms. Chandra Rana Field Supervisor 11. 12. Field Supervisor Ms. Sumitra Shrestha 13. Ms. Kalpana Bhattarai Field Supervisor 14 Ms. Umisara Darlami Field Supervisor Field Supervisor 15. Ms. Sarita Shrestha 16. Ms. Kalpana Bhatta Field Supervisor Ms. Geeta Pokharel Field Supervisor 17. 18 Ms. Ishwori Swar Field Supervisor 19. Ms. Sangita Karki Staff Nurse 20. Ms. Narayan Devi Manandhar Staff nurse 21. Ms. Menuka Rai Staff Nurse 22. Mr. Laxuman Dhungel Runner Mr. Sitaram Rijal 23. Runner 24. Mr. Saroj Pandey Runner

#### **Data Entry/Tabulation / Coding**

Ms. Deepa Shakya
 Mr. Babu Raja Dangol
 Coder
 Mr. Himal Awosthi
 Coder

4. Mr. Gehendra Pradhan
5. Mr. Prabhat Pradhan
6. Ms. Sanu Maiya Shrestha
7. Ms. Dejeena Amatya
Data Entry Person
Data Entry Person
Data Entry Person

#### **Administration Support**

Mr. Sanu Raja Shakya
 Senior Word Processor
 Ms. Geeta Amatya (Shrestha)
 Senior Word Processor
 Mr. Rajendra Kumar Shrestha
 Office Assistant

### **Laboratory Team (SACTS)**

Dr. Vijaya Lal Gurubacharya
 Mr. Janardan Kuinkel
 Senior Lab Technician
 Mr. Ramesh Baidya
 Lab Technician
 Ms. Dinesh Bista
 Ms. Yasodha Bista
 Lab Technician
 Lab Technician

# **TABLE OF CONTENTS**

	<u>Pa</u>	ige
ACKNO	WLEDGEMENTS	i
	TEAM MEMBERS	
	OF CONTENTS	
	TABLES	
	FIGURES	
	VIATION	
	ΓIVE SUMMARY	
CHAPT	ER - I: INTRODUCTION	1
1.1	Background	1
1.2	Objectives of the Study	2
CHAPT	ER – II: METHODOLOGY	3
2.1	Implementation of the Study	3
2.2	Study Population	3
2.3	Sample Design	3
2.4	Sample Size	3
2.5	Identification and Recruitment of FSWs	
2.6	Refusal	
2.7	Control of Duplication	
2.8	Research Instrument.	5
2.9	Study Personnel	
2.10	Recruitment and Training of Research Team	6
	Field Operation Procedures	
2.12	Coordination and Monitoring	8
2.13	Ethical Issues	8
2.14	HIV/STI Pre- and Post-Test Counseling and Follow-Up	8
2.15	Constraints in the Field Work	9
2.16	Data Processing and Analysis	9
CHAPT	ER – III: SOCIO-DEMOGRAPHIC CHARACTERISTICS	<b>10</b>
3.1	Socio-Demographic Characteristics.	10
	ER – IV: PREVALENCE OF HIV AND STI	
4.1	Prevalence of HIV and Syphilis Infection	13
4.2	Association of Socio-Demographic Characteristics and Syphilis Infection with	
	HIV Infection	13
4.3	Frequency of Condom Use with HIV and Syphilis Infection	14
4.4	Prevalence of Syndromes	14
OFF A POT		
CHAPTE	CR – V: SEXUAL BEHAVIOR AND CONDOM USE AMONG FEMALE	1.
<i>-</i> 1	SEX WORKERS	
5.1	Sexual Behavior of FSWs	
5.2	Sex Workers and Their Clients	
5.3	Types of Clients	
5.4	Sex Workers and Their Sex Partners	19

	5.5	Types of Sex Practiced by FSWs	.20
	5.6	Income of FSWs from Sex Work and Other Jobs	.21
	5.7	Knowledge of Condoms	.22
	5.8	Condom Use with Different Partners	.23
		5.8.1 Condom Use with Clients	.23
		5.8.2 Condom Use with Regular Clients	.23
		5.8.3 Condom Use with Non-Paying Partners	
		5.8.4 Condom Use with People Other than Clients, Husband and Male Friends.	.25
	5.9	Availability of Condoms and Their Brand Names	
	5.10	Modes of Obtaining Condoms	.27
	5.11	Use of Alcohol and Drugs by FSWs and Clients	.28
CH	IAPTE	R – VI: KNOWLEDGE OF HIV/AIDS AND STIs	.30
	6.1	Source of Knowledge of HIV/AIDS	
	6.2	FSWs' Knowledge on Major Ways of Avoiding HIV/AIDS	.30
	6.3	Knowledge on Major Ways of HIV/AIDS Transmission	.31
	6.4	Perception on HIV Test	
	6.5	Access to FHI/Nepal Messages	
	6.6	Knowledge of STIs, Experienced Symptoms, and Treatment in the Past Year	.34
	6.7	Existing STI Symptom/s and Treatment	.35
CH	IAPTE	R – VII: EXPOSURE TO STI/HIV/AIDS AWARENESS PROGRAMS	
	7.1	Peer/Outreach Education	
	7.2	Drop-in-Centers Visiting Practice.	.38
	7.3	STI Clinics Visiting Practice	.38
	7.4	VCT Centers Visiting Practice.	
	7.5	Participation in STI/HIV/AIDS Awareness Programs	.40
	7.6	Stigma and Discrimination	.41
CH	IAPTE	R – VIII: COMPARATIVE ANALYSIS	.43
	8.1	Prevalence of HIV and Syphilis Infection	
	8.2	Condom Use with Different Sex Partners	.43
CH	IAPTE	R – IX: SUMMARY OF MAJOR FINDINGS	.45
CU	I A DTE	R – X: RECOMMENDATIONS	47
UП	IAPIL	R – A: RECOMMENDATIONS	.4/
RE	FERE	NCES	
AN	NEXE	<u>s</u>	
		X 1: Indicators for Monitoring and Evaluation of HIV	
	ANNE	X 2: Sample Size Formula	.50
		XX 3: Questionnaire	
		X 4: Clinical/Lab Checklist	
	ANNE	X 5: Oral Informed Consent	.79
		X 6: Study Center	
	ANNE	X 7: Participation In Post-Test Counseling	83

# LIST OF TABLES

		<u>Page</u>
Table 3.1:	Birthplace of FSWs and Duration of their Stay in Kathmandu Valley	10
Table 3.2:	Socio-Demographic Characteristics of FSWs	
Table 4.1:	HIV and STI Prevalence among FSWs	13
Table 4.2:	Association of Socio-Demographic Characteristics and STI with HIV Infection	
Table 4.3:	Frequency of Condom Use with HIV and Syphilis Infection	
Table 4.4:	Reported STI Syndromes and Measured Clinical Diagnosis for Syphilis	
Table 5.1:	Sexual Behavior of FSWs	16
Table 5.2:	Number of Clients and Average Working Days as Reported by FSWs	17
Table 5.3:	Types of Clients as Reported by FSWs	
Table 5.4:	Number of Different Type of Sex Partners Reported by FSWs	
Table 5.5:	Types of Sex Practiced by FSWs	21
Table 5.6:	Income of FSWs from Sex Work and Other Jobs	22
Table 5.7:	Sources of Knowledge of Condom among FSWs	23
Table 5.8:	Condom Use with Clients and Non-paying Sex Partners	
Table 5.9:	Condom Use with Partners Other than Client, Husband, Male Friend	
Table 5.10:	Availability of Condoms and Brand Names of Widely Used Condoms	26
Table 5.11:	Modes and Places for Obtaining Condoms by FSWs	
Table 5.12:	Use of Alcohol and Drugs by FSWs	29
Table 6.1:	FSW's Knowledge on Major Ways of Avoiding HIV	31
Table 6.2:	FSWs' Knowledge on Ways of HIV/AIDS Transmission	32
Table 6.3:	Perception on HIV Test	33
Table 6.4:	Seen/Heard FHI Character/Message	34
Table 6.5:	Knowledge of STI, Experienced Symptoms and Treatment in the Past Year	35
Table 6.6:	Reported Existing STI Symptom/s and Treatment	36
Table 7.1:	Meeting/Interaction of FSWs with Peer/Outreach Educators	37
Table 7.2:	DIC Visiting Practice of FSWs	38
Table 7.3:	STI Clinic Visiting Practice of FSWs	39
Table 7.4:	VCT Visiting Practice of FSWs	40
Table 7.5:	Participation of FSWs in STI/HIV/AIDS Awareness Program	
Table 7.6:	Stigma and Discrimination	
Table 8.1:	HIV and Syphilis Prevalence among FSWs	
Table 8.2:	Condom Use with Different Sex Partners	44

# LIST OF FIGURES

	<u>l</u>	<u>'age</u>
Figure 1:	Marital Status	11
Figure 2:	Violence against FSWs in the Past Year	20
Figure 3:	Percentage of FSWs Using Condom Consistently with Different Sex Partners in the Past Year	25
Figure 4:	Modes of Obtaining Condoms	27
Figure 5:	HIV/AIDS Information Sources	30
Figure 6:	Knowledge of Major Indicators on HIV/AIDS Prevention	31
Figure 7:	Ever Had an HIV Test	32
Figure 8:	Symptoms of STI Experienced by FSWs	36
Figure 9:	Exposure to HIV/AIDS Related Programs/Activities in the Past Year	41

#### **ABBREVIATION**

AIDS Acquired Immuno-Deficiency Syndrome

BSS Behavioral Surveillance Survey CAC Community Action Center

CREHPA Center for Research on Environment, Health and Population Activities

DIC Drop-in-Center

FHI Family Health International

FSWs Female Sex Worker

GWP General Welfare Pratisthan HIV Human Immuno-Deficiency Virus

IBBS Integrated Biological and Behavioral Surveillance Survey

ID Identification Number IDUs Injecting Drug Users

IEC Information, Education and Communication

MSM Men who have sex with men

NCASC National Center for AIDS and STD Control

NFCC Nepal Fertility Care Center NGOs Non-Governmental Organizations

NGOs Non-Governmental Organizations
NHRC Nepal Health Research Council

OEs Outreach Educators
PEs Peer Educators

PHSC Protection of Human Subjects Committee

RPR Rapid Plasma Regain

SACTS STD/AIDS Counseling and Training Services

SBC Strategic Behavioral Communication

SLC School Leaving Certificate
STD Sexually Transmitted Disease
STI Sexually Transmitted Infection
VCT Voluntary Counseling and Testing

WHO World Health Organization

TPHA Treponema Pallidum Haemagglutination Assay

#### **EXECUTIVE SUMMARY**

This study is the third round of the IBBS conducted from June through August 2008 among 500 FSWs, both street (N=200) and establishment based (N=300) in the Kathmandu Valley (Kathmandu, Bhaktapur, and Lalitpur districts). The study was undertaken to measure the prevalence of HIV and syphilis, and associated risk and prevention behaviors among FSWs. Demographic and sexual behavior data were collected through a structured questionnaire while the prevalence of HIV and syphilis were selectively measured by blood samples. Syphilis was tested using the Rapid Plasma Regain (RPR) test card and HIV was detected by using Determine HIV 1/2 test as first test to detect antibodies against HIV, Uni-Gold test as a second test and SD Bioline HIV 1/2 test as a tie breaker test.

#### **Key Findings**

#### **Prevalence of HIV and STIs**

Out of 500 sex workers, 11 of them (2.2%) were infected with HIV while prevalence of active syphilis infection was one percent (5/500). Among the 200 street FSWs, 3.5 percent (7/200) and among 300 establishment based FSWs, 1.3 percent (4/300) were HIV positive. The active syphilis infection among street FSWs was 2.5 percent (5/200) while none of the establishment based FSWs had active syphilis.

The HIV prevalence rate (2% in 2004, 1.4% in 2006, and 2.2% in 2008) has slightly increased from the previous two rounds of the survey. There was a higher prevalence of HIV in both street and establishment based FSWs in this survey than their counterparts in the second round of the survey. However, this increase in prevalence is not statistically significant. On the other hand, syphilis infections (6% in 2004, 3% in 2006 and 1% in 2008) have decreased significantly over the years among both street and establishment based FSWs.

Establishment based FSWs who had been in the sex trade for more than two years and previously worked in India as commercial sex workers had a significantly higher rate of HIV infection

#### **Socio-demographic Characteristics**

The median age of the respondents was 22 years. Establishment based FSWs were younger (median age 21 years) than their street based counterparts (median age 27 years). Around 37 percent of establishment based and 14 percent of street based FSWs were below 20 years. A higher proportion of establishment based FSWs (56.3%) than the street based FSWs (36%) were new entries (6-12 months duration in sex works) to the sex trade.

The majority (85.8%) of the sex workers had migrated to the Kathmandu Valley. Moreover, 20 percent of them were relatively new, having migrated to the district less than a year ago.

Around 50 percent of the total respondents had been educated to the level of Grades 1-9 while only around five percent of them had SLC or a higher level of education. Illiteracy was higher among street based FSWs (48.5%) than establishment based FSWs (25%).

The majority of FSWs (70.8%) were married at least once; a higher proportion of the street based FSWs (83%) were married than establishment based FSWs (62.6%). The divorce or separation rate was also high among them (street, 41%; establishment 37.2%).

Almost 40 percent of the sex workers belonged to the Brahmin and Chhetri/Thakuri community. Tibeto-Burman communities (Tamang, Newar, Magar, Rai, Limbu, and Gurung) made up around 50 percent of the total sex workers while very few (3.8%) of them were from occupational caste groups (Damai, Sarki, Kami, Sunar etc).

#### **Sexual Behavior**

Sex at an early age was the prevalent practice among the study population. The majority of the FSWs (67.4%) had their first sexual contact at the age of 15-19 years. Around 20 percent of FSWs had sexual experience even earlier (11-14 years of age).

The sex workers' clients belong to a wide variety of profession, such as businessmen, policemen/soldiers, transport workers/drivers, as well as service holders/professionals and others. Many street based FSWs (68.5%) had transport workers/drivers as the most frequently visiting clients while many establishment based FSWs (69.7%) were frequently visited by businessmen.

The mean number of clients served by the FSWs in a day was 1.6. Most of the FSWs (61.4%) entertained one client on average per day; this comprised 48 percent of the 200 street based FSWs and 70.3 percent of the 300 establishment based FSWs. Around 26 percent of the FSWs served an average of two clients per day while around 10 percent entertained average three to four clients in a day.

Violence, including forced sex, is not uncommon among sex workers. A higher proportion of street based than establishment based FSWs were subjected to forceful sex (street 31%, establishment 21%); had clients performing objectionable activities (street 46%, establishment 30.7%); and had been physically assaulted (street 30%, establishment 18.3%).

#### **Condom Use among FSWs**

Although all of the sex workers knew about condoms, only 75 percent of the FSWs had used condoms with their last clients. Use of condoms with the last client among establishment based FSWs in 2008 (76.7%) has significantly decreased from the 2006 survey (80.3%)

Consistent condom using practice has decreased among FSWs with their partners over the years. A significant decrease in consistent condom using practice of street based (17.4% i.e. 24/138 in 2004, 6.1% i.e. 6/99 in 2006 and 7.4% i.e. 7/95 in 2008), and establishment based FSWs (18.7% i.e. 35/187 in 2004, 7.9% i.e. 12/151 in 2006 and 3.9% i.e. 5/129 in 2008) with non-paying partners was detected. Further consistent use of condoms with partners other than clients, husband and male friends had decreased significantly among the establishment based FSWs (59.7% i.e. 86/144 in 2006 and 38.1% i.e. 24/63 in 2008). Although consistent use of condoms among the total respondents with client (53.8%) and regular clients (57%) in 2008 survey has decreased from the previous two round of the survey, this decrease is not statistically significant.

Five percent of the total respondents had never used condoms. Among others, more than half (56%) had access to free condoms which they mostly obtained from clients, NGO/health workers/volunteers, and peers/friends. The most popular brands of condoms among them were Number One, Panther, and Kamasutra.

#### **Knowledge and Awareness of HIV/AIDS**

Knowledge of HIV was universal among the FSWs. The important sources of information on HIV/AIDS were the radio, television, people from NGOs, friends/relatives, and others.

Overall 58 percent of the respondents were aware of 'ABC' ('A', abstinence from sex; 'B', being faithful to one partner; 'C', consistence condom use) as HIV preventive measures, while only 36 percent had comprehensive knowledge on HIV i.e. 'BCDEF'('D', a healthy looking person can be infected with HIV; 'E', one cannot get HIV virus from mosquito bite; 'F', one cannot get HIV by sharing a meal with HIV infected person).

Forty percent of the FSWs had tested HIV for themselves before. Among them 84 percent (168/201) had HIV tested within last 12 months with most of the tests being done voluntarily (90%). A slightly higher proportion of street based FSWs (42.5%) than establishment based FSWs (38.7%) ever have had the HIV test.

More than 75 percent FSWs understood genital discharge and an itching sensation in vagina as symptoms of STI. The other symptoms they perceived as STI symptoms were lower abdominal pain, blisters and ulcers around the vagina, burning sensation while urinating, syphilis, HIV/AIDS, swelling of the vagina, and unusual bleeding from the vagina.

#### **Exposure to HIV/AIDS Prevention Programs**

During the preceding year more than half (60%) of the FSWs had met/discussed with a Peer educator/Outreach educator (PE/OE), around 22 percent had visited a Drop-in-Centre (DIC), 28 percent had visited an STI clinic and around 33 percent had visited a Voluntary Counseling and Testing (VCT) center at least once. A higher proportion of street based FSWs than establishment based FSWs were exposed to HIV prevention activities.

Nearly seven percent (6.8%) of the respondents had participated in different STI/HIV/AIDS awareness raising programs in the preceding year.

#### Recommendations

The data indicates that new and young girls are entering the sex trade every year. Hence, HIV/AIDS awareness campaigns should target youth and adolescent groups.

Consistent use of condoms is decreasing over the years with all types of sex partners. Therefore, prevention programs should focus more on the need for consistent condom use and on changing attitudes that create barriers to regular use of condoms.

Condom carrying behavior among FSWs is low. To promote consistent condom use with the sexual partners, prevention program for FSWs should focus on importance of condoms and should promote the behavior of carrying condoms every time with them.

The study shows that awareness of symptoms of STIs, major indicators of HIV, and health-seeking behavior of FSWs was very low. Intervention efforts are hence needed to promote HIV prevention behaviors and HIV testing practice among FSWs.

Outreach and other intervention efforts should be expanded further to include comprehensive and complimentary programs and to increase coverage to all high-risk populations, including clients of sex workers. The quality of these programs should be evaluated, and where necessary, strengthened.

#### **CHAPTER - I: INTRODUCTION**

#### 1.1 Background

HIV/AIDS has become a global threat to humankind. In Nepal, ever after the first reported cases of HIV in 1988, the epidemic has been gradually increasing among people of all aspects. As of November 2008, the National Centre for AIDS and STD Control (NCASC) had reported 2,103 confirmed AIDS cases and 12,746 confirmed HIV positive people (NCASC, 2008). National Centre for AIDS and STD Control (NCASC) in 2007 estimated that around 70,000 people are living with the HIV virus in Nepal. It is further estimated that 0.49 percent of population in the age group of 15-49 years are HIV positive and the male-to-female ratio of infection is three to one (NCASC, 2007). The country's vulnerability to HIV has increased because of several socio-economic factors including poverty, lack of employment, illiteracy, low level of education, conflict, large-scale internal and cross-broader migration, gender inequalities, trafficking of girls, injecting drug use, commercial sex work, and stigmas related to sex and sexuality.

Nepal is defined as a country with a 'concentrated epidemic'. That means risk of infection is higher among the most at-risk population (MARPs). The epidemic is largely concentrated in female sex workers (FSWs), injecting drug users (IDUs), men who have sex with men (MSMs), and migrants. Under the HIV/AIDS Surveillance Plan, NCASC with the technical support of FHI along with New ERA, have been conducting an 'Integrated Biological and Behavioral Surveillance Survey' (IBBS) among the MARPs on a regular basis since 1999. The result of IBBS conducted so far indicate that HIV prevalence among FSWs in 16 Terai Highway districts in the East has decreased significantly since 1999, from 3.9 to 1.5 percent in 2006. In Kathmandu, it has decreased from two percent in 2004 to 1.4 percent in 2006. In Pokhara, infections among FSWs remain constant at two percent since 2002. Likewise, the prevalence of active syphilis has decreased from six percent in 2004 to three percent in 2006 among FSWs of Kathmandu. However, among FSWs of Pokhara it has increased from two percent in 2004 to 3.5 percent in 2006.

The predominant mode of transmission of HIV in the country is heterosexual contact with commercial sex workers. Sex workers are considered one of the core groups for the transmission of STDs and HIV as a 'bridge group' to the general population, mainly as a result of unprotected sex with their clients, and their respective other sex partners. Behavioral Sentinel Surveillance Surveys conducted among FSWs and their clients in Kathmandu, Pokhara, and the Terai Highway revealed that the sex trade was on an increasing trend and that a greater number of younger FSWs were entering the business (New ERA, 2003c and New ERA, 2003d). Interventions targeted at FSWs and their clients have intensified over the years. These programs basically aim to bring about behavioral change among the sex workers and their clients. Promotion of condom use as a safer sex practice is one of the chief components of these activities. The Behavioral Surveillance Survey conducted among FSWs and their clients in the Kathmandu Valley in 2003 had shown that around 40 percent of the sex workers had consistently used condoms in the past month with their clients (New ERA/FHI 2003). The first IBBS conducted in 2004 revealed that 56.6 percent and second IBBS conducted in 2006 revealed 56.2 percent of the sex workers in the Kathmandu Valley had used condoms consistently with their clients in the past year (New ERA/SACTS/FHI 2005, New ERA/SACTS/FHI 2007).

The present study is the third round of the series of IBBS conducted among female sex workers in Kathmandu. This paper presents a socio-demographic profile, HIV and syphilis prevalence, and associated risk and prevention behaviors among 200 streets based and 300 establishments based female commercial sex workers in Kathmandu.

#### 1.2 Objectives of the Study

The overall objectives of the study were to measure the prevalence of HIV and syphilis among FSWs of the Kathmandu Valley; to assess their HIV/STI-related risk and prevention behaviors; to access impact of intervention programs for FSWs; and to analyze trends through comparison of selected variables of data obtained from the first and the second rounds of IBBS conducted in 2004 and 2006 with the current third round of the IBBS among FSWs in the Kathmandu Valley.

The specific objective of the study was to collect information related to socio-demographic characteristics; sexual and drug using behaviors; knowledge of HIV/AIDS; knowledge and treatment of STI problems; knowledge and use of condoms; and exposure of FSWs to available HIV/STI services in Kathmandu.

#### CHAPTER – II: METHODOLOGY

#### 2.1 Implementation of the Study

The study was organized by New ERA in collaboration with STD/AIDS Counseling and Training Services (SACTS) with the technical support of FHI. SACTS was responsible for setting up the mobile lab in the field sites, providing training to lab technicians, supervising and collecting blood samples, and conducting HIV and syphilis testing at their Kathmandu based laboratory. New ERA's responsibility was to design research methodology, including the sampling method, prepare the questionnaire, collect data, distribute STI results to the study participants with post-test counseling, and manage the overall study. Many local organizations also provided assistance for the successful completion of the survey.

#### 2.2 Study Population

This cross-sectional IBBS study was conducted among FSWs, who are considered to be one of the high-risk sub-populations. The eligibility criterion used in the study was: 'women reporting to have had provided sexual services in return for payment in cash or in kind in the last six or more months' in the Kathmandu Valley.

#### 2.3 Sample Design

In the first phase maps of locations were developed to list the areas where sex workers solicited the clients. Altogether five areas (Gongabu, Thamel, Sundhara, Gausala, and Koteshwor) were identified. The New ERA team then went to these areas to identify all possible locations and target populations. Local key informants such as brokers, clients of FSWs, and restaurant staff were contacted to find potential participants. At each location, information on population size was collected by direct and indirect counting. FSWs talked to, seen but not talked to, and reported by informants were aggregated to get a total number of sex workers. After estimating the number of sex workers in different locations, the identified locations were further divided into different clusters.

The second phase of the sampling design included the selection of study participants from those clusters. The FSWs recruited were from the streets and establishment based settings. Establishment based FSWs were selected from cabin restaurants, 'dohori' restaurants, dance restaurants, discotheques, hotels/lodges, house settlements and massage parlors.

#### 2.4 Sample Size

The sample size was calculated to detect up to 15 percent differences 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 trend analysis. The formula used in the sample size estimation is shown in Annex 2. As in the first and the second round of the survey, a total of 500, consisting 300 establishment based and 200 street based FSWs was selected as study sample.

#### 2.5 Identification and Recruitment of FSWs

It was not an easy task to identify the sex workers in different localities and to convince them to participate in the interview. However, most of the researchers who conducted these interviews were acquainted with the working places and behavior of the sex workers, as they had been frequently involved in previous rounds of the IBBS in Kathmandu and other studies of the same nature, including mapping exercises done to locate the working places of FSWs; thus making the identification and recruitment process easier.

Before the inception of the actual fieldwork, the study team visited different local organizations such as the General Welfare Pratisthan (GWP), Women Acting Together for Change (WATCH), Community Action Centre (CAC), Society for Empowerment-Nepal (STEP Nepal), Chhahari Nepal, Change Nepal, Jagriti Mahila Sangh, Mahilako Nimitta Mahila Manch Nepal and Nepal Fertility Care Centre (NFCC). The study team apprised the different stakeholders about the study objectives and methodology. Meetings were conducted with the staff of different organizations that had been mobilizing their Peer Educators (PEs) and Outreach Educators (OEs), Drop in Centers (DIC) operators, and Voluntary Counseling and Testing (VCT) center operators. The meetings were, in general, 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 study also sought to find out the exposure of the study participants to various HIV/AIDS-related programs, including peer/outreach education and their visits to the DICs, VCT centers and STI clinics located in the district.

After careful observation of these locations, the researchers started approaching the study 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 familiar sex workers. In order to confirm the identity of the study 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 number of their clients; the period of their involvement 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 interviewed. The respondents were screened at least twice and sometimes thrice during the process. Respondents who satisfactorily answered all the screening questions were briefed about the purposes, objectives, and methodology of the study. Once the selected sex worker agreed to participate in the study, the researchers took them to the clinic for interview and collection of the blood sample.

Sex workers were enrolled after they were informed about the study and their role in the study. An informed consent form was administered by the interviewer in a private setting and witnessed by another staff member to ensure that the study participants understood the questions well. 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 unique number was also issued to each respondent. The same number was used in the questionnaire, on medical records, and on the blood specimens of the particular respondent. The names and addresses of the respondents were not recorded anywhere. A clinician gave the participants pre-test counseling on HIV/AIDS and STIs 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 in case of any such sign, they were counseled accordingly. They were provided free medicines for syndromic treatment in accordance with the National STI Case Management Guidelines 2006. 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 for their transportation cost was also provided to the FSWs.

Fieldwork for the study started on June 17, 2008, and continued up to August 3, 2008.

#### 2.6 Refusal

All respondents participated voluntarily in the study. A total of 146 sex workers approached for the interview refused to take part in the study. Refusals were recorded at two stages: (i) at the time of approaching the sex workers at different locations (40 refusals); and (ii) after arriving at the study sites (106 refusals). However there was no refusal after the administration of the questionnaire. Among those, 51 refused to participate in the study as they were not interested in it, 27 had started sex trade less than six months ago, 23 refused to be in the study saying that they had recently been to a clinic/VCT for a check up although study team had explained and encouraged them to take part in the study, 21 said that they were too busy, 13 said that they were scared of the blood test, seven denied that they were sex workers, two demanded more money, one was denied permission by her employer and one was pregnant.

#### 2.7 Control of Duplication

In order to avoid repeated interviews with the same FSW, the staff nurses and, in some cases, the researchers were exchanged between different study sites as they were more familiar with the participants. Further, the lab technicians, 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 included queries relating 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 study number.

#### 2.8 Research Instrument

A quantitative research approach was adopted in the study. The structured questionnaire that was tested and used in the previous rounds of IBBS was repeated. The questionnaire includes 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 related to STI symptoms were asked by a staff nurse to verify the occurrence of such symptoms in the past or during the survey (Annex 4). The study participants were provided 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 Study Personnel

The study was conducted by a team comprised of a study director, a research coordinator, a research officer, an assistant research officer, a senior counselor, two senior research assistants, and 24 field study team members.

Three field teams were formed for the survey. Each field team consisted of one research assistant, four interviewers, one staff nurse, one lab technician and one runner. The first team covered the two sites at Gausala and Thamel. The second team was responsible for covering the Gongabu and Sundhara sites, and the last team covered Koteshwor site.

#### 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 studies previously such as IBSS and sero survey among FSWs, truckers, migrants, clients and IDUs.

Training was provided for the field researchers at New ERA Training Hall. A one-week intensive training program was organized from June 4 to June 10, 2008 for all the field researchers by trainers from FHI, SACTS, and New ERA. The training was specially focused on an introduction to the study, the sampling 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 of previous experiences (problems and solutions). Role-play practice was carried out assuming the actual field situation. Possible problems that could be faced while approaching the sex workers and ways of overcoming 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

#### Clinic Set-up

Clinics were set up at five pocket areas of Kathmandu: i.e., Gongabu, Thamel, Sundhara, Gausala, and Koteshwor (Annex 6) in order to cover those areas as outlined by the sampling procedure. These centrally-located sites were purposively selected considering the convenience in meeting the study population and in bringing them to the clinic. The clinic had a lab facility for blood drawing and centrifuging the blood for separation of sera. There was separate room for each activity, including the administration of the questionnaire, STI examination, blood collection, 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 STI 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 given as necessary. Furthermore, an external genital examination was complemented with a speculum examination as per the need.

#### Collection, Storage and Transportation of Samples

After pre-test counseling the lab technician briefed the respondents about HIV testing process and sought her consent for drawing the blood. Blood samples from each of the study participants for HIV/syphilis test were drawn from vein using a 5ml disposable syringe and stored in a sterile glass tube with the respondent's ID number. Serum was separated and put in a sterile serum vial with ID no. The samples were transported to the SACTS laboratory in Kathmandu every day in a cold box. The serum samples were stored at the SACTS laboratory at a temperature of -12 to  $-20^{\circ}$ C.

#### Laboratory Methods

Syphilis was tested using the Rapid Plasma Regain (RPR) test card manufactured by Becton Dickinson and Company, and confirmed by means of the Serodia *Treponema Pallidium* Particle Agglutination test (TPHA; Fujirebio Inc., Tokyo, Japan). Treponema Pallidum Haemagglutination Assay (TPHA) positive and all samples with positive RPR were further tested for the titre of up to 64 times dilution. On the basis of titre of RPR, all the specimens with RPR/TPHA positive results were divided into two categories.

- TPHA positive with RPR-ve or RPR +ve with Titre < 1:8 history of syphilis
- TPHA positive with RPR titre 1:8 or greater Current syphilis requiring immediate treatment

Altogether 189 FSWs were provided syndromic treatment for STIs as they went through the clinical procedure in the course of the study.

HIV was detected by using Determine HIV 1/2 (Abbott Japan Co. Ltd.) as first test to detect antibodies against HIV. If the first test showed negative result then no further test was conducted but, if the first test was positive, second test was performed by using Uni-Gold (Trinity Biotech, Dublin, Ireland). In case of a tie between the first two tests, a third test was performed by using SD Bioline HIV 1/2 (Standard Diagnostics, Inc., Kyonggi-do, South Korea) as a tie breaker test. The interpretation of the test results was done as follows:

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

#### Quality Control of Laboratory Tests

Quality control was strictly maintained throughout the process of the collection of the specimen, their handling and testing stages. All the tests were performed using internal controls. These controls were recorded with all the laboratory data. For quality control

assurance, a 10 percent sample of the total serum collected was submitted to National Public Health Laboratory (NPHL) for testing HIV and syphilis. The same test kit and testing protocols were used in NPHL for quality assurance.

#### 2.12 Coordination and Monitoring

New ERA carried out the overall coordination of the study. SACTS was responsible for setting up the field clinic and performing the laboratory and clinical part of the study, including collecting, storing, and testing blood samples.

The key research team members conducted the monitoring and supervision of the field activities. The research assistant was responsible on a day-to-day basis for ensuring that the study was implemented according to the protocol in the field. 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. Officers of FHI also supervised the ongoing study to deal with any problems reported from the field as and when necessary. In addition, the key research team member made periodic site visits throughout the fieldwork.

#### 2.13 Ethical Issues

Ethical approval was obtained from the Nepal Health Research Council (NHRC) the government's ethical clearance body, which approved the protocol, consent forms, and draft questionnaires and additionally from the Protection of Human Subjects Committee (PHSC) of Family Health International.

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 briefed that such withdrawal would not affect the services they would normally receive from the study. A consent format describing the objectives of the study, the nature of the participant's involvement, the benefits, and confidentiality issues was clearly read out to them (Annex 5). Since the names and addresses of the interviewed FSWs were not recorded elsewhere, the ID cards that were provided to the study participants with specific number identified them. HIV test results were provided to the individual participants in strict confidence.

The study team maintained the confidentiality of the data collected through out the survey. The interviewer regularly submitted the completed questionnaires to the field supervisor on the day of each interview. The supervisor kept those questionnaires in separate locked cabinets where except them no one had access to collected information. The supervisor then transported the questionnaires to New ERA every week. In New ERA office, the questionnaires were kept in locked coding room where absolutely no one except authorized data coding and data entry staff has access to individual questionnaire.

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

After the collection of the blood samples all the study participants were informed about the date, location, and place where they could have the test results. They were also informed that they could collect their test results only by showing the ID card bearing their study number

that was provided to them by the study team. Pre- and post-HIV/STI test counseling was provided to the study participants. They were briefed about the importance of receiving the test result and when and where they could receive their HIV and STI results with post-test counseling. For follow-up services, the study participants were referred to the counseling centers of SACTS and CAC.

Post-test counseling and individual report dissemination was provided from July 8 to August 27, 2008 at counseling centre of SACTS and CAC. The respondents had to collect their test result within the specified date and they were not provided any incentive for collecting the test result. Out of the 500 sex workers who tested for HIV and syphilis, 92 (18.4%) turned up to receive their test result (Annex 7).

#### 2.15 Constraints in the Field Work

The ongoing political instability in the country with several days of 'Nepal Bandh' created challenges in conducting the field work. A total of five days of Nepal Bandh during the survey period affected the collection of data. Similarly, there was no suitable environment for the researchers to enter into the cabin, dance restaurants and discos since their safety could not be guaranteed. In some cases the owners of the restaurants denied the permission to FSWs to involve in the survey. Besides, as the survey was conducted in the rainy season, the continuous heavy rainfall was another constraint as FSWs refused to come to the study sites in the rainy days.

#### 2.16 Data Processing and Analysis

All the completed questionnaires were thoroughly checked by the field supervisors and were brought to New ERA for further checking, coding, processing, data entry and analysis. A double data entry system was used to minimize errors in data entry. The data entry and data analysis was done by authorized persons only in a password protected computers. Simple statistical tools such as mean, median, frequency and percentages were used to analyze the data. The FoxPro database program was used for data entry and the data was analyzed using SPSS 13.0 and EPI-INFO.

#### CHAPTER – III: SOCIO-DEMOGRAPHIC CHARACTERISTICS

This chapter describes the socio-demographic characteristics of a total of 500 FSWs including both street (n=200) and establishment based (n=300) sex workers of the Kathmandu Valley. Since these two types of sex workers were sampled independently, the analysis was carried out separately for each type.

#### 3.1 Socio-Demographic Characteristics

Table 3.1 shows the birth districts of the respondents and duration of their stay in Kathmandu. The survey results showed that majority (85.8%) of the respondents were born outside the Kathmandu Valley. Around 13 percent of them were born in the valley while a few (1.6%) were born in India. Twelve percent of the total number of respondents had been living in the Kathmandu Valley permanently since their birth. While 14 percent had spent more than 10 years in the valley and others had migrated later, around 20 percent were relatively new having migrated to the valley less than a year ago.

Table 3.1: Birthplace of FSWs and Duration of their Stay in Kathmandu Valley

Characteristics	Street	Street (N=200)		ent (N=300)	Total (N=500)	
Characteristics	n	%	n	%	n	%
Birth Districts						
Kathmandu Valley *	31	15.5	32	10.7	63	12.6
India	5	2.5	3	1.0	8	1.6
Other Districts	164	82.0	265	88.3	429	85.8
Period Living in Kathmandu Valley						
Since Birth	28	14.0	32	10.7	60	12.0
More than 120 months	52	26.0	18	6.0	70	14.0
61 months – 120months	38	19.0	54	18.0	92	18.4
13 months – 60 months	57	28.5	123	41.0	180	36.0
Up to 12 months	25	12.5	73	24.3	98	19.6

\*Note: Kathmandu, Lalitpur, Bhaktapur

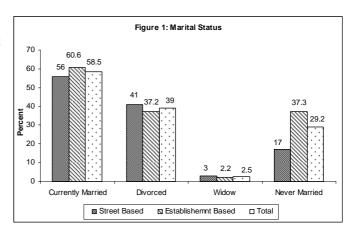
The age of the participants ranged from 16 to 52 years with a median age of 22 years. The median age of the street based sex workers was 27 years and that of the establishment based FSWs was 21 years. Overall, 28 percent of the respondents were less than 20 years of age. Establishment based respondents tended to be younger as 37.3 percent of them were under 20 years, compared to 14 percent of the same age group among street based respondents (Table 3.2).

Around 50 percent of the total respondents had an education level of Grade 1-9, while only around five percent of them had education to SLC level or above Illiteracy was higher among street based FSWs (48.5%) than establishment based FSWs (25%) (Table 3.2).

Regarding the ethnic composition of the respondents, almost 40 percent of the sex workers belonged to the Brahmin and Chhetri/Thakuri community. Tibeto-Burman communities (Tamang, Newar, Magar, Rai, Limbu, and Gurung) made up around 50 percent of the total sex workers while very few (3.8%) of them were from occupational caste groups (Damai, Sarki, Kami, Sunar etc). The detail ethnic composition of the respondents is shown in Table 3.2.

A large proportion (70.8%) of FSWs was at least married once; a higher proportion of the street based FSWs (83%) were married than their establishment based counterparts (62.7%).

Among the married FSWs, 58.5 percent were currently married (street 56% and establishment 60.6%); 39 percent were divorced or permanently separated (street 41% and establishment 37.2%); and 2.5 percent were widowed (street 3% and establishment 2.2%). A total of 29 percent (street 17% and establishment 37.3%) of the respondents were never married (Figure 1).



**Table 3.2: Socio-Demographic Characteristics of FSWs** 

	Street	(N=200)	Establishm	ent (N=300)	Total (N=500)		
Socio-Demographic Characteristics	n	%	n	%	n	%	
Age of respondents							
Less than 20 (16-19)	28	14.0	112	37.3	140	28.0	
20 – 24	46	23.0	121	40.3	167	33.4	
25 – 29	41	20.5	47	15.7	88	17.6	
30 – 34	41	20.5	11	3.7	52	10.4	
35 or above (35-52)	44	22.0	9	3.0	53	10.6	
Mean/Median Age:		28.4/27		21.9/21		24.5/22	
Education							
Illiterate	97	48.5	75	25.0	172	34.4	
Literate, no schooling	22	11.0	36	12.0	58	11.6	
Grade 1 – 5	36	18.0	92	30.7	128	25.6	
Grade 6 – 9	36	18.0	83	27.7	119	23.8	
SLC and Above	9	4.5	14	4.7	23	4.6	
Ethnic/Caste Group			1				
Brahmin	21	10.5	25	8.3	46	9.2	
Chhetri/Thakuri	61	30.5	90	30.0	151	30.2	
Newar	23	11.5	24	8.0	47	9.4	
Tamang	29	14.5	77	25.7	106	21.2	
Magar	12	6.0	25	8.3	37	7.4	
Rai/Limbu	19	9.5	25	8.3	44	8.8	
Gurung	5	2.5	16	5.3	21	4.2	
Damai/Sarki/Kami/Sunar	13	6.5	6	2.0	19	3.8	
Others	17	8.5	12	4.0	29	5.8	
Marital Status	17	0.5	12	1.0		3.0	
Married	93	46.5	114	38.0	207	41.4	
Divorced/Separated	68	34.0	70	23.3	138	27.6	
Widowed	5	2.5	4	1.3	9	1.8	
Never Married	34	17.0	112	37.3	146	29.2	
Age at First Marriage	34	17.0	112	37.3	140	27.2	
11 – 14	38	22.9	41	21.8	79	22.3	
15 – 19	90	54.2	119	63.3	209	59.0	
20 – 24	30	18.1	26	13.8	56	15.8	
25 – 36	8	4.8	20	1.1	10	2.8	
Mean/Median Age at First Marriage:	0	17.1/17		16.7/17	10	16.9/17	
Husband Has Co-wife		17.1/17		10.7/17		10.5/17	
Yes	26	28.0	28	24.6	54	26.1	
No	67	72.0	86	75.4	153	73.9	
Total	93	100.0	114	100.0	207	100.0	
Living Status of FSWs	93	100.0	114	100.0	207	100.0	
Currently Married Sex Workers Living With Husband/Male Friend	75	80.6	88	77.2	163	78.7	
Unmarried Sex Workers Living With Male Friend	3	8.8	16	14.3	19		
	3	0.0	10	14.3	19	13.0	
Dependents of FSWs	122	66.5	127	45.7	270	540	
Yes	133 67	66.5 33.5	137 163	45.7 54.3	270	54.0 46.0	
No	0/	35.3	163	34.3	230	46.0	
Total Number of Dependents (Adults + Children)	40	26.1		47.4	112	41.0	
One	48	36.1	65	47.4	113	41.9	
2 – 3	75	56.4	66	48.2	141	52.2	
4 and more	10	7.5	6	4.4	16	5.9	
Mean Number of Dependents:	-	2.0	-	1.7	-	1.9	

Table 3.2 further shows that around 26 percent of the married FSWs had a co-wife. Among the currently married respondents, 80.6 percent of the street based and 77.2 percent of establishment based FSWs were living with their husband. Marriage at quite an early age was the prevalent trend as the median age at which the sex workers were married for the first time was 17 years for both street and establishment based FSWs.

A total of 54 percent of the FSWs (66.5% street, 45.7% establishment) reported that they had dependents, either children or adults, on their income. Almost half of them (52.2%) had 2-3 such dependents; around 42 percent of them had one dependent while rest of them had four or more dependents. The mean number of dependents was 1.9 (Table 3.2).

#### CHAPTER - IV: PREVALENCE OF HIV AND STI

#### 4.1 Prevalence of HIV and Syphilis Infection

Out of 500 sex workers who participated in the study, 11 of them (2.2%) were infected with HIV. Among the 200 street FSWs, 3.5 percent (7/200) and among 300 establishments based FSWs, 1.3 percent (4/300) were HIV positive (Table 4.1).

Syphilis history (TPHA +ve with RPR –ve or RPR titre <1:8) was 2.2 percent and current syphilis (TPHA +ve/RPR titre  $\geq$  1:8) was one percent. Overall, 2.5 percent (5/200) among the street sex workers were currently infected with high titre syphilis, while none of the establishment based FSWs were detected with current syphilis infection. Altogether, 4.5 percent (9/200) of the street sex workers and 0.7 percent (2/300) of the establishment sex workers had a history of syphilis. It was further noticed that syphilis infection, both active syphilis and syphilis history, was significantly higher in street based FSWs (Table 4.1).

Street Establishment Total STI Infection (N=200)(N=500)% % % n n n HIV+ve 3.5 1.3 11 22 Syphilis Infection\* 2.5 Active Syphilis 0.0 0 1.0 Syphilis History 9 4.5 0.7 11 2.2

Table 4.1: HIV and STI Prevalence among FSWs

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

Table 4.2 demonstrates the association of HIV positive status of FSWs with syphilis infection and with demographic variables. It was observed that the establishment based FSWs who had been in the sex trade for more than two years were at significantly high risk of HIV infection. Furthermore, previous sex work in India was also associated with HIV positive status among the establishment based FSWs (p<0.05). However, no significant association was observed among the street based FSWs with these variables. Other demographic variables such as age, educational status, and marital status were not associated significantly with the HIV infection (Table 4.2).

<sup>\*</sup>Syphilis Infection, both active syphilis and syphilis history is significantly higher in street based FSWs (p<0.01)

Table 4.2: Association of Socio-Demographic Characteristics and STI with HIV Infection

Socio-Demographic Characteristics —	Street (N=200)		Establishı	nent (N=300)	Total (N=500)		
Socio-Demographic Characteristics	N	HIV+ve n (%)	N	HIV+ve n (%)	N	HIV+ve n (%)	
Age							
<20 years old	28	0 (0.0)	112	1 (0.9)	140	1 (0.7)	
≥20 years old	172	7 (4.1)	188	3 (1.6)	360	10 (2.8)	
Educational Level							
Illiterate and literate with no schooling	119	4 (3.4)	111	3 (2.7)	230	7 (3.0)	
Schooling (Grades 1 to 10 and above SLC)	81	3 (3.7)	189	1 (0.5)	270	4 (1.5)	
Marital Status							
Ever Married	166	6 (3.6)	188	4 (2.1)	354	10 (2.8)	
Never married	34	1(2.9)	112	0 (0.0)	146	1 (0.7)	
Years of Sex Work				*		*	
< 2 years	101	2 (2.0)	213	1 (0.5)	314	3 (1.0)	
≥2 years	99	5 (5.0)	87	3 (3.5)	186	8 (4.3)	
Sex Work in India				*		*	
Yes	2	0 (0.0)	1	1 (100.0)	3	1 (33.3)	
No	198	7 (3.5)	299	3 (1.0)	497	10 (2.0)	
Syphilis Infection						*	
Current Syphilis	5	1 (20.0)	0	0 (0.0)	5	1 (20.0)	
Syphilis History	9	0 (0.0)	2	0 (0.0)	11	0 (0.0)	
No infection of Syphilis	186	6 (3.2)	298	4 (1.3)	484	10 (2.1)	

<sup>\*</sup>Significant association between the demographic variables and HIV and syphilis infection (p<0.05)

#### 4.3 Frequency of Condom Use with HIV and Syphilis Infection

The association of HIV and STI infection with the frequency of condom use of the respondents with their clients, regular clients and non-paying partners was examined. Although no significant association was detected, inconsistency of condom use with clients and non-paying partners put the FSWs at risk of HIV and syphilis infection as a higher percentage of FSWs who reported irregularity in condom use with such partners was HIV and syphilis infected (Table 4.3).

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

Frequency of Condom Use	N=500	HIV Positive n (%)	Current Syphilis n (%)	Syphilis History n (%)
Frequency of condom use by regular clients				
All of the time	203	6 (3.0)	2 (1.0)	5 (2.5)
Not all the time	152	4 (2.6)	1 (0.7)	4 (2.6)
Frequency of condom use by non-paying partners				*
All of the time	12	0 (0.0)	0 (0.0)	2 (16.7)
Not all the time	212	2 (0.9)	2 (0.9)	5 (2.4)
Frequency of condom use by clients				
All of the time	269	5 (1.9)	2 (0.7)	5 (1.9)
Not all the time	231	6 (2.6)	3 (1.3)	6 (2.6)

<sup>\*</sup>Significant association between frequency of condom use by non-paying sex partners and syphilis history (p<0.05)

#### 4.4 Prevalence of Syndromes

There was no association between the reported STI symptoms and the clinical diagnosis/examination of STI syndromes. During the survey, more than half of the respondents (291/500) reported that they were suffering from symptoms that they believed to be evidence of STIs. However, after clinical examination it was found that 2.4 percent had history of syphilis (6 street based and 1 establishment based) and one percent had untreated syphilis (3 street based and none establishment based) that required treatment. However,

among the 70 street based sex workers who reported not having any STI symptoms, two were suffering from untreated syphilis (Table 4.4).

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

		Street (N=200)			Establishment (N=300)			Total (N=500)			
Reported STI Symptoms	N	Syphilis History n (%)	Current Syphilis n (%)	N	Syphilis History n (%)	Current Syphilis n (%)	N	Syphilis History n (%)	Current Syphilis n (%)		
Painful sex	64	4 (6.3)	3 (4.7)	79	0 (0.0)	0 (0.0)	143	4 (2.8)	3 (2.1)		
Abdominal pain	76	3 (4.0)	2 (2.6)	89	1 (1.1)	0 (0.0)	165	4 (2.4)	2 (1.2)		
Vaginal itching	66	4 (6.1)	0 (0.0)	79	0 (0.0)	0 (0.0)	145	4 (2.8)	0 (0.0)		
Vaginal odor	59	3 (5.1)	1 (1.7)	71	1 (1.4)	0 (0.0)	130	4 (3.1)	1 (0.8)		
Vaginal discharge	72	3 (4.2)	1 (1.4)	94	0 (0.0)	0 (0.0)	166	3 (1.8)	1 (.06)		
Dysuria	46	2 (4.4)	2 (4.4)	59	0 (0.0)	0 (0.0)	105	3 (2.9)	2 (1.9)		
Polyuria	38	1 (2.6)	0 (0.0)	37	0 (0.0)	0 (0.0)	75	1 (1.3)	0 (0.0)		
Genital ulcers	11	0 (0.0)	0 (0.0)	17	0 (0.0)	0 (0.0)	28	0 (0.0)	0 (0.0)		
Unusual vaginal bleeding (discharge)	6	0 (0.0)	0 (0.0)	11	0 (0.0)	0 (0.0)	17	0 (0.0)	0 (0.0)		
Genital warts	9	0 (0.0)	0 (0.0)	6	0 (0.0)	0 (0.0)	15	0 (0.0)	0 (0.0)		
Others	0	0 (0.0)	0 (0.0)	0	0 (0.0)	0 (0.0)	0	0 (0.0)	0 (0.0)		
Any of the above symptoms	130	6 (4.6)	3 (2.3)	161	1 (0.6)	0 (0.0)	291	7 (2.4)	3 (1.0)		
None of the above symptoms	70	3 (4.3)	2 (2.9)	139	1 (0.7)	0 (0.0)	209	4 (1.9)	2 (1.0)		

# CHAPTER – V: SEXUAL BEHAVIOR AND CONDOM USE AMONG FEMALE SEX WORKERS

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

#### 5.1 Sexual Behavior of FSWs

Table 5.1 describes the sexual behaviors of the FSWs. The sex workers in the study population had been involved in the sex trade ranging from six months to 24 years. The mean number of months for which they were involved in the sex trade was 25 months, with around 48 percent of them carrying out sex work for less than a year, indicating that new sex workers are entering the business. A larger proportion of establishment based FSWs (56.3%) than street based FSWs (36%) were new entries to the sex trade. Conversely, a higher proportion of FSWs who were involved in the sex trade for more than four years were street based (22%) compared to those based in different establishments (4%). As per the study criteria set for the study population, those sex workers involved in the profession for less than six months were not recruited.

Table 5.1: Sexual Behavior of FSWs

Sexual Behavior		(N=200)	Establishm	ent (N=300)	Total (N=500)	
Sexual Bellaviol	n	%	n	%	n	%
Age at First Sexual Intercourse						
11 – 14	44	22.0	57	19.0	101	20.2
15 – 19	122	61.0	215	71.7	337	67.4
20 - 24	28	14.0	25	8.3	53	10.6
25 - 30	6	3.0	3	1.0	9	1.8
Mean/Median Age at First Sex:	16.8	/16.0	16.5	/16.0	16.6	/16.0
Duration of Sexual Exchange for Money						
6 – 12 months	72	36.0	169	56.3	241	48.2
13 – 24 months	46	23.0	71	23.7	117	23.4
25 – 36 months	22	11.0	37	12.3	59	11.8
37– 48 months	16	8.0	11	3.7	27	5.4
More than 48 months (49 months-24 yrs)	44	22.0	12	4.0	56	11.2
Mean Months:	-	34.6	-	18.5	1	25.0
Working as FSW from the Interview Location						
Up to 6 months	11	5.5	42	14.0	53	10.6
7 – 12 months	66	33.0	146	48.7	212	42.4
13 – 24 months	47	23.5	65	21.7	112	22.4
25 – 36 months	20	10.0	32	10.7	52	10.4
37 – 48 months	17	8.5	5	1.7	22	4.4
More than 48 months	39	19.5	10	3.3	49	9.8
Ever Worked as a FSW in Other Places						
Yes	10	5.0	6	2.0	16	3.2
No	190	95.0	294	98.0	484	96.8
Worked in India as a FSW						
Yes	2	1.0	1	0.3	3	0.6
No	198	99.0	299	99.7	497	99.4
Decision made t o go to India						
Coerced	1	50.0	0	0.0	1	33.3
On my own wish	1	50.0	1	100.0	2	66.7

Fifty-three 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. Sex at an early age was the prevalent practice among the sex workers with the median age at first sexual intercourse being 16 years. Around 67 percent of the sex workers had their first sexual contact at the age of 15-19 years. It is important to note that one-fourth of the

respondents (20.2%) had their first sexual encounter even earlier, at 11-14 years of age (Table 5.1).

A few of the respondents (3.2%) had worked as sex workers elsewhere in the country while only three out of 500 sex workers had worked in India for some time as sex workers. Of them, while one had been forcibly taken to India, two 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) that a FSW serves in general. As reported by the respondents, the number of clients served per day ranged from one to six clients, with a mean of 1.6 clients per day. Most of them (61.4%) reported that they entertained one client on average per day; this comprised of 48 percent of the 200 street based FSWs and 70.3 percent of the 300 establishment based FSWs. Around 26 percent of the total respondents served an average of two clients per day, while around 10 percent entertained three to four clients in a day.

Table 5.2: Number of Clients and Average Working Days as Reported by FSWs

Number of Clients of Sex Workers	Street	(N=200)	Establishme	ent (N=300)	Total (N=500)	
Number of Cheffs of Sex Workers	n	%	n	%	n	%
Average Number of Clients Per Day						
One	96	48.0	211	70.3	307	61.4
Two	70	35.0	58	19.3	128	25.6
Three– Four	27	13.5	24	8.0	51	10.2
More than Four	7	3.5	7	2.3	14	2.8
Mean Clients per Day:	-	1.8	-	1.5	-	1.6
Number of Clients on the Previous Day						
None	93	46.5	171	57.0	264	52.8
One	58	29.0	79	26.3	137	27.4
Two	35	17.5	33	11.0	68	13.6
Three – Four	10	5.0	14	4.7	24	4.8
More than Four	4	2.0	3	1.0	7	1.4
Mean No. of Clients on the Previous Day	-	0.9	-	0.7	-	0.8
Number of Clients in the Past Week						
0	1	0.5	5	1.7	6	1.2
One	17	8.5	44	14.7	61	12.2
Two	28	14.0	84	28.0	112	22.4
Three – Four	58	29.0	77	25.7	135	27.0
Five – Ten	62	31.0	62	20.7	124	24.8
More than Ten	34	17.0	28	9.3	62	12.4
Mean Number of Clients in the Past Week:	-	6.6	-	4.6	-	5.4
Time of Last Sexual Contact						
On the Day of Interview	12	6.0	12	4.0	24	4.8
1 – 2 Days Before	141	70.5	186	62.0	327	65.4
3 – 5 Days Before	41	20.5	86	28.7	127	25.4
6 and More Days Before	6	3.0	16	5.3	22	4.4
Number of Clients on the Day of Last Sexual Contact						
One	136	68.0	248	82.7	384	76.8
Two	48	24.0	39	13.0	87	17.4
Three – Nine	16	8.0	13	4.3	29	5.8
Mean Number of Clients on that Day:	-	1.5	-	1.2	-	1.3
Average Number of Days Worked in a Week						
One	4	2.0	6	2.0	10	2.0
Two	13	6.5	31	10.3	44	8.8
Three	27	13.5	36	12.0	63	12.6
Four to Seven Days	156	78.0	227	75.7	383	76.6
Mean Number of Days Worked in a Week:	-	5.2	-	5.2	-	5.2

In order to have a clear picture of the number of clients that FSWs served, they were further asked about the number of their clients on the pervious day of the interview, during the week

preceding the survey and on the last day of their sexual contact. The number of clients served by the FSWs on the previous day of the interview ranged from none to more than four. More than half of the sex workers (52.8%) said that they had not served any client on the previous day; 27.4 percent reported that they had served one client, 13.6 percent said that they had served two clients, while the rest of them reported that they had entertained more than two clients (Table 5.2).

The mean number of clients entertained by the sex workers in the past week was 5.4. One-third of the FSWs (34.6%) had served 1-2 clients, 27 percent had served 3-4 clients, and 37 percent had served more than four clients in the previous week of the interview (Table 5.2). A few of them (1.2%) reported that they didn't have any sexual contact with clients in the week preceding the interview. It was further noticed that street based FSWs had served a higher number of clients in the past week (average number of clients, 6.6) than establishment based FSWs (average number of clients, 4.6).

The majority of sex workers (65.4%) had sexual contact 1-2 days before the day of the interview. A large proportion of FSWs (76.8%) had entertained one client on the day of the last sexual act. On average, street based FSWs had entertained a slightly higher number of clients (1.5) than establishment based FSWs (1.2) on the day of the last sexual act. A large proportion of FSWs (76.6%) reported that they worked as sex worker for four to seven days a week, with an average number of 5.2 working days per week (Table 5.2).

#### **5.3** Types of Clients

The sex workers' clients belong to a wide variety of professions. Overall, 55.4 percent of sex workers reported businessmen as clients who visited them frequently. Similarly, policemen/soldiers were reported by 50.6 percent, transport workers/drivers by 41.8 percent, and service holders/professionals by 38.2 percent of FSWs. It was further noticed that many street based FSWs (68.5%) had transport workers/drivers as their most frequently visiting clients, while many establishment based FSWs (69.7%) were frequently visited by businessmen (Table 5.3).

Table 5.3: Types of Clients as Reported by FSWs

Types of Clients	Street	(N=200)	Establishm	ent (N=300)	Total (N=500)	
Types of Chefts	n	%	n	%	n	%
Occupation of Most Frequent Clients*						
Businessman	68	34.0	209	69.7	277	55.4
Policeman/Soldier	95	47.5	158	52.7	253	50.6
Transport Worker/Driver	137	68.5	72	24.0	209	41.8
Service Holder/Officer/Doctor	59	29.5	132	44.0	191	38.2
Foreign Employee	25	12.5	100	33.3	125	25.0
Migrant/Industrial Worker/Wage Laborer	91	45.5	23	7.7	114	22.8
Contractor	32	16.0	55	18.3	87	17.4
Tourist/Foreigner	9	4.5	43	14.3	52	10.4
Student	8	4.0	28	9.3	36	7.2
Others	13	6.5	8	2.7	21	4.2
Occupation of Last Client						
Businessman	22	11.0	103	34.3	125	25.0
Policeman/Soldier	32	16.0	45	15.0	77	15.4
Service Holder/Officer/Doctor	20	10.0	48	16.0	68	13.6
Migrant/Industrial/Wage Laborer	45	22.5	9	3.0	54	10.8
Transport Worker/Driver	37	18.5	16	5.3	53	10.6
Foreign Employee	14	7.0	30	10.0	44	8.8
Contractor	13	6.5	11	3.7	24	4.8
Foreigner	3	1.5	16	5.3	19	3.8
Student	6	3.0	8	2.7	14	2.8
Others (Guide, Guard, Politician etc.)	4	2.0	8	2.7	12	2.4
Don't Know	4	2.0	6	2.0	10	2.0

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

One-fourth of the FSWs (25%) had businessmen as their last client. Others had their last sexual contact with policemen/soldiers (15.4%), migrants/industrial/wage laborers (10.8%), and transport workers/drivers (10.6%). Most of the street based FSWs had their last sexual contact with migrants/industrial workers/wage laborers (22.5%), transport workers/drivers (18.5%) and police/army personals (16%) whereas most of the establishment FSWs had businessman (34.3%), service holder/professionals (16%) and police/army personals (15%) as their last client (Table 5.3).

#### 5.4 Sex Workers and Their Sex Partners

The transmission of sexual infection depends largely on the number of sex partners. The sex workers reportedly had two different types of sex partners in general: paying and non-paying partners. This section presents additional information on the number of sex partners that the sex workers had inclusive of both paying and non-paying 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 clients who pay them for sexual contact.

The respondents had an average of 5.4 non-paying partners in the past week (6.5 for street based and 4.6 for establishment based FSWs). Among the total respondents, almost 35 percent of the FSWs each had 3-5 and 1-2 paying sex partners in the week preceding the survey. Besides, 12.2 percent of them (16.5 percent of the street based and 9.3 percent of establishment based FSWs) had served more than 10 paying sex partners during this period (Table 5.4).

Table 5.4: Number of Different Type of Sex Partners Reported by FSWs

Sex Partners of Sex Workers	Street (N=200)		Establishm	ent (N=300)	Total (	N=500)
	n	%	n	%	n	%
No. of Paying Sex Partners in the Past Week						
0	1	0.5	5	1.7	6	1.2
One – Two	46	23.0	128	42.7	174	34.8
Three – Five	72	36.0	102	34.0	174	34.8
Six – Ten	48	24.0	37	12.3	85	17.0
More than Ten	33	16.5	28	9.3	61	12.2
Mean (Paying Partners in the Past Week):	-	6.5	-	4.6	-	5.4
No. of Non-Paying Sex Partners in the Past Week						
0	117	58.5	190	63.3	307	61.4
One – Two	81	40.5	110	36.7	191	38.2
Three – Four	2	1.0	0	0.0	2	0.4
<b>Mean (Non-Paying Partners in the Past Week):</b>	-	0.5	-	0.4	-	0.4
No. of Paying and Non-Paying Sex Partners in the						
Past Week						
0	1	0.5	2	0.7	3	0.6
One – Two	28	14.0	98	32.7	126	25.2
Three – Five	83	41.5	125	41.7	208	41.6
Six – Ten	53	26.5	44	14.7	97	19.4
More than Ten	35	17.5	31	10.3	66	13.2
Mean (Paying and Non-Paying Partners in the Past Week):	-	7.0	-	5.0	-	5.8
Last Sex Partner						
Client	109	54.5	142	47.3	251	50.2
Regular Client	40	20.0	66	22.0	106	21.2
Husband/Male friend	42	21.0	66	22.0	108	21.6
Other male	9	4.5	26	8.7	35	7.0

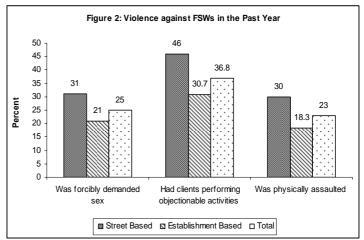
Around 38 percent of the FSWs had non-paying sex partners with a minimum of one to four in the past week. The mean number of non-paying partners entertained by them in the week preceding the survey was 0.4. The majority of respondents (61.4%) reported that they had not

served any non-paying sex partner in the previous week while 38.2 percent of them had provided services to 1-2 such non-paying sex partners during the period (Table 5.4).

The mean number of both paying and non-paying sex partners in the previous week was 5.8. The mean number of sexual partners (paying and non-paying) entertained by the street based FSWs in the past week was higher (7.0) than those served by the establishment based sex workers (5.0). Around half of the sex workers (50.2%) had their last sexual contact with their clients, 21.6 percent of them had their husband/male friends as their last sex partners, while seven percent had last sexual contact with other males (Table 5.4).

#### 5.5 Types of Sex Practiced by FSWs

Violence against sex workers, including forced sex, is uncommon and puts sex workers at greater risk of contracting STIs/HIV. The sex workers were 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. Street based FSWs were more likely to face different forms of violence compared to those based in



different establishments. As seen in Figure 2, a higher proportion of street based than establishment based FSWs were subjected to forceful sex (31% street based and 21% establishment based), had clients performing objectionable activities (46% street based and 30.7% establishment based) and were physically assaulted (30% street based and 18.3% establishment based in the past year.

A total of 184 (36.8%) respondents replied positively to the question regarding whether they were forced to perform any sexual acts against their wishes in the past one year. Masturbation (89/184) followed by oral sex (64/184) was reported as types of activities that they were forced to perform despite their reluctance to do so. A few respondents also reported that they were subjected to verbal torture (49/184), were forced to have sex after drinking alcohol (54/184), and had clients refusing to pay for sexual services (71/184). These types of violence were noticed to be common among street based sex worker than establishment based sex workers (Table 5.5).

Table 5.5: Types of Sex Practiced by FSWs

Type of Sex	Street (N=200)		Establishment (N=300)		Total (N=500)	
Type of Sex	n	%	n	%	n	%
Types of Sex Acts in the Past Year						
Only Vaginal	141	70.5	221	73.7	362	72.4
Masturbation	48	24.0	76	25.3	124	24.8
Oral Sex	34	17.0	25	8.3	59	11.8
Anal Sex	13	6.5	6	2.0	19	3.8
Total	200	*	300	*	500	*
Clients Refusing to Pay for Sexual Services						
Yes	91	45.5	49	16.3	140	28.0
No	109	54.5	251	83.7	360	72.0
Mean No. of Such Incidences in Past Six Months:	-	3.9	-	1.8	-	3.1
Total	200	100.0	300	100.0	500	100.0
Types of Activities Performed by Clients Which FSWs Disliked						
Masturbation	32	34.8	57	62.0	89	48.4
Oral Sex	31	33.7	33	35.9	64	34.8
Anal Sex	12	13.0	7	7.6	19	10.3
Escape Without Paying	51	55.4	20	21.7	71	38.6
Assaulted	36	39.1	20	21.7	56	30.4
Forced to have sex after drinking alcohol	25	27.2	29	31.5	54	29.4
Verbal Torture	26	28.3	23	25.0	49	26.6
Stole Money	19	20.7	1	1.1	20	10.9
Burnt with cigarette	2	2.2	1	1.1	3	1.6
Others	0	0.0	1	1.1	1	0.5
Total	92	*	92	*	184	*
Types of Sex with Last Client						
Vaginal Sex	199	99.5	299	99.7	498	99.6
Masturbation	18	9.0	18	6.0	36	7.2
Oral Sex	7	3.5	1	0.3	8	1.6
Anal Sex	2	1.0	0	0.0	2	0.4
Total	200	*	300	*	500	*

\*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 distributes the FSWs according to their income from sex work and other jobs besides the sex trade. 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. 589 (street based FSWs) and Rs. 1,217 (establishment based FSWs) with a minimum of Rs. 20 to a maximum of Rs. 5,500. Such variations in income could be due to the varying rates for sex acts charged by the different categories of sex workers in the study population. Other reasons could be different rates for married and uneducated sex workers compared to their educated and unmarried counterparts.

The average weekly income of the establishment based FSWs was also higher (Rs 3,641) than those based in the street (Rs. 2,296). Only nine percent of street based respondents earned more than 5,000 in a week; compared to 19.6 percent of establishment based FSWs reporting so (Table 5.6).

A large proportion of the respondent (82.4%) said that they were engaged in other jobs as well. Almost all (98.3%) of the establishment based FSWs reported having a side job while only 58.5 percent of street based FSWs replied that they had. Most of the respondents who had other jobs had been working as waitresses (59%) in different restaurants (Table 5.6). Among the street based FSWs, the average weekly income from the other jobs was Rs. 744, ranging from Rs. 150-7,000 and among the establishment based FSWs it was Rs. 971 ranging from Rs. 150-15,000.

Table 5.6: Income of FSWs from Sex Work and Other Jobs

Income from Sex Work and Other Jobs		(N=200)	=200) Establishment (N=300)			Total (N=500)	
		%	n	%	n	%	
Income from Last Sex with Client							
0	2	1.0	0	0.0	2	0.4	
Up to Rs. 100	13	6.5	0	0.0	13	2.6	
Rs. 101 – Rs. 500	108	54.0	71	23.7	179	35.8	
Rs. 501 – Rs. 1,000	48	24.0	91	30.3	139	27.8	
Rs. 1001 – Rs. 1,500	16	8.0	68	22.7	84	16.8	
Rs. 1501 - Rs. 2,000	9	4.5	33	11.0	42	8.4	
Rs. 2000 and above	4	2.0	37	12.3	41	8.2	
Range: Rs	20-	3500	150-	-5500	20-5	5500	
Mean Income from Last Sex Work: Rs.	-	589	-	1217	- 966		
Total	200	100.0	300	100.0	500	100.0	
Weekly Income from Sex Work		1000	200	1000	200	10010	
Up to Rs. 1,000	54	27.0	11	3.7	65	13.0	
Rs 1,001 – Rs. 2,000	67	33.5	75	25.0	142	28.4	
Rs 2,001 – Rs. 3,000	32	16.0	72	24.0	104	20.8	
Rs 3,001 – Rs. 4,000	20	10.0	50	16.7	70	14.0	
Rs 4,001 – Rs. 5,000	9	4.5	33	11.0	42	8.4	
Rs 5,001 – Rs. 10,000	18	9.0	55	18.3	73	14.6	
More than Rs 10,000	0	0.0	4	1.3	4	0.8	
Range: Rs.	Ü	00-8500		0-15000		0-15000	
Mean Weekly Income from Sex Work: Rs.		2296	-	3641	-	3103	
Total	200	100.0	300	100.0	500	100.0	
Have Part Time Job Besides Sex Work							
Yes	117	58.5	295	98.3	412	82.4	
No	83	41.5	5	1.7	88	17.6	
Total	200	100.0	300	100.0	500	100.0	
Part Time Jobs besides Sex Work							
Waitress	16	13.7	227	77.0	243	59.0	
Wage Laborer	50	42.7	4	1.4	54	13.1	
Masseuse in Massage Parlor	1	0.9	32	10.8	33	8.0	
Domestic Help	26	22.2	5	1.7	31	7.5	
Dancer in Dance Restaurant	0	0.0	26	8.8	26	6.3	
Owner of Bhatti Pasal/Restaurant/Cabin	9	7.7	3	1.0	12	2.9	
Retail Shops/Business	5	4.3	0	0.0	5	1.2	
Service (Accountant, peon, etc.)	3	2.6	0	0.0	3	0.7	
Peer Communicator in NGO	1	0.9	0	0.0	1	0.2	
Other	6	5.1	2	0.7	8	1.9	
Total	117	*	295	*	412	*	
Average Weekly Income from Other Sources Besides Sex Work							
0 (No Other Source)	83	41.5	5	1.7	88	17.6	
Up to Rs. 500	50	25.0	41	13.7	91	18.2	
Rs. 501- Rs. 1,000	53	26.5	196	65.3	249	49.8	
Rs. 1001 – Rs. 1,500	10	5.0	27	9.0	37	7.4	
Rs. 1501 – Rs. 2,000	2	1.0	19	6.3	21	4.2	
Rs. 2,000 and above	2	1.0	12	4.0	14	2.8	
Range Rs.	150-	7,000	150-1	15,000		15,000	
Mean Weekly Rs.:		744	-	971	-	906	
<b>y</b>							

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

#### 5.7 Knowledge of Condoms

Condom promotion has been one of the important components of HIV/AIDS awareness campaigns. Such campaigns have focused on raising awareness about condoms with the help of various IEC materials disseminated through print as well as electronic media. Almost all of the respondents had heard of condoms before.

Radio was the most popular source of information on condoms as mentioned by 93 percent of the sex workers. Television came up as the second most popular information source (86.8%), followed by friends/neighbors (83.4%), the pharmacy (81.6%), NGOs (63.8%), and billboards/signboards (60%). Similarly, other reported sources of knowledge were

newspapers/posters (59.4%), hospitals (43.6%), health posts/health centers (32.2%), and health workers (22%). Cinema halls, street drama, community events, video vans and community workers were also mentioned by the respondents as the other sources of their knowledge about condoms (Table 5.7).

Table 5.7: Sources of Knowledge of Condom among FSWs

Source of Knowledge of Condoms	Street (	N=200)	Establishm	ent (N=300)	Total (N=500)		
	n	%	n	%	n	%	
Sources of Knowledge of Condoms:							
Radio	184	92.0	282	94.0	466	93.2	
Television	169	84.5	265	88.3	434	86.8	
Friend/Neighbor	176	88.0	241	80.3	417	83.4	
Pharmacy	153	76.5	255	85.0	408	81.6	
NGOs	127	63.5	192	64.0	319	63.8	
Billboard/Signboard	102	51.0	198	66.0	300	60.0	
Newspaper/Poster	107	53.5	190	63.3	297	59.4	
Hospital	85	42.5	133	44.3	218	43.6	
Health Post/Health Center	69	34.5	92	30.7	161	32.2	
Health Worker/Volunteer	45	22.5	65	21.7	110	22.0	
Cinema Hall	42	21.0	67	22.3	109	21.8	
Street Drama	28	14.0	26	8.7	54	10.8	
Comic Book	23	11.5	31	10.3	54	10.8	
Community Event/Training	17	8.5	32	10.7	49	9.8	
Video Van	14	7.0	9	3.0	23	4.6	
Community Workers	14	7.0	9	3.0	23	4.6	
Others	2	1.0	4	1.3	6	1.2	

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

#### **5.8** Condom Use with Different Partners

The study participants basically entertain three different types of sex partners: (i) paying partners, i.e., those who pay them in cash or in kind for sex; (ii) non-paying partners, i.e., those who do not pay them for sex; for instance 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 as 'other' sex partners. The following sections describe their condom use behaviors with these different sex partners.

#### 5.8.1 Condom Use with Clients

The use of condoms in their last sexual encounter with a client was reported by 75 percent of the FSWs. Only around 54 percent of the FSWs had been consistently using condoms with the clients in the past year. Out of 375 FSWs who had used condoms in the last sex with clients, 68 percent reported that they themselves had suggested using condoms. A slightly higher proportion of establishment FSWs (76.7%) than street based FSWs (72.5%) reported using condoms in the last sexual encounter (Table 5.8).

#### 5.8.2 Condom Use with Regular Clients

Seventy-one percent of the sex workers reported having clients visiting them on a regular basis. Around 57 percent (203/355) of the respondent who had regular clients reported that they used condoms consistently in the past year. Seventy-four percent of them further reported the use of condom during their last sexual contact with their regular client. A slightly higher proportion of street based FSWs (59.9% i.e. 88/147) than establishment based FSWs (55.3% i.e. 115/208) were using condoms consistently with their regular clients (Table 5.8).

Table 5.8: Condom Use with Clients and Non-paying Sex Partners

Candam Has	Street	(N=200)	Establishment (N=200)		Total (N=500)		
Condom Use	n	%	n	%	n	%	
Use of Condom with Last Client							
Yes	145	72.5	230	76.7	375	75.0	
No	55	27.5	70	23.3	125	25.0	
Tota	al 200	100.0	300	100.0	500	100.0	
Condom Use Suggested by	1			i			
Myself	97	66.9	159	69.1	256	68.3	
My partner	48	33.1	71	30.9	119	31.7	
Joint decision	-	-	-	-	-	-	
Tota	ıl 145	100.0	230	100.0	375	100.0	
Consistent Use of Condom with the Client in the Past							
Year							
Every time	103	51.5	166	55.3	269	53.8	
Most of the time	54	27.0	93	31.0	147	29.4	
Sometimes	22	11.0	25	8.3	47	9.4	
Rarely	8	4.0	4	1.3	12	2.4	
Never	13	6.5	12	4.0	25	5.0	
Tota	al 200	100.0	300	100.0	500	100.0	
Have Regular Client in the Past Year							
Yes	147	73.5	208	69.3	355	71.0	
No	53	26.5	92	30.7	145	29.0	
Tota	al 200	100.0	300	100.0	500	100.0	
Consistent Use of Condom with Regular Clients in the	1			i			
Past Year							
Every time	88	59.9	115	55.3	203	57.2	
Most of the time	30	20.4	49	23.6	79	22.3	
Sometimes	14	9.5	24	11.5	38	10.7	
Rarely	4	2.7	5	2.4	9	2.5	
Never	11	7.5	15	7.2	26	7.3	
Tota	ıl 147	100.0	208	100.0	355	100.0	
Use of Condom with Regular Client in the Last Sex							
Yes	114	77.6	149	71.6	263	74.1	
No	33	22.4	59	28.4	92	25.9	
Tota	ıl 147	100.0	208	100.0	355	100.0	
Condom Use Suggested by							
Myself	73	64.0	95	63.8	168	63.9	
My partner	41	36.0	54	36.2	95	36.1	
Tota	ıl 114	100.0	149	100.0	263	100.0	
Have Non-Paying Partner during Past Year							
Yes	95	47.5	129	43.0	224	44.8	
No	105	52.5	171	57.0	276	55.2	
Tota	ıl 200	100.0	300	100.0	500	100.0	
Consistent Use of Condom with Non-Paying Partner in the Past Year							
Every time	7	7.4	5	3.9	12	5.4	
Most of the time	4	4.2	7	5.4	11	4.9	
Sometimes	10	10.5	23	17.8	33	14.7	
Rarely	5	5.3	13	10.1	18	8.0	
Never	69	72.6	81	62.8	150	67.0	
Tota	ıl 95	100.0	129	100.0	224	100.0	

# 5.8.3 Condom Use with Non-Paying Partners

Overall 44.8 percent of the respondents reported having non-paying sex partners in the year preceding the survey. Consistent use of condoms with non-paying partners was found to be very low among both street (7.4% i.e. 7/95) and establishment based FSWs (3.9% i.e. 5/129). The majority of the respondent (67% i.e. 150/224) reported that they were not using condoms with their non-paying partners (Table 5.8).

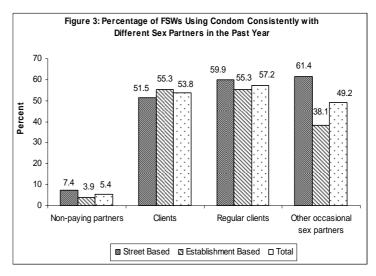
#### 5.8.4 Condom Use with People Other than Clients, Husband and Male Friends

Table 5.9 demonstrates the condom using practice with other males whom the FSWs met occasionally. Only 24 percent of respondents were engaged in sexual acts with people other than their clients, their husband or male friends in the past year. Condom use with such partners in the last sexual act was reported by almost 67 percent (80/120) and in most cases (75%) the sex workers themselves had suggested using condoms. Consistent condom use with such partners was reported by almost half of the respondents (49.2%) who had such partners. More street based FSWs (61.4% i.e. 35/57) were consistently using condoms with those partners than establishment based FSWs (38.1% i.e. 24/63)

Table 5.9: Condom Use with Partners Other than Client, Husband, Male Friend

Condom Use by FSWs		reet 200)	Establishment (N=300)		Total (N=500)	
	n	%	n	%	n	%
Have Sexual Contact with Partner Other than Client, Husband, Male						
Friend in the Past Year						
Yes	57	28.5	63	21.0	120	24.0
No	143	71.5	237	79.0	380	76.0
Total	200	100.0	300	100.0	500	100.0
Use of Condom with Partner other than Client, Husband, Male						
Friend in the Last Sex						
Yes	48	84.2	32	50.8	80	66.7
No	9	15.8	31	49.2	40	33.3
Total	57	100.0	63	100.0	120	100.0
Condom Use Suggested by						
Myself	38	79.2	22	68.8	60	75.0
My partner	10	20.8	10	31.2	20	25.0
Total	48	100.0	32	100.0	80	100.0
Consistent Use of Condom with Partner Other than Client, Husband, Male Friend in the Past Year						
Every time	35	61.4	24	38.1	59	49.2
Most of the time	12	21.1	10	15.9	22	18.3
Sometimes	5	8.8	6	9.5	11	9.2
Rarely	0	0.0	6	9.5	6	5.0
Never	5	8.8	17	27.0	22	18.3
Total	57	100.0	63	100.0	120	100.0

Figure 3 compares the reported consistent use of condom by the respondents with their different sex partners in the past vear. Consistent condom use was lowest with non-paying partners. At the same time, it is further evident from the figure that a higher proportion of street based FSWs had used condoms consistently occasional sex partners, regular clients, and non-paying sex partners than their establishment based counterparts in the past year.



# 5.9 Availability of Condoms and Their Brand Names

Almost 28 percent replied positively when asked whether they carry condoms with them. A larger proportion of street based FSWs (46.5%) replied that they usually carry condoms, while only around 15 percent of establishment based FSWs said the same. However, the majority of those (105 out of 137) who said they usually carry condoms did not have a condom with them when they were requested by the interviewers to show them the condoms (Table 5.10).

Table 5.10: Availability of Condoms and Brand Names of Widely Used Condoms

Condom Acquisition	Street	(N=200)	Establishm	nent (N=300)	Total (N=500)		
Condom Acquistion	n	%	n	%	n	%	
Carry Condom Usually							
Yes	93	46.5	44	14.7	137	27.4	
No	107	53.5	256	85.3	363	72.6	
Total	200	100.0	300	100.0	500	100.0	
No. of Condoms Carried							
One	2	2.2	0	0.0	2	1.5	
Two	3	3.2	0	0.0	3	2.2	
Three – Five	12	12.9	8	18.2	20	14.6	
Six – Ten	5	5.4	1	2.3	6	4.4	
More than Ten	1	1.1	0	0.0	1	0.7	
Not carrying right now	70	75.3	35	79.5	105	76.6	
Total	93	100.0	44	100.0	137	100.0	
Fime Needed to Obtain Condoms from Nearest Place	73	100.0	77	100.0	157	100.0	
	99	40.5	216	72.0	215	62.0	
Up to 5 minutes 6 – 10 minutes	<u>99</u> 77	49.5 38.5	216 61	72.0 20.3	315 138	63.0	
	11		15		26	27.6	
11 – 15 minutes	8	5.5	6	5.0 2.0	14	5.2	
16 – 20 minutes	5	2.5	+	+ +	5	2.8	
21 and more minutes Don't Know	0	0.0	0 2	0.0	2	1.0 0.4	
Total	200	100.0	300	100.0	500	100.0	
Places Where Condoms are Available	106				1.55		
Pharmacy	186	93.0	279	93.0	465	93.0	
Clients	93	46.5	168	56.0	261	52.2	
NGO/Health Workers/ Volunteers	94	47.0	138	46.0	232	46.4	
General Retail Store (Kirana Pasal)	67	33.5	132	44.0	199	39.8	
Hospital	86	43.0	111	37.0	197	39.4	
Private Clinic	74	37.0	119	39.7	193	38.6	
Paan Shop	64	32.0	120	40.0	184	36.8	
Peer/Friends	35	17.5	52	17.3	87	17.4	
Health Post/Health Center	34	17.0	39	13.0	73	14.6	
Bar/Guest House/Hotel	28	14.0	42	14.0	70	14.0	
Massage Center	1	0.5	39	13.0	40	8.0	
FPAN Clinic	11	5.5	11	3.7	22	4.4	
Bhatti Pasal	18	9.0	2	0.7	20	4.0	
Others	1	0.5	8	2.7	9	1.8	
Total	200	*	300	*	500	*	
Brand Names of widely used Condoms							
Number 1	128	64.0	180	60.0	308	61.6	
Panther	71	35.5	125	41.7	196	39.2	
Kamasutra	45	22.5	94	31.3	139	27.8	
Jodi	50	25.0	88	29.3	138	27.6	
Dhaal	56	28.0	50	16.7	106	21.2	
Black Cobra	22	11.0	77	25.7	99	19.8	
Lily	3	1.5	10	3.3	13	2.6	
Skinless	1	0.5	3	1.0	4	0.8	
Others	6	3.0	4	1.3	10	2.0	
Brands Not Known	50	25.0	59	19.7	109	21.8	
Not Used in the Past Year	13	6.5	12	4.0	25	5.0	
Total	200	*	300	*	500	*	

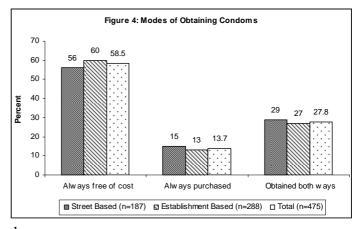
\*Note: The percentages add up to more than 100 because of multiple responses.

Sixty-three percent of the sex workers said that they could get condoms within five minutes from their place of work. Only a few sex workers (3.8%) reported that it took more than 15 minutes for them to reach the nearest places to get condoms. The majority of the sex workers (93%) reported that they could get condoms from pharmacies. More than half of them (52.2%) also said that they could get condoms from their clients/sex partners. NGO/health workers, general retail stores, hospitals, private clinics, and 'paan' shops were mentioned as other places from where they could get condoms (Table 5.10).

The most used brand of condom among the respondents was Number One (61.6%). Other most used brands were Panther (39.2%), Kamasutra (27.8%), Jodi (27.6%), Dhaal (21.2%), and Black Cobra (19.8%). Almost 22 percent of FSWs did not know the brand name of the condoms used by them. Additionally, five percent (25/500) of the respondents had not used condoms in the past year (Table 5.10).

#### **5.10** Modes of Obtaining Condoms

Figure 4 classifies the mode of obtaining condoms by the respondents. A total of five percent FSWs reported that they never had used the condom. Among others, 58.5 percent reported that they obtained free condoms all the time, around 14 percent always purchased them, and around 28 percent obtained them both ways. A slightly higher proportion of establishment based FSWs (60%) than street based FSWs (56%)



reported that they had access to free condoms.

Table 5.11 shows the places from where FSWs usually obtained free condoms or purchased them. Among those respondents who reported obtaining free condoms, 81 percent said that their clients brought condoms with them, 55.1 percent said that they got them from NGO/health workers/volunteers, 21.7 percent reported peers/friends and 10.5 percent said that they obtained free condoms from hotels/lodges/restaurants.

Seven in ten respondents (71.2%) preferred that their clients brought condoms with them. NGOs/health workers/volunteers, peer/friends, and hotels/lodges/restaurants were the next preferred suppliers of free condoms (Table 5.11).

Among those sex workers who purchased condoms all the time or occasionally, around 85 percent usually bought them from pharmacies, 32 percent from private clinics, and around 20 percent from 'paan' shops. When asked about their opinion on the most convenient places for them to purchase condoms, the majority of the respondents (83.8%) said they preferred to buy condoms from a pharmacy (Table 5.11).

Table 5.11: Modes and Places for Obtaining Condoms by FSWs

Condom Acquisition	Street	(N=200)	Establishment (N=300)		Total (N=500)		
Condom Acquisition	n	%	n	%	n	%	
Mode of Obtaining Condoms							
Always free of cost	105	52.5	173	57.7	278	55.6	
Purchase	28	14.0	37	12.3	65	13.0	
Obtain both ways	54	27.0	78	26.0	132	26.4	
Condom never used	13	6.5	12	4.0	25	5.0	
Total	200	100.0	300	100.0	500	100.0	
Free Condoms Usually Obtained From							
Client	118	74.2	214	85.3	332	81.0	
NGO/Health workers/Volunteers	91	57.2	135	53.8	226	55.1	
Peers/friends	43	27.0	46	18.3	89	21.7	
Hotel/Lodge/Restaurant	14	8.8	29	11.6	43	10.5	
Massage Parlor	1	0.6	36	14.3	37	9.0	
Hospital	11	6.9	12	4.8	23	5.6	
Bhatti Shop	12	7.5	1	0.4	13	3.2	
FPAN clinics	2	1.3	2	0.8	4	1.0	
Community events	1	0.6	1	0.4	2	0.5	
Total		*	251	*	410	*	
	159	*	251	*	410	*	
Most Convenient Place to Obtain Free Condom	101	62.5	101	76.1	202	71.2	
Client/ others sex partners	101	63.5	191	76.1	292	71.2	
NGO/Health workers/Volunteers	78	49.1	92	36.7	170	41.5	
Peers/friends	26	16.4	29	11.6	55	13.4	
Hotel/Lodge/Restaurant	10	6.3	27	10.8	37	9.0	
Massage Parlor	1	0.6	34	13.5	35	8.5	
Hospital	5	3.1	6	2.4	11	2.7	
Bhatti Shop	9	5.7	0	0.0	9	2.2	
Health Post/Health Center	5	3.1	1	0.4	6	1.5	
FPAN Clinic	2	1.3	2	0.8	4	1.0	
Community events	1	0.6	2	0.8	3	0.7	
Total	159	*	251	*	410	*	
Places of Purchasing Condom							
Pharmacy	73	89.0	95	82.6	168	85.3	
Private Clinic	24	29.3	39	33.9	63	32.0	
Pan Shop	20	24.4	20	17.4	40	20.3	
General Retail Store (Kirana Pasal)	8	9.8	17	14.8	25	12.7	
Hotel/Lodge/Restaurant	9	11.0	5	4.3	14	7.1	
Others	1	1.2	0	0.0	1	0.5	
Total	82	*	115	*	197	*	
Most Convenient Place to Purchase Condom		1	1	†			
Pharmacy Pharmacy	71	86.6	94	81.7	165	83.8	
Private Clinic	18	22.0	30	26.1	48	24.4	
Pan Shop	13	15.9	10	8.7	23	11.7	
General Retail Store (Kirana Pasal)	4	4.9	8	7.0	12	6.1	
Hotel/lodge/Restaurant	8	9.8	4	3.5	12	6.1	
Others	1	1.2	0	0.0	1	0.1	
Others Total	•	1.2	115	V.U *	197	0.5 *	

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

#### 5.11 Use of Alcohol and Drugs by FSWs and Clients

The majority of respondents (72.4%) consumed alcohol in the past month. Establishment based FSWs (75.7%) were more likely to have alcoholic drinks than street based FSWs (67.5%). Out of 362 FSWs who consumed alcohol, 155 admitted that they consumed it on daily basis and 128 said that they drank 2-3 times a week. Others drank less frequently (Table 5.12).

Seven percent of the sex workers had also used drugs at least once in the past month. Among the 500 sex workers, 17.4 percent said that they knew someone who injected drugs. When asked about their relationship with known IDUs, more than half of them (52.9%) mentioned that they were the local boys in the neighborhood, 23 percent said friends, and around eight percent said relatives and/or family members. Moreover, 20.9 percent (9/43) street based and

9.1 percent (4/44) of establishment based respondents also mentioned that the IDUs that they knew were their clients.

Two of the respondents had injected drugs at least once in the past year. Five of the sex workers also admitted having sex in exchange for drugs while seven had at least once been engaged in sexual contact for money to buy drugs.

Table 5.12: Use of Alcohol and Drugs by FSWs

Consumption of Alaskal and Dungs	Street	(N=200)	Establishm	ent (N=300)	Total (N=500)		
Consumption of Alcohol and Drugs	n	%	n	%	n	%	
Consumption of Alcohol in the Past Month							
On a Daily Basis	64	32.0	91	30.3	155	31.0	
2-3 Times a Week	47	23.5	81	27.0	128	25.6	
Once a Week	14	7.0	26	8.7	40	8.0	
Less than Once a Week	10	5.0	29	9.7	39	7.8	
Never	65	32.5	73	24.3	138	27.6	
Tried Any Types of Drugs in the Past Month							
Yes	11	5.5	24	8.0	35	7.0	
No	189	94.5	276	92.0	465	93.0	
Know Injecting Drug Users (IDUs)							
Yes	43	21.5	44	14.7	87	17.4	
No	157	78.5	256	85.3	413	82.6	
Tota	al 200	100.0	300	100.0	500	100.0	
Relationship with Known IDUs							
Local Boys	20	46.5	26	59.1	46	52.9	
Friend	8	18.6	12	27.3	20	23.0	
Client	9	20.9	4	9.1	13	14.9	
Relative	5	11.6	2	4.5	7	8.1	
Family	1	2.3	0	0.0	1	1.2	
Tota	al 43	*	44	*	87	*	
Knowledge of Sex Partners being IDUs							
Sex Partners Including Clients	10	5.0	9	3.0	19	3.8	
Clients	10	5.0	9	3.0	19	3.8	
Injecting History in the Past Year							
Ever Injected Drugs	1	0.5	1	0.3	2	0.4	
Injected in Past 12 Months	0	0.0	1	0.3	1	0.2	
Ever Exchanged Sex for Drugs	1	0.5	4	1.3	5	1.0	
Ever Exchanged Sex for Money to Buy Drugs	2	1.0	5	1.7	7	1.4	

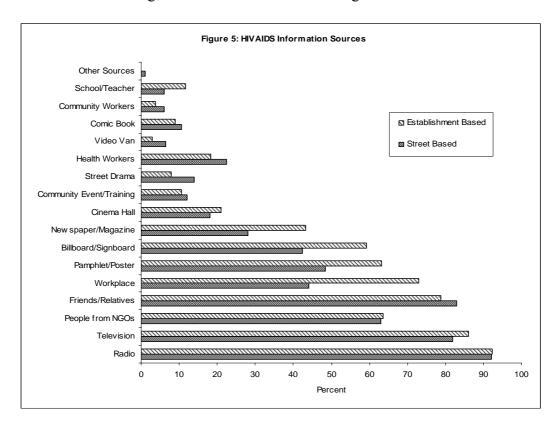
\*Note: The percentages add up to more than 100 because of multiple responses

## CHAPTER - VI: 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 as well as STIs.

#### 6.1 Source of Knowledge of HIV/AIDS

All of the respondents had heard about HIV/AIDS. Radio was the most important source of information on HIV/AIDS as 92.2 percent of the FSWs reported that they heard about HIV/AIDS from the radio. Television (84.4%) followed by friends/relatives (80.4%) were mentioned as other sources of respondents' knowledge on HIV/AIDS. A considerable proportion of the respondents had also heard about HIV/AIDS from NGO people, the workplace, pamphlets/posters, signboards/billboards and newspapers/magazines. A detail of FSWs' source of knowledge on HIV/AIDS is shown in Figure 5.



## 6.2 FSWs' Knowledge on Major Ways of Avoiding HIV/AIDS

Table 6.1 shows the knowledge of the respondents about ways of preventing the transmission of HIV. 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 condom during every sex act) as HIV preventive measures were 69.2 percent, 82.4 percent, and 91.8 percent respectively. Overall, 58.4 percent of the respondents correctly identified all three **A**, **B**, and **C** as HIV-preventive measures. Further, among the respondents, 92.2 percent knew that a healthy-looking person can be infected with HIV (**D**), 46.4 percent of them identify that a person cannot get HIV from a mosquito bite (**E**), and 82 percent knew

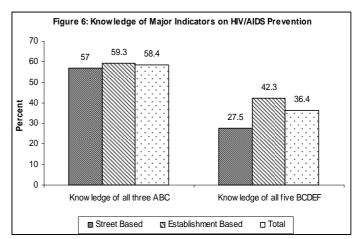
that one cannot get HIV by sharing a meal with an HIV-infected person (**F**). Overall, only 36.4 percent of the respondents were aware of all the five major indicators i.e., **BCDEF**.

Table 6.1: FSW's Knowledge on Major Ways of Avoiding HIV

	Knowledge of Major Indicators on HIV/AIDS		reet 200)	Establishment (N=300)		Total (N=500)	
	•	n	%	n	%	n	%
A	Can protect themselves through abstinence from sexual contact	142	71.0	204	68.0	346	69.2
В	Can protect themselves through monogamous sexual contact	158	79.0	254	84.7	412	82.4
C	Can protect themselves through condom use every time during sex	172	86.0	287	95.7	459	91.8
D	A healthy-looking person can be infected with HIV	182	91.0	279	93.0	461	92.2
E	A person can not get the HIV virus from mosquito bite	78	39.0	154	51.3	232	46.4
F	Can not get HIV by sharing a meal with an HIV infected person	152	76.0	258	86.0	410	82.0
Kne	owledge of all the three: ABC	114	57.0	178	59.3	292	58.4
Kne	owledge of all five indicators: BCDEF	55	27.5	127	42.3	182	36.4

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

Figure 6 compares knowledge of **ABC** and **BCDEF** among the street and establishment based respondents. A higher proportion of establishment based FSWs were aware of the major indicators of HIV/AIDS prevention than their street based counterparts. Furthermore, it was noticed that a higher proportion of both street based and establishment based respondents were aware of all of **ABC** (57% street based and 59.3% establishment based) than **BCDEF** (27.5% street



based and 42.3% establishment based) preventive measures.

## 6.3 Knowledge on Major Ways of HIV/AIDS Transmission

The sex workers were asked if they knew any person infected with HIV or who had died of AIDS. Forty-nine percent of the street based and 37.3 percent of the establishment based respondents knew someone living with HIV/AIDS or who had died of AIDS. Among them, 21.4 percent of the total respondents had their close friends and 8.6 percent had their close relative who had suffered from HIV/AIDS or had succumbed to it. More street based (32.7%) than establishment based (11.6%) respondents had friends with HIV/AIDS or who had died of AIDS (Table 6.2).

The sex workers understanding of HIV/AIDS and its different modes of transmission were also tested with the help of certain probing questions (Table 6.2). As indicated by the table, a larger proportion (98.4%) 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 (97.6%). Ninety-three percent of them also mentioned that holding an HIV-infected person's hand did not pose a risk of HIV transmission. Almost 89 percent said that an infected pregnant woman could transmit the virus to her unborn child. Similarly, 72 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, almost 47 percent of them expressed their unawareness of any measures to minimize such risk. Some of them (22.5%), however, said that taking

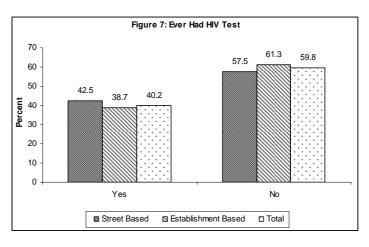
medicine would be helpful. The response shown in the table showed that a slightly higher proportion of establishment based FSWs than street based FSWs had the correct information on HIV/AIDS.

Table 6.2: FSWs' Knowledge on Ways of HIV/AIDS Transmission

Statements Related to HIV/AIDS	Street (N=200)		Establishment (N=300)		Total (N=500)	
	n	%	n	%	n	%
Know Anyone Who is Infected with HIV or Who has Died of AIDS	98	49	112	37.3	210	42.0
Have a close relative or close friend who is infected with HIV or						
has died of AIDS						
Close friend	32	32.7	13	11.6	45	21.4
Close relative	7	7.1	11	9.8	18	8.6
No relation	59	60.2	88	78.6	147	70.0
Total	98	100.0	112	100.0	210	100.0
Awareness on HIV/AIDS						
Blood transfusion from an infected person to the other transmit HIV	194	97.0	298	99.3	492	98.4
A person can get HIV, by using previously used needle/syringe	193	96.5	295	98.3	488	97.6
Can not get HIV by holding an HIV infected person's hand	178	89.0	287	95.7	465	93.0
A pregnant woman infected with HIV/AIDS can transmit the virus to her unborn child	174	87.0	270	90.0	444	88.8
A woman with HIV/AIDS can transmit the virus to her new-born child through breastfeeding	149	74.5	210	70.0	359	71.8
Total	200	100.0	300	100.0	500	100.0
Ways by which a pregnant woman can reduce the risk of						
transmission of HIV to her unborn child						
Take medicine	40	23.0	60	22.2	100	22.5
Others	1	0.6	0	0.0	1	0.2
Don't Know	81	46.5	128	47.4	209	47.1
Can't do anything	43	24.7	68	25.2	111	25.0
Abort the child	9	5.2	14	5.2	23	5.2
Total	174	100.0	270	100.0	444	100.0

## 6.4 Perception on HIV Test

Table 6.3 distributes the respondents according to their perceptions about the HIV test. Regarding the question on the availability of HIV testing facilities in their community, more than half (61.6%) of them reported that it was possible for them to have a confidential HIV test in their community. Forty percent of the FSWs said that they had taken up the test for themselves before. A slightly higher proportion of street based FSWs (42.5%) than establishment



based FSWs (38.7%) have had the test (Figure 7). Among them, almost 84 percent of both street as well as establishment based FSWs had taken up the test during the last 12 months preceding the survey, while others had been tested more than a year before. Most of them had taken up the test voluntarily (92.9% street based and 87.9% establishment based), while others had been asked to test. Most of them (96.5% street based and 95.7% establishment based FSWs) got the result while others did not collect it as they were afraid of the result (1/8), forgot (3/8), were sure of not being infected (2/8), or did not feel the need to collect the result (1/8).

Table 6.3: Perception on HIV Test

Perception of HIV Test		eet 200)	Establishment (N=300)			otal 500)
	n	%	n	%	n	%
Confidential HIV Test Facility Available in the Community						
Yes	122	61.0	186	62.0	308	61.6
No	46	23.0	66	22.0	112	22.4
Don't Know	32	16.0	48	16.0	80	16.0
Total	200	100.0	300	100.0	500	100.0
Ever had an HIV test						
Yes	85	42.5	116	38.7	201	40.2
No	115	57.5	184	61.3	299	59.8
Total	200	100.0	300	100.0	500	100.0
Voluntarily Underwent the HIV Test or Because it was						
Required						
Voluntarily	79	92.9	102	87.9	181	90.0
Required	6	7.1	14	12.1	20	10.0
Total	85	100.0	116	100.0	201	100.0
Received HIV Test Result						
Yes	82	96.5	111	95.7	193	96.0
No	3	3.5	5	4.3	8	4.0
Total	85	100.0	116	100.0	201	100.0
Reason for Not Receiving the Test Result						
Forgot it	2	66.7	1	20.0	3	37.5
Sure of not being infected	0	0.0	2	40.0	2	25.0
Afraid of result	0	0.0	1	20.0	1	12.5
Felt unnecessary	0	0.0	1	20.0	1	12.5
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	71	83.5	97	83.6	168	83.6
Between 1-2 years	9	10.6	8	6.9	17	8.5
Between 2-4 years	4	4.7	10	8.6	14	7.0
More than 4 years ago	1	1.2	1	0.9	2	1.0
Total	85	100.0	116	100.0	201	100.0

## 6.5 Access to FHI/Nepal Messages

From the time FHI started intervention programs in Nepal to bring awareness about HIV/AIDS among the 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 rhetorical 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 FHI messages and the responses provided by the sex workers regarding their awareness of the messages. More than 65 percent of the sex workers were found to be aware of messages like "Condom Kina Ma Bhaya Hunna Ra", "Jhilke dai chha chhaina condom", "Youn rog ra AIDS bata bachnalai rakhnu parchha sarbatra paine condom lai" and "Ramro sangha prayog gare jokhim huna dinna, bharpardo chhu santosh dinchhu jhanjat manna hunna", "Condom Bata Suraksha, Youn Swasthya Ko Raksha" and HIV/AIDS Bare Aajai Dekhi Kura Garau" (Table 6.4).

As high as 97 percent of the sex workers reported that those messages had made them understand that the use of condoms prevent transmission of AIDS, around 71 percent of them also said that these the message had made them aware that use of condoms prevents STIs, and 62 percent mentioned that condoms are also used for family planning. A comparatively large proportion of establishment based FSWs than their street based counterparts had the correct understanding of the advantages of using condoms (Table 6.4).

Table 6.4: Seen/Heard FHI Character/Message

Heard/Seen/Read the Following Messages/Characters in Past One Year	Street (N=200)		Establishment (N=300)		Total (N=500)	
1 cai	n	%	n	%	n	%
Condom Kina Ma Bhaya Hunna Ra	138	69.0	203	67.7	341	68.2
Jhilke Dai Chha Chhaina Condom	131	65.5	204	68.0	335	67.0
Youn Rog Ra AIDS Bata Bachnalai Rakhnu Parchha Sarbatra Paine Condom Lai	144	72.0	237	79.0	381	76.2
Ramro Sangha Prayog Gare Jokhim Huna Dinna Bharpardo Chhu Santosh Dinchhu Jhanjat Manna Hunna	149	74.5	234	78.0	383	76.6
Condom Bata Suraksha, Youn Swasthya Ko Raksha	147	73.5	239	79.7	386	77.2
HIV/AIDS Bare Aajai Dekhi Kura Garau	135	67.5	234	78.0	369	73.8
Ek Apas Ka Kura	65	32.5	90	30.0	155	31.0
Maya Garaun Sadbhav Badaun	86	43.0	155	51.7	241	48.2
Des Pardes	42	21.0	62	20.7	104	20.8
Information Derived from the Messages						
Use Condom Against AIDS	188	94.0	295	98.3	483	96.6
Use Condom Against STI	129	64.5	228	76.0	357	71.4
Use Condom for Family Planning	112	56.0	200	66.7	312	62.4

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

Sex workers are at high risk for sexually transmitted infections due to the nature of their work. To find out the extent of the problem of STIs among the sex workers and their perception towards STIs, they were asked about their understanding of STIs and whether they had experienced any STI symptoms during the past year. For 82 percent of the sex workers STI meant genital discharge and for 72.6 percent, an itching sensation in the vagina was STI; 46.8 percent of sex workers perceived that STI symptoms were lower abdominal pain; and 43.2 percent mentioned blisters and ulcers around the vagina. They also indicated other symptoms such as a burning sensation while urinating, syphilis, gonorrhea, HIV/AIDS, unusual bleeding from vagina and vaginal pain. However, 4.5 percent of street based and three percent of establishment based FSWs did not have knowledge about any of the symptoms of STIs (Table 6.5).

In response to the question on whether they had experienced any STI symptoms in the past year, 42.4 percent of the FSWs (48.5% street based and 38.3% establishment based) reported having had experienced at least one STI symptom. Many of them reported lower abdominal pain (25.4%), vaginal discharge (23.8%), vaginal itching (23.2%), and vaginal odor (17.0%) during the previous year. Forty-two percent out of 212 respondents who experience the symptoms in the past year did not seek the treatment while those who underwent the treatment had mostly visited SACTS, CAC and private clinic (Table 6.5).

Almost 90 percent of the respondents who went for a medical cure for the STI symptoms had also received counseling to avoid the problem in future (Table 6.5). They were mostly counseled to consistently use condoms for every sexual act (72.1%), to take medicine regularly (70.3%), to reduce the number of sex partners (39.6%), and to come for regular check-ups (35.1%).

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

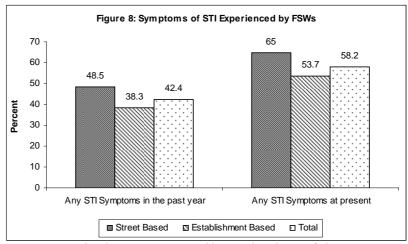
Perception on STI, Reported STI Symptoms and Treatment		reet 200)		shment 300)		tal 500)
	n	%	n	%	n	%
Understanding of STI						
White/Pus/Dhatu flow Discharge	154	77.0	256	85.3	410	82.0
Itching in Vagina	142	71.0	221	73.7	363	72.6
Lower Abdominal Pain	83	41.5	151	50.3	234	46.8
Blisters and Ulcers Around Vagina	74	37.0	142	47.3	216	43.2
Burning Sensation/Passing Urine/Painful Urination	48	24.0	52	17.3	100	20.0
Syphilis (Bhiringi)/Gonorrhea	39	19.5	29	9.7	68	13.6
AIDS/HIV	21	10.5	32	10.7	53	10.6
Swelling of Vagina	7	3.5	13	4.3	20	4.0
Bleeding	8	4.0	8	2.7	16	3.2
Pain in Vagina	4	2.0	8	2.7	12	2.4
Don't know	9	4.5	9	3.0	18	3.6
Others (Fever, Weakness, etc.)	42	21.0	54	18.0	96	19.2
Total	200	*	300	*	500	*
Types of STI Symptoms Experienced in the Past Year						
Lower Abdominal Pain	63	31.5	64	21.3	127	25.4
Vaginal Discharge	62	31.0	57	19.0	119	23.8
Vaginal Itching	53	26.5	63	21.0	116	23.2
Vaginal Odor	37	18.5	48	16.0	85	17.0
Dysuria	41	20.5	43	14.3	84	16.8
Painful Sex	43	21.5	36	12.0	79	15.8
Genital Ulcer or Sore	18	9.0	22	7.3	40	8.0
Polyuria	15	7.5	15	5.0	30	6.0
Genital Warts	4	2.0	3	1.0	7	1.4
Unusual Vaginal Bleeding	3	1.5	4	1.3	7	1.4
Other	0	0.0	2	0.7	2	0.4
Any of the Above Symptoms	97	48.5	115	38.3	212	42.4
None of the Above Symptoms	103	51.5	185	61.7	288	57.6
Total	200	*	300	*	500	*
Places visited for Treatment of STI Symptoms in the Past Year						
SACTS	21	31.8	25	42.4	46	36.8
Community Action Center	23	34.9	4	6.8	27	21.6
Private Clinic	5	7.6	13	22.0	18	14.4
Hospital	8	12.1	8	13.6	16	12.8
Pharmacy	7	10.6	7	11.9	14	11.2
Nepal Fertility Care Center	0	0.0	1	1.7	1	0.8
Women Acting Together for Change	1	1.5	0	0.0	1	0.8
Self Treatment	1	1.5	0	0.0	1	0.8
FPAN	1	1.5	0	0.0	1	0.8
Others	1	1.5	3	5.1	4	3.2
Total	66	*	59	*	125	*
Received Counseling to Avoid the Problem from the Place of	UU		37		143	
Treatment						
Yes	59	90.8	52	88.1	111	89.5
No	6	9.2	7	11.9	13	10.5
Total	65	100.0	59	100.0	124	100.0
	05	100.0	37	100.0	124	100.0
Types of Counseling Received Use Condom	42	72.0	27	71.2	90	72.1
Take Medicine Regularly	43 37	72.9 62.7	37 41	71.2 78.9	80 78	72.1 70.3
Reduce Number of Sexual Partners	24	40.7	20	38.5	44	39.6
Regular Check-up	27	45.8	12	23.1	39	35.1
Not to Make Sexual Contact while Using Medicine	11	18.6	13	25.0	24	21.6
Others	1	1.7	0	0.0	1	0.9
Total	59	*	52	*	111	*

# **6.7** Existing STI Symptom/s and Treatment

Apart from their past year's experience, the sex workers were also asked if they had been experiencing any STI symptoms at the time of the survey. Around 58 percent reported that they were experiencing at least one of the STI symptoms during the period (Table 6.6). Some of these symptoms reported by them were vaginal discharge (33.2%), lower abdominal pain (33%), vaginal itching (29%), painful sex (28.6%) and vaginal odor (26%). Other symptoms

as dysuria, polyuria, genital ulcers, genital warts, and unusual vaginal bleeding were also mentioned. Out of 291 sex workers who had been experiencing at least one STI symptom during the study period, only 10 percent had sought treatment.

More street based than establishment based FSWs



reported having at least one STI symptom in the past year and/or at the time of the survey. As in Figure 8, 48.5 percent of street based and 38.3 percent of establishment based FSWs had at least one STI symptom in the past year. Likewise, 65 percent of street based and around 54 percent of establishment based FSWs had been experiencing at least one such symptom at the time of the survey. Overall, 42 percent of respondents did not have any such symptoms at the time of the survey.

Table 6.6: Reported Existing STI Symptom/s and Treatment

Existing STI Symptoms and Treatment		reet 200)		shment 300)	Total (N=500)	
	n	%	n	%	n	%
Types of STI Symptoms Experienced Currently						
Vaginal Discharge	72	36.0	94	31.3	166	33.2
Lower Abdominal Pain	76	38.0	89	29.7	165	33.0
Vaginal Itching	66	33.0	79	26.3	145	29.0
Painful Sex	64	32.0	79	26.3	143	28.6
Vaginal Odor	59	29.5	71	23.7	130	26.0
Dysuria	46	23.0	59	19.7	105	21.0
Polyuria	38	19.0	37	12.3	75	15.0
Genital Ulcer or Sore	11	5.5	17	5.7	28	5.6
Unusual Vaginal Bleeding (Discharge)	6	3.0	11	3.7	17	3.4
Genital Warts	9	4.5	6	2.0	15	3.0
Any of the Above Symptoms	130	65.0	161	53.7	291	58.2
None of the Above Symptoms	70	35.0	139	46.3	209	41.8
Total	200	*	300	*	500	*
Went for Treatment for any of Above Symptoms						
Yes	12	9.2	17	10.6	29	10.0
No	118	90.8	144	89.4	262	90.0
Total	130	100.0	161	100.0	291	100.0

<sup>\*</sup>Note: The percentages add up to more than 100 because of multiple responses.

# CHAPTER – VII: EXPOSURE TO STI/HIV/AIDS AWARENESS PROGRAMS

The exposure of the FSWs to the ongoing HIV/AIDS awareness programs and their participation in those activities was examined by asking several questions relating to some of the most important components of current HIV/AIDS related programs run by several organizations.

#### 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 its preventive measures. In response to the question on whether they had met/had discussions with PEs/OEs, 60 percent replied positively. A somewhat higher proportion of street based FSWs (61.5%) than establishment based FSWs (58.3%) had met OEs/PEs in the last 12 months. It was further noticed that their meetings/discussions were mostly focused on interaction regarding HIV/AIDS transmission methods followed by STI transmission methods, demonstration of method of condom use, and discussions on condom use. The majority of sex workers (41.6%) reportedly had met OEs/PEs from CAC, STEP Nepal (34.9%) and SACTS (19.8%). It was further noticed that the sex workers met OEs/PEs quite often, as around 32 percent had seen them more than four times (Table 7.1).

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

Peer Educator/Outreach Education	Street (N=200)		Establishment (N=300)		Total (N=500)	
reci Educator/Outreach Education	n	%	n	%	n	%
Met or discussed or interacted with Peer Educators (PE) or						
Outreach Educators (OE) in the Last 12 months						
Yes	123	61.5	175	58.3	298	59.6
No No	77	38.5	125	41.7	202	40.4
Total	200	100.0	300	100.0	500	100.0
Activities Involved in with OEs/PEs	200	100.0	300	100.0	500	100.0
		0.1.5	4.5.4		2.00	
Discussion on how HIV/AIDS is/isn't transmitted	104	84.6	164	93.7	268	89.9
Discussion on how STI is/isn't transmitted	80	65.0	135	77.1	215	72.2
Regular/non-regular use of condom	85	69.1	118	67.4	203	68.1
Demonstration on using condom correctly	51	41.5	117	66.9	168	56.4
STI treatment/cure after treatment	28	22.8	21	12.0	49	16.4
Counseling on reducing number of sex partner	3	2.4	9	5.1	12	4.0
Training on HIV and STI, Condom day, AIDS day, participation in discussions	3	2.4	7	4.0	10	3.4
and interaction programs		-				
Others	1	0.8	2	1.1	3	1.0
Total	123	*	175	*	298	*
Organizations Represented by OEs/PEs						
CAC	97	78.9	27	15.4	124	41.6
STEP Nepal	11	8.9	93	53.1	104	34.9
SACTS	18	14.6	41	23.4	59	19.8
Chhahari Nepal	5	4.1	20	11.4	25	8.4
Change Nepal	2	1.6	10	5.7	12	4.0
WATCH	5	4.1	2	1.1	7	2.4
SWAN Nepal	1	0.8	5	2.9	6	2.0
PSI	0	0.0	3	1.7	3	1.0
NFCC	1	0.8	1	0.5	2	0.7
NRCS	0	0.0	2	1.1	2	0.7
AMDA	0	0.0	1	0.6	1	0.3
Sathi	0	0.0	1	0.6	1	0.3
GWP	0	0.0	1	0.6	1	0.3
Others	2	1.6	9	5.1	11	3.7
Total	123	*	175	*	298	*
Number of Visits to OEs/PEs						
Once	19	15.5	38	21.7	57	19.1
2-3 times	65	52.9	81	46.3	146	49.0
4-6 times	19	15.5	27	15.4	46	15.4
7-12 times	10	8.1	13	7.4	23	7.7
More than 12 times	10	8.1	16	9.2	26	8.7
Total	123	100.0	175	100.0	298	100.0

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

#### 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 22 percent of sex workers reported having visited a DIC during the last year. The practice of street based FSWs visiting DIC was higher (26.5%) than establishment based FSWs (18.3%). They had mostly visited DICs to watch films on HIV/AIDS (67.6%), to participate in discussions on HIV/AIDS transmission (64.8%), to learn the correct way of using a condom (59.3%), to participate in discussions on STI transmission (43.5%), and to collect condoms (33.3%). Most of the sex workers reported having visited DICs run by CAC and SACTS. Among those who visited DICs, almost 61 percent had visited more than once (Table 7.2).

Table 7.2: DIC Visiting Practice of FSWs

DIC Visiting Practices of FSWs	Street	(N=200)	Establishm	ent (N=300)	Total (N=500)	
DIC VISITING Fractices of FSWs	n	%	n	%	n	%
DIC Visit in the Last 12 months						
Yes	53	26.5	55	18.3	108	21.6
No	147	73.5	245	81.7	392	78.4
Total	200	100	300	100	500	100
Activities Involved in at DIC						
Went to watch film on HIV/AIDS	35	66.0	38	69.1	73	67.6
Participated in discussion on HIV transmission	30	56.6	40	72.7	70	64.8
Went to learn the correct way of using condom	31	58.5	33	60.0	64	59.3
Participated in discussion on STI transmission	23	43.4	24	43.6	47	43.5
Went to collect condoms	25	47.2	11	20.0	36	33.3
Participated in training, interaction and discussion programs on HIV/AIDS and STI	6	11.3	9	16.4	15	13.9
Went for STI treatment	2	3.8	9	16.4	11	10.2
Went to collect IEC materials	1	1.9	8	14.6	9	8.3
Took friend with me	2	3.8	2	3.6	4	3.7
Total	53	*	55	*	108	*
Name of Organizations that Run DIC Visited by Them						
CAC	46	86.8	8	14.5	54	50.0
SACTS	7	13.2	30	54.5	37	34.3
STEEP Nepal	3	5.7	6	10.9	9	8.3
Chhahari Nepal	1	1.9	5	9.1	6	5.6
Change Nepal	2	3.8	1	1.8	3	2.8
Swan Nepal	0	0.0	2	3.6	2	1.9
WATCH	1	1.9	1	1.8	2	1.9
GWP	0	0.0	1	1.8	1	0.9
NRCS	0	0.0	1	1.8	1	0.9
Others	0	0.0	2	3.6	2	1.9
Don't know	0	0.0	1	1.8	1	0.9
Total	53	*	55	*	108	*
Number of Visits to the DICs						
Once	17	32.1	25	45.4	42	38.9
2-3 times	26	49.1	26	47.3	52	48.1
4-6 times	7	13.2	3	5.5	10	9.3
7-12 times	1	1.9	0	0.0	1	0.9
More than 12 times	2	3.8	1	1.8	3	2.8
Total	53	100	55	100	108	100

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

#### 7.3 STI Clinics Visiting Practice

Prompt detection and treatment of STIs may prevent many health hazards. Several STI clinics are being run by different organizations to facilitate prompt detection and treatment of STIs. The sex workers were also asked if they had visited any STI clinic in the past year. The practice of visiting STI clinics was not so common among them. Only around 28 percent had visited a STI clinic in the preceding year. While 32.5 percent of street based FSWs had

visited a STI clinic in the past year, 24.7 percent of establishment based FSWs had paid such a visit during the period. During their visits to STI clinics in the past year, almost 56 percent had been physically examined for STI identification and 70 percent had their blood tested in the clinic. Sixty-six percent were advised to use a condom during each act of sexual intercourse and around 37 percent were advised to take complete and regular medicine. The most frequently visited STI clinic was SACTS and CAC. Among those who visited an STI clinic, more than 50 percent had visited the clinic more than once (Table 7.3).

**Table 7.3: STI Clinic Visiting Practice of FSWs** 

STI Clinic Visiting Practices of FSWs	Street	(N=200)	Establishm	ent (N=300)	Total (N=500)	
STI Clinic Visiting Fractices of FSVVS	N	%	n	%	n	%
Visited any STI Clinic in the Last 12 Months						
Yes	65	32.5	74	24.7	139	27.8
No	135	67.5	226	75.3	361	72.2
Total	200	100	300	100	500	100
Activities Involved in at STI Clinic						
Blood tested for STI	40	61.5	56	75.7	96	69.1
Was advised to use condom in each sexual intercourse	40	61.5	52	70.3	92	66.2
Physical examination conducted for STI identification	41	63.1	37	50.0	78	56.1
Was advised to take complete and regular medicine	28	43.1	23	31.1	51	36.7
Took friend with me	8	12.3	3	4.1	11	7.9
Was suggested to reduce number of sexual partners	3	4.6	4	5.4	7	5.0
Total	65	*	74	*	139	*
Name of Organizations that Run STI Clinic						
Visited by Them						
SACTS	28	43.1	50	67.6	78	56.1
CAC	29	44.6	5	6.8	34	24.5
Private Clinic	4	6.2	11	14.9	15	10.8
WATCH	1	1.5	2	2.7	3	2.2
Hospital	2	3.1	2	2.7	4	2.9
Pharmacy	2	3.1	2	2.7	4	2.9
GWP	0	0.0	1	1.4	1	0.7
NFCC	0	0.0	1	1.4	1	0.7
Others	2	3.0	1	1.4	3	2.2
Don't know	0	0.0	1	1.4	1	0.7
Total	65	*	74	*	139	*
Number of Visits to STI Clinics						
Once	23	35.4	39	52.7	62	44.6
2-3 times	36	55.4	35	47.3	71	51.1
4-6 times	4	6.2	0	0.0	4	2.9
More than 7 times	2	3.1	0	0.0	2	1.4
Total	65	100.0	74	100.0	139	100.0

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

#### 7.4 VCT Centers Visiting Practice

It was reported that about 33 percent of the FSWs had visited Voluntary Counseling and Testing (VCT) centers during the past 12 months. More street based sex workers (39.5%) than the establishment based (28.3%) had been to VCT centers in the past 12 months. Among them, 93.3 percent had taken up HIV testing facilities and 68.3 percent had received pre-test counseling. The activities that the respondents participated in at VCT centre are summarized in Table 7.4. The most frequently visited VCT centre was again SACTS and CAC. More than half of the respondents had visited a VCT center more than once (Table 7.4).

**Table 7.4: VCT Visiting Practice of FSWs** 

Street (N=200) N %		ent (N=300)	Total (N=500)	
%	n	%	n	%
39.5	85	28.3	164	32.8
60.5	215	71.7	336	67.2
100	300	100	500	100
88.6	83	97.7	153	93.3
62.0	61	71.8	110	67.1
60.8	64	75.3	112	68.3
55.7	55	64.7	99	60.4
40.5	27	31.8	59	36.0
26.6	20	32.9	40	20.0
26.6	28	4.7	49 12	29.9 7.3
*		4./ *		/.3 *
*	85	*	164	•
				i
62.0	71	83.5	120	73.2
39.2	71	9.4	120 39	23.8
0.0	1	1.2	39	0.6
0.0	1 1	1.2	1	0.6
0.0		1.2		
0.0	1	1.2	1	0.6
0.0	2	2.4	2	1.2
0.0	1	1.2	1	0.6
*	85	*	164	v.o *
*	65	*	104	*
39.2	48	56.5	79	48.2
50.6	34	40.0	79	48.2
5.1	3	3.5	7	43.1
				0.6
			_	1.8
	_		_	1.8
	1.3 3.8 100	3.8 0	3.8 0 0.0	3.8 0 0.0 3

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

## 7.5 Participation in STI/HIV/AIDS Awareness Programs

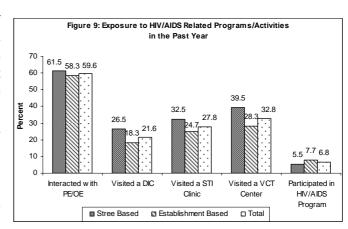
The reported participation of the sex workers in different STI/HIV/AIDS awareness raising programs within the year was minimal with only around seven percent having had ever participated in any of such activities; this consisted of 7.7 percent of establishment based and 5.5 percent of street based FSWs. Some of the reported activities that the FSWs had been involved in were group discussions (70.6%), street drama (29.4%), HIV/AIDS-related training (23.5%), AIDS Day celebrations (20.6%), and Condom Day celebrations (20.6%). More than half (53%) of the respondents had participated in such activities more than once (Table 7.5).

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

Participations in HIV/AIDS Awareness Programs	Street (N=200)			shment 300)	Total (N=500)	
	n	%	n	%	n	%
Ever Participated in HIV/AIDS Awareness Raising						
Program or Community Events						
Yes	11	5.5	23	7.7	34	6.8
No	189	94.5	277	92.3	466	93.2
Total	200	100	300	100	500	100
Activities Participated in						
Group discussions	7	63.6	17	73.9	24	70.6
Street drama	7	63.6	3	13.0	10	29.4
HIV/AIDS related training	3	27.3	5	21.7	8	23.5
Condom Day	5	45.5	2	8.7	7	20.6
AIDS Day	5	45.5	2	8.7	7	20.6
Condom use demonstrations	3	27.3	3	13.0	6	17.6
HIV/AIDS related Workshops	0	0.0	2	8.7	2	5.9
Talk programs	0	0.0	1	4.3	1	2.9
Total	11	*	23	*	34	*
Name of the Organizations that Organized Such Activities						
Steps Nepal	0	0.0	13	56.5	13	38.2
CAC	6	54.5	1	4.3	7	20.6
SACTS	3	27.3	2	8.7	5	14.7
WATCH	2	18.2	0	0.0	2	5.9
Maiti Nepal	1	9.1	0	0.0	1	2.9
AMDA	0	0.0	1	4.3	1	2.9
Others	2	18.2	6	26.1	8	23.5
Don't Know	1	9.1	0	0.0	1	2.9
Total	11	*	23	*	34	*
Frequency of Such Participation in the past year						
Once	1	9.1	15	65.2	16	47.1
2-3 times	5	45.5	6	26.1	11	32.4
4-6 times	1	9.1	0	0.0	1	2.9
7-12 times	1	9.1	0	0.0	1	2.9
More than 12 times	1	9.1	0	0.0	1	2.9
Not Participated During the Past Year	2	18.2	2	8.7	4	11.8
Total	11	100.0	23	100.0	34	100.0

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

As seen in the Figure 9, a higher proportion of street based FSWs than their establishment based counterparts been exposed different to HIV/AIDS-related programs in the preceding the vear survey. Respondents had mostly interacted with PEs/OEs; but visiting VCT, STI and DIC centers was not so common. Participation in any of the HIV/AIDS programs was the lowest among both street and establishment based FSWs.



#### 7.6 Stigma and Discrimination

HIV/AIDS is stigmatized in Nepal, increasing the impact of HIV on PLHA and those most at risk. FSWs' perception 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 (93.8%) or a HIV-positive female relative (94.6%) at their home if necessary.

However, 66.8 percent of FSWs said that if a family member had HIV they would keep it confidential and would rather not talk about it.

**Table 7.6: Stigma and Discrimination** 

Stigma and Discrimination	Street	(N=200)	Establishm	ent (N=300)	Total (N=500)	
Sugma and Discrimination	N	%	n	%	n	%
Willing to take care of HIV positive male relative						
in the household						
Yes	182	91.0	287	95.7	469	93.8
No	18	9.0	13	4.3	31	6.2
Willing to take care of HIV positive female						
relative in the household						
Yes	184	92.0	289	96.3	473	94.6
No	16	8.0	11	3.7	27	5.4
Willing to maintain confidentiality of a HIV						
positive family member						
Yes	137	68.5	197	65.7	334	66.8
No	62	31.0	102	34.0	164	32.8
Don't Know	1	0.5	1	0.3	2	0.4

#### CHAPTER – VIII: COMPARATIVE ANALYSIS

This chapter seeks to analyze the trend between the first, the second, and the third round of studies by comparing the selected data from all three rounds. It specifically compares the prevalence of HIV and STIs, and condom use practices among FSWs. This comparison is possible only because the same sampling design, same sample size, and same sampling procedures were used in all three rounds of the IBBS survey.

# 8.1 Prevalence of HIV and Syphilis Infection

An increase in the HIV prevalence rate was detected in this round than the previous two rounds of the survey (2.2% in 2008, 1.4% in 2006, and 2% in 2004). Both street and establishment based FSWs in this survey had a higher prevalence of HIV than their counterparts in the second round of the survey. However, the increase in prevalence is not statistically significant at 95 percent confidence level (Table 8.1).

Table 8.1: HIV and Syphilis Prevalence among FSWs

	First Round (2004)		004) Second Round (2006) Third Round (2008)		Second Round (2006) Third Round (2008)		Second Round (20		008)	Test of
STI Infection	Street (N=200)	Establish- ment (N=300)	Total (N=500)	Street (N=200)	Establishment (N=300)	Total (N=500)	Street (N=200)	Establishment (N=300)	Total (N=500)	Significance of the three years trend
	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	years trend
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)	
Current 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)	*
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)	*

<sup>\*</sup>Significant decrease of STI infection among street and establishment based FSWs over the years

Syphilis infection, on the other hand, has decreased significantly over the years among both street and establishment based FSWs. While active syphilis has decreased from six percent in 2004 and three percent in 2006 to one percent in 2008; syphilis history has decreased from 8.8 percent in 2004 and 9.8 percent in 2006 to 2.2 percent in the 2008 survey (Table 8.1).

# 8.2 Condom Use with Different Sex Partners

Data from the study showed that consistent condom using behavior had decreased among the FSWs with their sexual partners. A significant decrease in the use of condoms with last client was observed among establishment based FSWs in the current survey (76.7%) than the second round of the survey (80.3%). Likewise, a significant decrease over the years in consistent condom using practice of street based FSWs (17.4% i.e. 24/138 in 2004, 6.1% i.e. 6/99 in 2006 and 7.4% i.e. 7/95 in 2008) as well as establishment based FSWs (18.7% i.e. 35/187 in 2004, 7.9% i.e. 12/151 in 2006 and 3.9% i.e. 5/129 in 2008) with non-paying partners was detected. Furthermore, the consistent use of condoms with partners other than clients, husband or male friend has decreased significantly among the establishment based FSWs (59.7% i.e. 86/144 in 2006 and 38.1% i.e. 24/63 in 2008). Consistent use of condoms among the total respondents with clients (53.8%) and regular clients (57%) in the 2008 survey has decreased compared to the previous two rounds of the survey. However, this decrease is not statistically significant (Table 8.2).

**Table 8.2: Condom Use with Different Sex Partners** 

	Fi	First Round (2004) Second Round (2006) Third Round (2008)								
Condom Use by Female Sex Workers	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)	Test of Significance of the three
	n (%)	n (%)	n (%)	n (%)	N (%)	n (%)	n (%)	n (%)	n (%)	years trend
<b>Use of Condom</b>	with Last	Client								
Yes	161 (80.5)	209 (69.7)	370 (74.0)	145 (72.5)	241 (80.3)	386 (77.2)	145 (72.5)	230 (76.7)	375 (75.0)	*
No	39 (19.5)	91 (30.3)	130 (26.0)	55 (27.5)	59 (19.7)	114 (22.8)	55 (27.5)	70 (23.3)	125 (25.0)	
Consistent Use	of Condon	n with the Cli	ent in the P	ast Year						
All the time	115 (57.5)	168 (56.0)	283 (56.6)	105 (52.5)	176 (58.7)	281 (56.2)	103 (51.5)	166 (55.3)	269 (53.8)	NS
Not all the time	85 (42.5)	132 (44.0)	217 (43.4)	95 (47.5)	124 (41.3)	219 (43.8)	97 (48.5)	134 (44.7)	231 (46.2)	
Consistent Use	of Condon	ı with Regula	r Clients in	the Past Y	'ear					
All the time	90 (65.7)	130 (60.5)	220 (62.5)	97 (67.8)	142 (63.4)	239 (65.1)	88 (59.9)	115 (55.3)	203 (57.2)	NG
Not all the time	47 (34.3)	85 (39.5)	132 (37.5)	46 (32.2)	82 (36.6)	128 (34.9)	59 (40.1)	93 (44.7)	152 (42.8)	NS
Total	137	215	352	143	224	367	147	208	355	ĺ
Consistent Use	of Condon	ı with Non-Pa	ying Partn	er in the Pa	ast Year					
All the time	24 (17.4)	35 (18.7)	59 (18.1)	6 (6.1)	12 (7.9)	18 (7.2)	7 (7.4)	5 (3.9)	12 (5.4)	*
Not all the time	114 (82.6)	152 (81.3)	266 (81.9)	93 (93.9)	139 (92.1)	232 (92.8)	88 (92.6)	124 (96.1)	212 (94.6)	#
Total	138	187	325	99	151	250	95	129	224	
Consistent Use	of Condon	n with Partne	r Other tha	n Client, H	lusband, Mal	e Friend in	the Past Yo	ear		
All the time	-	-	-	45 (56.3)	86 (59.7)	131 (58.5)	35 (61.4)	24 (38.1)	59 (49.2)	*
Not all the time	-	-	-	35 (43.7)	58 (40.3)	93 (41.5)	(38.6)	39 (61.9)	61 (50.8)	,
Total	-	-	-	80	144	224	57	63	120	Í

<sup>\*</sup>Statistically significant association of condom using behavior and survey year among establishment based FSWs.

Blank cells in the 2004 columns indicate that no such information was collected in 2004 survey

<sup>†</sup>Statistically significant association of condom using behavior and survey year among street based FSWs #Statistically significant association of condom using behavior and survey year among the total respondents NS: No significant association

## CHAPTER - IX: SUMMARY OF MAJOR FINDINGS

#### Prevalence of HIV and STI

Out of 500 sex workers, 11 (2.2%) were HIV-positive, while the prevalence of active syphilis infection was one percent (5/500). Among the 200 street FSWs, 3.5 percent (7/200) and among 300 establishment based FSWs, 1.3 percent (4/300) were HIV- positive. The active syphilis infection among street FSWs was 2.5 percent (5/200) while none of the establishment based FSWs had active syphilis.

HIV prevalence rate (2% in 2004, 1.4% in 2006 and 2.2% in 2008) has slightly increased from the previous two rounds of the survey. Both street and establishment FSWs in this survey had a higher prevalence of HIV than their counterparts in the second round of the survey. However, the increase in prevalence is not statistically significant. On the other hand, syphilis infection (6% in 2004, 3% in 2006, and 1% in 2008) has decreased significantly over the years among both street and establishment based FSWs.

## **Socio-demographic Characteristics**

Establishment based FSWs were younger (median age 21 years) than their street based counterparts (median age 27 years). Around 37 percent of establishment based and 14 percent of street based FSWs were below 20 years. A large proportion of establishment based FSWs (56.3%) than the street based FSWs (36%) were new entries to the sex trade.

The majority (85.8%) of the sex workers were migrants to the Kathmandu Valley. Moreover, 20 percent of them were relatively new, having migrated to the district less than a year ago.

Around 50 percent of the total respondents had an education level of Grade 1-9, while only around five percent of them had SLC or above. Illiteracy was higher among street-based FSWs (48.5%) than establishment-based FSWs (25%).

The majority of FSWs (70.8%) were married at least once; a higher proportion of the street based FSWs (83%) were married than establishment based FSWs (62.6%). The divorce or separation rate was also high among them (street, 41% and establishment 37.2%).

#### **Sexual Behavior and Condom Use**

The majority of FSWs (67.4%) had their first sexual contact at the age of 15-19 years. Around 20 percent of FSWs had sexual experience even earlier (11-14 years of age). The mean number of clients served by the FSWs in one day was 1.6. Most of the FSWs (61.4%) entertained one client on average per day, with 26 percent of the FSWs serving an average of two clients per day. Around 10 percent entertained an average of three to four clients in a day.

The sex workers' clients belong to a wide variety of profession, such as businessmen, policemen/soldiers, transport workers/drivers, service holders/professionals, and others.

A higher proportion of street based than establishment based FSWs were subjected to forceful sex (street 31%, establishment 21%); had clients performing objectionable activities

(street 46%, establishment 30.7%); and had been physically assaulted (street 30%, establishment 18.3%).

Only 75 percent of the FSWs had used condoms with their last clients. Consistent condom using practice has decreased among FSWs with their sexual partners over the years. A significant decrease in consistent condom use of street (17.4% i.e. 24/138 in 2004, 6.1% i.e. 6/99 in 2006 and 7.4% i.e. 7/95 in 2008) and establishment based FSWs (18.7% i.e. 35/187 in 2004, 7.9% i.e. 12/151 in 2006 and 3.9% i.e. 5/129 in 2008) with non-paying partners was detected. Furthermore, consistent use of condoms with partners other than clients, husband and or male friend has decreased significantly among the establishment based FSWs (59.7% i.e. 86/144 in 2006 and 38.1% i.e. 24/63 in 2008). Although consistent use of condoms among the total respondents with clients (53.8%) and regular clients (57%) in the 2008 survey has decreased from the previous two rounds of the survey, this decrease is not statistically significant.

Five percent of the total respondents had never used condoms. Among others, more than half (56%) had access to free condoms which they mostly obtained from clients, NGOs/health workers/volunteers and peers/friends. The most popular brands of condoms among them were Number One, Panther, and Kamasutra.

## **Knowledge and Awareness of HIV/AIDS**

Knowledge of HIV was universal among the FSWs. The important source of information on HIV/AIDS was radio, television, people from NGOs, friends/relatives, and others. Overall 58 percent of the respondents were aware of 'A', 'B' and 'C' indicators of HIV while only 36 percent knew all preventive measures of HIV i.e. 'BCDEF'.

Forty percent of the FSWs had tested HIV for themselves before. A slightly higher proportion of street based FSWs (42.5%) than establishment based FSWs (38.7%) have had the HIV test.

More than 75 percent of FSWs understood genital discharge and itching sensation in the vagina as symptoms of STI. The other symptoms they perceived as STI symptoms were lower abdominal pain, blisters and ulcers around the vagina, burning sensation while urinating, syphilis, HIV/AIDS, swelling of the vagina and unusual bleeding from the vagina.

#### **Exposure to HIV/AIDS Prevention Activities**

During the preceding year, more than half (60%) of the FSWs had met/discussed with PEs/OEs, around 22 percent had visited a DIC, 28 percent had visited an STI clinic and around 33 percent had visited a VCT center. A higher proportion of street based FSWs than establishment based FSWs were exposed to HIV prevention activities. Nearly seven percent (6.8%) of the respondents had participated in different STI/HIV/AIDS awareness raising programs in the preceding year.

## **CHAPTER - X: RECOMMENDATIONS**

Preventing HIV infections amongst those involved in the sex trade has been proven to be an instrumental part to fight against AIDS. Monitoring FSWs' prevalence and behaviors must stay at the forefront of the HIV response.

HIV prevalence has not changed significantly over the years, however, the increased in prevalence rate from 1.4 percent in 2006 to 2.2 percent in 2008 suggest that the national programs targeting sex workers and their clients should be continued, expanded and intensified to reach a greater and more consistent coverage.

The survey shows that syphilis infection has decreased over the three years trends, nevertheless monitoring of STI among the most-at-risk population should be continued and should develop strategies to reach more population in need of STI treatment.

The data indicate that new and young girls were entering the sex trade every year. Hence, HIV/AIDS awareness campaigns should target youths and adolescent groups. Sex education at school level also would help in creating general awareness.

It is essential that prevention programs should focus not only on the high-risk behavior associated with commercial sex work, but also on the high-risk behavior associated with their sexual partners. Special intervention strategies should be designed targeting the clients of FSWs who are part and parcel of the general population.

The irregular condom use noted in the study especially among FSWs with their steady partners (husbands, male friends) suggests that FSWs only consider being at high risk with clients or non-steady partners; therefore, prevention programs should focus more on the need for consistent condom use with all kinds of partners. Information campaigns should focus on changing attitudes that create barriers to regular use of condom.

The study shows that awareness of FSWs regarding STI symptoms and major indicators of HIV was very low. Similarly, the health-seeking behavior of FSWs was also low. Intervention efforts are therefore needed to promote HIV prevention behaviors and health-seeking behavior.

Access to VCT services remains low. Availability of VCT services should be expanded and promotion of the importance of knowing HIV status should be intensified.

Outreach and other intervention efforts should be expanded further to include comprehensive, complimentary programs and to increase coverage to all high-risk populations. The quality of these programs should be evaluated, and where necessary, strengthened.

A more in-depth analysis of population demographics, behaviors, and access to interventions should be conducted on a site-by-site basis where FSWs concentrate. Utilization of surveillance data should become a routine part of the national monitoring and evaluation system.

Analysis of trend in HIV and syphilis has given valuable inputs for program evaluation. Continuation of such studies in the future is instrumental for the continuation of such monitoring.

## REFERENCES

- NCASC. November 2008. Cumulative Data on HIV/AIDS.
- NCASC. 2007. National Estimates of HIV Infections.
- New ERA/SACTS/FHI. 2000. STD and HIV Prevalence Survey among Female Sex Workers and Truckers on Highway Routes in the Terai, Nepal; New ERA/SACTS, Kathmandu. A Report submitted to Family Health International/Nepal.
- New ERA. 2003c. *Behavioral Surveillance Survey in the Highway Route of Nepal: Round No. 5*, A Report submitted to Family Health International/Nepal.
- New ERA. 2003d. Behavioral Surveillance Survey of Female Sex Workers and Clients in Pokhara Valley: Round I, A Report submitted to Family Health International/Nepal.
- New ERA/SACTS/FHI. 2004. STI/HIV Prevalence and Risk Behavioral Study among Female Sex Workers and Truckers Along the Terai Highway Routes Covering 22 Districts of Nepal; 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. 2007. *Integrated Bio-Behavioral Survey among Injecting Drug Users in Pokhara Valley; Round II-2007*, New ERA/SACTS, Kathmandu. A Report submitted to Family Health International/Nepal.
- New ERA/SACTS/FHI. 2007. Integrated Bio-Behavioral Survey among Injecting Drug Users in Kathmandu Valley; Round II-2007, New ERA/SACTS, Kathmandu. A Report submitted to Family Health International/Nepal.
- SACTS. 2001. *Kathmandu FSW Sero-prevalence Study*. A Report submitted to Family Health International/Nepal. Kathmandu.



 $\label{eq:ANNEX-1} \textbf{Indicators for Monitoring and Evaluation of HIV}$ 

Prevention 1: HIV related risk and transmission among FSWs	Street (N=200)	Establishment (N=300)	Total (N=500)
Impact/Outcome indicators			
Percentage of FSWs who are HIV infected	3.5	1.3	2.2
Percentage of FSWs reporting the use of a condom with their most recent client	72.5	76.7	75.0
Percentage of FSWs reporting consistent condom use with their clients over the past 12 months	51.5	55.3	53.8
Percentage of FSWs who both correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV transmission	27.5	42.3	36.4
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)	67.0	62.0	64.0
Percentage of FSWs reached with HIV prevention programs (Knows where to receive HIV test and received condoms)	40.5	41.0	40.8
Percentage of FSWs who received an HIV test in the last 12 months and who know their results	34.5	38.8	32.4

## ANNEX - 2

Basic equation used in sample design

$$n= \quad D \left[ \left( Z_{\alpha} + Z_{\beta} \right)^2 * \left( P_1 \left( 1 - P_1 \right) + P_2 \left( 1 - P_2 \right) \right) / \left( P_2 - P_1 \right)^2 \right]$$

- 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  $(P_2-P_1)$  is the size of the magnitude of change it is desired to be able to detect
- $Z_{\alpha}$  = 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 (P<sub>2</sub>-P<sub>1</sub>) would not have occurred by chance ( $\alpha$  the level of statistical significance), and
- $Z_{\beta}$  = the Z-score corresponding to the degree of confidence with which it is desired to be certain of detecting a change of size (P<sub>1</sub>-P<sub>2</sub>) if one actually occurred ( $\beta$  statistical power).

# ANNEX - 3

# CONFIDENTIAL

National Centre for AIDS and STD Control (NCASC) Ministry of Health and Population (MOPH), Government of Nepal

# INTEGRATED BIO- BEHAVIORAL SURVEY (IBSS) AMONG FEMALE SEX WORKERS IN KATHMANDU VALLEY – 2008

# **FSW Questionnaire**

Namaste! My name is, I am here from New ERA to collect data for a research study. This study is being conducted by New ERA and SACTS with technical assistance from Family Health International (FHI) and USAID – Nepal for the National Centre for AIDS and STD Control (NCASC), Ministry of Health and Population. As explained in the consent taking process during this data collection, I will ask you some questions that will be about sexual behavior, use and promotion of condoms, STI/HIV/AIDS, drugs and migration pattern. I believe that you will provide correct information only. We will also draw a few drops of blood for HIV testing. If you have any STI symptoms, we will provide treatment free of charge. The information given by you will be strictly treated as confidential. Nobody will know whatever we talk 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.
You are free to quit the survey any time you want to. You do not want 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: 2065//
<u>Definition of Respondent</u> "Women aged 16 years and above reporting having been paid in cash or kind for sex within the last 6 months."
Name of interviewer: Code No. of Interviewer:
Date of Interview: 2065//
Checked by the supervisor: Signature: Date: 2065//
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)

# 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 personally	
102	Where is the respondent (sex worker) based?	Disco         1           Dance Restaurant         2           Cabin Restaurant         3           Call Girl         4           Massage Parlor         5           House Settlement         6           Bhatti Pasal         7           Street         8           Garment/Carpet Factory         9           Squatter/Refugee         10           Restaurant         11           Dohori Restaurant         12           Hotel/Lodge         13           Other (Specify)         96	
103	Interview Starting Time Interview Completion Time		
104	Where were you born?	DistrictVDC/MunicipalityWard NoVillage/Tole	
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?	Month	<b>→</b> 201
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?		
		A 00	
		Age	
202	What is your caste?	Ethnicity/Caste	
202	What is your custo.	(Specify)	
	(Specify Ethnic Group/Caste)		
		Code No	
203	What is your educational status?	Illiterate0	
	(Circle '0' if illiterate, '19' for the literate	Literate19	
	without attending the school, and write exact	Grade	
	number of the passed grade)	(Write the completed grade)	
204	What is your present marital status?	Married 1 -	<b>→</b> 204.2
		Divorced/Permanently	
		Separated2	
		Widow3	
		Never married4 –	<b>→</b> 204.3
204.1	How old were you when you got	Age	<b>→</b> 204.3
	divorced/separated/widowed?	(Write the completed years)	
204.2	Are you presently living with your	Yes 1 -	<b>→</b> 205
	husband?	No2	
204.3	Who are you living with now?	Male friend1	
		Relatives2	
	(Multiple answers. DO NOT READ the possible	Other females3	
	answers)	Children4	
		Alone5	
		Others (Specify)96	
	[Note: If answer in Q. 204 is 'never married' Go		
205	At what age were you married for the first		
203	time?	Years old	
		(Write Complete Years)	
	[Note: If answer in Q. 204 is 'Divorced/Perman 207]	iently Separated ' or ' Widow ' Go to Q.	
206	Does your husband have co-wife now?	Yes1	
200	Does your nusband have co-whe now?	No	
207	Are there people who are dependent on	Yes	
207	vour income?	No	<b>→</b> 208
207.1	How many are dependent on your income?		200
207.1	Trow many are dependent on your meome:	Adults	
	(Adults are those who have completed 18 years)	Children	
208	How long have you been exchanging		
200	sexual intercourse for money or other	Months	
	things?	Don't know98	
	(if answer is less than 6 months stop		
	interview)		
208.1	Did you have any sexual intercourse during	Yes1	
	past 12 months?	No	Stop
209	How many months have you been working		Interview
20)	here as a sex worker at this place?	Months	
	1 more as a son worker at any place:	<u> </u>	<u> </u>

Q. N.	Questions and Filters	Coding Categories	Skip to
210	Where else have you worked as a sex	Discothèque1	<u>,</u>
	worker?	Dance restaurant2	
		Cabine restaurant 3	
	(For example: Bhatti shop, Cabin Restaurant,	Call girl4	
	Discotheques etc.)	Massage parlor5	
	Mention location in the space provided	House6	
		Bhatti pasal7	
		Road 8	
		Garment/carpet factory9	
		Squatter settlement/refugee 10	
		Restaurant 11	
		Dohori restaurant12	
		Hotel/lodge13	
		Did not work anywhere else0	
		Others (Specify) 96	
211	Have you ever been engaged in this	Yes	
	profession in other locations too?	No2 — District VDC/Municipality Village/Tole	<b>→</b> 213
211.1	Where did you work?	District VDC/Municipality Village/Tole	
	(List all the places mentioned by the respondent)		
212	In the past one-year have you followed	Yes1	
	this profession in other locations also?	No2 -	<b>→</b> 213
212.1	Where did you follow such profession?	District VDC/Municipality Village/Tole	
	(List all the places)		
213	11	V 1	
213	Have you ever followed this profession even in India?	Yes	N 216
213.1		No	₹210
213.1	Where did you work in India?	Name of Fraces Name of Nearby City	
	(List all the locations worked in India).		
	(Sast un tre rocutors worked in rivalu).		
214	In total, for how many months did you		
	work as a sex worker in India?	Months	
215	Were you coerced to go there or you went	Coerced1	
	there on your free will?	On my own2	
216	What is your average weekly income from	CashRs.	
	commercial sex?	Gift equivalent toRs.	
		TotalRs.	
	[Note: If there is '0' in both cash and gift equivalent, probe for the reasons]	Others (Specify) 96	
217	Do you have any other work besides sex	Yes1	
	work?	No	<b>→</b> 218
	•		

Q. N.	Questions and Filters	Coding Categories	Skip to
217.1	What do you do?	Waiter	
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 1 No 2 -	<b>→</b> 301
218.1	How many such incidents have occurred in the past six months?	Times	

# 3.0 INFORMATION ON SEXUAL INTERCOURSE

Q. N.	Questions and Filters	Coding Categories	Skip to
301	How old were you at your first sexual intercourse?	Year's old	
302	Among all of your partners, how many of them had sex with you in exchange for money in the past week?	Number	
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	
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	
305	Usually, how many clients visit you in a day?	Number	
305.1	With how many clients did you have sexual intercourse yesterday?	Number	
305.2	With how many clients did you have sexual intercourse in the past week?	Number	

Q. N.	Questions and Filters	Coding Categories	Skip to
306	In the past month, with which profession's	Bus, truck or tanker worker1	•
	client did you mostly have sex?	Taxi, jeep, microbus or minibus	
		worker2	
		Industrial/wage worker3	
	(Encircle three most reported types of client. DO	Police4	
	NOT READ the possible answers)	Soldier/Army5	
		Student 6	
		Rickshawala7	
		Service holder8	
		Businessmen9	
		Mobile Businessmen10	
		Migrant worker/lahurey11	
		Contractor12	
		Foreigner (Indian and other nationals)14	
		Farmer15	
		Others (Specify)96	
		Don't know98	
306.1	What was the professional background of	Bus, truck or tanker worker1	
	your last client?	Taxi, jeep, microbus or minibus	
		worker2	
		Industrial/wage worker3	
		Police4	
		Soldier/Army5	
		Student 6	
		Rickshawala7	
		Service holder8	
		Businessmen9	
		Mobile Businessmen10	
		Migrant worker/lahurey11	
		Contractor12	
		Foreigner (Indian and other	
		nationals14	
		Farmer	
		Others (Specify)96	
		Don't know98	
307	How many days in a week (on an average)	D	
	do you work as a sex worker?	Days	
• • • •			
308	When did you have the last sexual		
	intercourse with a client?	Days before	
309	(Write '00' if Today)  How many partners did you have sayual		
309	How many partners did you have sexual intercourse with on that day?	Number	
310	How much rupees or other items did the	Cash Rs.	
310	last client pay you?		
	last enem pay you?		
	(Note: If there is '00' in both cash and gift	Total Rs. Reason	
	equivalent, mention the reasons)	1000011	
		L	

# 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,	Yes1	
	did he use a condom?	No2 -	→401.2
401.1	Who suggested condom use at that time?	Myself 1	ħ I
		My Partner2	<b>≻</b> 402
		Don't know98	IJ
401.2	Why didn't your client use a condom at that	Not available1	
	time?	Too expensive2	
		Partner objected3	
		I didn't like to use it4	
		Used other contraceptive5	
	(Multiple answers. DO NOT READ the possible	Didn't think it was necessary6	
	answers)	Didn't think of it7	
		Client offered more money8	
		Didn't know / not aware about	
		condom9	
		04 (6 :6)	
		Other (Specify) 96	
400	TT 0 1'1 1' 1	Don't know 98	<b>&gt;</b> 402
402	How often did your clients use condom	All of the time1-	<b>→</b> 403
	over the past 12 months?	Most of the time	
		Some of the time	
		Rarely	
1001		Never	
402.1	Why didn't your client use condom always?	Not available1	
		Too expensive2	
	A LA LA DO NOTIDEA DA LA	Partner objected3	
	(Multiple answers. DO NOT READ the possible answers)	I didn't like to use it4	
	alisweis)	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	
		Other (Specify) 96	
		Don't know98	

# Condom use with Regular Client

Q. N.	Questions and Filters	Coding Categories	Skip to
403	Do you have any client who visits you on	Yes1	
	regular basis?		<b>→</b> 406
404	Did your regular client use condom in the	Yes1	
	last sexual contact with you?	No2 -	→404.2
404.1	Who suggested condom use at that time?	Myself1	
		My Partner2	<b>≻</b> 405
		Don't know98	J

Q. N.	Questions and Filters	Coding Categories	Skip to
404.2	Why didn't your regular client use a	Not available1	
	condom at that time?	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	
		Client offered more money8	
		Didn't know / not aware about	
		condom9	
		Other (Specify) 96	
		Don't know98	
405	How often did your regular clients use	All of the time1 –	<b>→</b> 406
	condom with you over the past 12 months?	Most of the time2	
		Some of the time3	
		Rarely4	
		Never5	
405.1	Why didn't they use condom always?	Not available1	
		Too expensive2	
		Partner objected3	
	(Multiple answers. DO NOT READ the possible	I didn't like to use it4	
	answers)	Used other contraceptive5	
		Didn't think it was necessary6	
		Didn't think of it7	
		Client offered more money8	
		Other (Specify)96	
		Don't know98	

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?	Yes	→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	
408	The last time you had sex with your husband or male friend staying to gather, did your sex partner use a condom?	Yes	→408.2
408.1	Who suggested condom use that time?	Myself       1         My Partner       2         Don't know       98	<b>}</b> 409
408.2	Why didn't your partner use a condom that time?	Not available	

Q. N.	Questions and Filters	Coding Categories	Skip to
409	How often did all of your non-paying	All of the time1 -	<b>→</b> 410
	partners use condoms over the last 12	Most of the time2	
	months?	Some of the time3	
		Rarely4	
		Never5	
		Did not have sexual intercourse	
		in the last 12 months6 –	<b>→</b> 410
409.1	Why didn't they use condom always?	Not available1	
		Too expensive2	
	(Multiple answers. DO NOT READ the possible	Partner objected3	
	answers)	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	
		Other (Specify) 96	
		Don't know98	

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

Q. N.	Questions and Filters	Coding Categories	Skip to
410	During the past one year, did you have	Yes1	
	sexual intercourse with a person other	No2 -	<b>→</b> 412.2
	than your client, husband/male friend?		
411	Did he use condom when he had last sexual	Yes1	
	contact with you?	No2-	<b>→</b> 411.2
411.1	Who suggested condom use at that time?	Myself1	
		My Partner2	<b>≻</b> 412
		Don't know98	J
411.2	Why didn't he use condom at that time?	Not available1	
		Too expensive2	
		Partner objected3	
		I didn't like to use4	
		Used other contraceptive5	
		Didn't think it was necessary6	
		Didn't think of it7	
		Other (Specify) 96	
410	XX 0 111	Don't know98	
412	How often did your other partners use	All of the time1	<b>→</b> 412.2
	condom with you over the past 12 months?	Most of the time2	
		Some of the time3	
		Rarely4	
412.1	Why did your other newtness not	Never	
412.1	Why did your other partners not use condom regularly?		
	Condom regularry:	Too expensive	
		I didn't like to use4	
	(Multiple answers. DO NOT READ the possible	Used other contraceptive5	
	answers)	Didn't think it was necessary6	
		Didn't think of it7	
		Other (Specify)96	
		Don't know	

Q. N.	Questions and Filters	Coding Categories	Skip to
412.2	Have you heard about condoms that	Yes1	
	can be used by women?	No2-	<b>→</b> 412.7
	(If the respondent has not heard about female		
	condom, explain what they are before asking		
410.0	questions)	D 1:	
412.3	If yes, from where did you know about	Radio1	
	this?	TV2	
		Pharmacy3	
		Health Post/Health Center4	
		Hospital5	
	(Multiple answers. DO NOT READ the possible	Health Workers/Volunteers6	
	answers)	Friends/Relatives/Neighbors 7 NGO staff	
		Newspapers/Posters9 Video Van	
		Street Drama	
		Cinema Hall	
		Community interaction/training13	
		Bill Board/Sign Board14	
		Comic Book	
		Community Workers16	
		Other (Specify) 96	
412.4	Have you ever used female condoms?	Yes	
	Thave you ever used female condoms:	No2—	▶412.7
412.5	When was the last time you used female	Within a month1	
	condom?	1-5 months before2	
		6-11 months before	
		More than 12 months before4	
		Don't remember/know98	
412.6	Who was your sex partner when you used	Regular partner1	
	female condom last time?	Client	
		Regular client3	
		Others (Specify) 96	
		Don't remember/know98	
412.7	In your opinion are female condoms useful	Yes1	
	for women like you?	No2	
413	With whom did you have your last sexual	Client	
	intercourse in the past one year?	Regular client2	
		Husband/male friend	
		Other male4	
		Others (Specify) 96	
413.1	Did you use condom at that time?	Yes1	
		No2	

## **Condom Accessibility**

Q. N.	Questions and Filters	Coding Categories	Skip to
414	Do you usually carry condoms with you?	Yes1	
		No2 -	<b>→</b> 415
414.1	At this moment, how many condoms do you have at-hand with you?  (Observe and write)	Number	

Q. N.	<b>Questions and Filters</b>	Coding Categories	Skip to
415	Which places or persons do you know from	Health Post/ health center1	_
	where/whom you can obtain condoms?	Pharmacy2	
		General retail store (Kirana Pasal) 3	
		Private clinic4	
		Paan shop5	
	(Multiple answers. DO NOT READ the possible answers)	Hospital6	
	allswers)	FPAN clinic	
		Peer/friends	
		NGO/health workers/volunteers9	
		Hotel/lodge	
		Client/other sex partner11 Massage parlor12	
		Bhatti pasal	
		Other (Specify) 96	
		Don't know98	
415.1	How long does it take for you to obtain a		
	condom from the nearest spot from your	Minutes	
	house or your working place?	No knowledge/not aware of	
		condom95	
416	How do you usually obtain condoms?	Always free of cost1	
	(Prov. abtain free of east on both ways)	Purchase2 -	<b>→</b> 416.3
	(Buy, obtain free of cost or both ways)	Obtain both ways3	
		Condom never used4 –	<b>→</b> 418
416.1	From where do you often obtain free	Health Post/Health Center 1	
	condoms?	Hospital	
	(Multiple answers. DO NOT READ the possible	FPAN clinics 3	
	answers)	Peers/friends	
		NGO/Health Workers/Volunteers 6	
		Client/other sex partner7	
		Massage parlor8	
		Hotel/lodge/restaurant9	
		Bhatti pasal10	
		Others (Specify) 96	
416.2	Which would be the most convenient	Health Post/Health Center 1	
	place/s for you to obtain free condoms?	Hospital	
		FPAN clinics 3 Peers/friends 4	
	AA-IC-L DO NOT DE AD d	Community events 5	
	(Multiple answers. DO NOT READ the possible answers)	NGO/Health Workers/Volunteers 6	
	W. (12)	Client/other sex partner7	
		Massage parlor8	
		Hotel/lodge/restaurant9	
		Bhatti pasal 10 Others (Specify) 96	
416.3	In the last 12 months, have you been given	Others (Specify)        96           Yes - free	
110.5	condoms by any organizations?	Yes – on cash2	
		No3	
415	Note: If response is '1' in Q416 Go to Q418	I N	
417	From where do you often purchase	Pharmacy1	
		General retail store (Vivana Dagal)	
	condoms?	General retail store ( <i>Kirana Pasal</i> )2 Private clinic	
	condoms?	Private clinic	

Q. N.	Questions and Filters	Coding Categories	Skip to
417.1	Which would be the most convenient	Pharmacy1	
	place/s for you to purchase condoms?	General retail store (Kirana Pasal)2	
		Private clinic3	
	(Multiple answers. DO NOT READ the possible	Pan Shop4	
	answers)	Hotel/lodge/restaurant5	
		Others (Specify) 96	

Type of Sex Practices

Q. N.	Questions and Filters	Coding Categories	Skip to
418	During the past one-year, did any of your	Yes1	-
	sexual partners force you to have sex with	No2	
	them against your wish?		
419	Did any person physically assault you (for	Yes1	
	any reason) in the past year?	No2	
420	In the past year, did any of your clients	Yes1	
	perform such act/s that you did not like?	No2-	<b>→</b> 422
421	If yes, what were they?	Oral sex1	
		Masturbation2	
		Anal sex3	
		Beaten up4	
		Snatched /stole money5	
		Used abusive language	
		(bhalu etc.)6	
		Ran away without paying7	
		Burnt with cigarette8	
		Forced to have sex after drinking	
		alcohol9	
		Other (Specify)96	
422	In the past year, did you have other type	Yes1	
	of sexual intercourse other than vaginal?	No2-	<b>→</b> 501
	(INSTRUCTION TO INTERVIEWER: Explain		
	the other types of sexual intercourse besides vaginal (such as oral, anal)		
422.1	If yes, what type of sexual act/s were they?	Oral1	
	== y ==,= w type or serious were mey.	Anal	
	(Multiple answers. DO NOT READ the possible	Masturbation	
	answers)	Other (Specify) 96	
422.2	What type of sexual contact did you have	Oral	
	with your last client?	Anal	
	with your last offerit.	Masturbation	
	(Multiple answers. DO NOT READ the possible	Vaginal4	
	answers)	Other (Specify)96	
		70	

## 5.0 AWARENESS OF HIV/AIDS

Q. N.	Questions and Filters	Coding Ca	ategories	Skip to
501	Have you ever heard of HIV/AIDS?	Yes	1	
		No	2 -	→ 601
502	Of the following sources of information, from	n which sources hav	e you collected	
	information on HIV/AIDS within the past on			
	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	1	2	
	14. Bill Board/Sign Board	1	2	
	15. Comic Book	1	2	
	16. Community Workers	1	2	
	96. Others (Specify)	1	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	Yes1	
	with HIV or who has died of AIDS?	No2-	<b>→</b> 505
504	Do you have a close relative or close	Yes, a close relative1	
	friend who is infected with HIV or has	Yes, a close fried2	
	died of AIDS?	No3	
505	Can people protect themselves from HIV	Yes1	
	by keeping sexual contact with only one	No2	
	uninfected faithful sex partner?	Don't know98	
506	Can people protect themselves from	Yes1	
	HIV, virus-causing AIDS, by using	No2	
	condom correctly in each sexual contact?	Don't know98	
507	Do you think a healthy-looking person	Yes1	
	can be infected with HIV?	No2	
		Don't know98	
508	Can a person get the HIV virus from	Yes1	
	mosquito bite?	No2	
		Don't know98	
509	Can a person get HIV by sharing a meal	Yes1	
	with an HIV infected person?	No2	
	_	Don't know98	
510	Can a pregnant woman infected with	Yes1	
	HIV/AIDS transmit the virus to her	No2 -	<b>→</b> 512
	unborn child?	Don't know98-	<b>→</b> 512
511	What can a pregnant woman do to	Cannot do anything/cannot	
	protect her child from HIV transmission?	protect the child0	
		Take Medication	
		Abort the child	
		Other (Specify)96	
		Don't know98	

Q. N.	Questions and Filters	Coding Categories	Skip to
512	Can a woman with HIV/AIDS transmit	Yes1	
	the virus to her new-born child through	No2	
	breastfeeding?	Don't know98	
513	Can people protect themselves from HIV	Yes1	
	virus by abstaining from sexual	No2	
	intercourse?	Don't know98	
514	Can a person get HIV by holding an HIV	Yes1	
	infected person's hand?	No2	
		Don't know98	
515	Can a person get HIV, by using	Yes1	
	previously used needle/syringe?	No2	
		Don't know98	
516	Can blood transfusion from an infected	Yes1	
	person to the other transmit HIV?	No2	
		Don't know98	
517	Is it possible in your community for	Yes 1	
	someone to have a confidential HIV test?	No2	
		Don't know98	
517.1	Do you know where can you go for HIV	Yes1	
	testing?	No2	
518	I don't want to know the result, but	Yes1	
	have you ever had an HIV test?	No2-	<b>→</b> 601
519	Did you voluntarily undergo the HIV test	Voluntarily1	
	or because it was required?	Required2	
520	Please do not tell me the result, but did	Yes1 -	<b>→</b> 522
	you find out the result of your test?	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	Within last 12 months1	
	HIV test?	Between 1-2 years2	
		Between 2-4 years3	
		More than 4 yeas ago4	
523	Have you taken up HIV testing in the	Yes1	
	past 12 months?	No2	
524	I don't want to know the results, but	Yes1	
	did you receive the results of that test?	No2-	<b>→</b> 601

## 6.0 PROMOTION OF CONDOM

Q.N.	Questions and Filters	Coding Ca		Skip to
601	In the past one-year have you seen, read or h			
	condoms from the following sources? (READ THE FOLLOWING LIST)			
	Sources of Information	Yes	No	
	1. Radio	1	2	
	2. TV	1	2	
	3. Pharmacy	1	2	
	4. Health Post/ Health Center	1	2	
	5. Hospital	1	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	
602	What message did you get from the	e Condoms should be used to		
	advertisement?	avoid HIV/AIDS	1	
		Condoms should l	be used to	
	(Multiple answers. DO NOT READ the possible	avoid STI		
	answers)	Condoms should l		
		family planning,		
		planning messag		
		Other (Specify)	96	
603	In the past one-year, have you ever seen,			
	heard or read following messages?			
	Messages/Characters	Yes	No	
	Jhilke Dai Chha Chhaina Condom     Garden Kina Ma Phana Hanna Ba	1	2	
	Condom Kina Ma Bhaya Hunna Ra     Youn Rog Ra AIDS Bata Bachnalai	1	2	
	Rakhnu Parchha Sarbatra Paine	1	2	
	Condom Lai		_	
	4. Ramro Sanga Prayog Gare Jokhim Huna			
	Dinna Bharpardo Chhu Santosh Dinchhu	1	2	
	Jhanjhat Manna Hunna			
	5. Condom Bata Surakchhya, Youn			
	Swasthya Ko Rakchhya AIDS Ra Younrog Bata Bachna Sadhai Condom	1	2	
	Ko Prayog Garau			
	6. HIV/AIDS Bare Aajai Dekhee Kura Garau	1	2	
	7. Ek Apas Ka Kura	1	2	
	8. Maya Garaun Sadbhav Badaun	1	2	
	9. Des Pardes	1	2	
	96. Others (Specify)	1	2	

Q.N.	Questions and Filters	Coding Categories	Skip to
603.1	Besides above messages have you seen,	Yes1	
	heard or read any other messages relating	No2-	<b>►</b> 604
	to STI/HIV/AIDS Prevention or Condom		
	Uses?		
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	Never used condom0	
	condoms did you use most of the time?	Number One 1	
		Dhaal2	
	(Record first three)	Panther3	
		Kamasutra4	
		Jodi5	
		Black cobra6	
		Condom with no brand name	
		(MOH white, red)7	
		Lilly8	
		Vega9	
		Skin less10	
		Play Vet11	
		Did 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	Yes1	
	with peer educators (PE) or outreach	No2-	<b>→</b> 609
	educators (OE) in the last 12 months?	No response99	
606	When you met/discussed/interacted with	Discussion on how HIV/AIDS	
	PE or OE, what activities did they	is/isn't transmitted1	
	involve you in?	Discussion on how STI is/isn't	
		transmitted2	
		Regular/non-regular use of	
	(Multiple answers. DO NOT READ the possible	condom3	
	answers)	Demonstration on using condom	
		correctly4	
		STI treatment/cure after	
		treatment5	
		Counseling on reducing number	
		of sex partner6	
		Training on HIV and STI,	
		Condom day, AIDS day,	
		participation in discussions and	
		interaction programs7	
		Others (Specify) 96	

Q. N.   Questions and Filters   Coding Categ	gories Skip to
607 Do you know from which organization AMDA	
were they?	2
Trinetra	3
WATCH	4
(Multiple answers. DO NOT READ the ICH	
possible answers) NSARC	
NRCS	
INF/Paluwa	
Siddhartha Club	
CAC	10
SACTS	
NFCC	
NAPN	
SPARSHA	
Change Nepal	15
PSI	
Sathi Sanstha	17
Indreni Sewa Samaj	18
Step Nepal	
Swan Nepal	20
Others (Specify)	.96
Don't know	98
How many times have you been visited Once	
by PE and/or OE in the last 12 months? 2-3 times	
4-6 times	
	4
More than 12 times	
Have you visited or been to any drop in Yes	
center (DIC) in the last 12 months? No	
What did you do at DIC?  Went to collect condom:  Went to loom the common	
(Multiple answers. do not read the possible Went to learn the correct of using condom	
(Multiple answers. do not read the possible answers)  Of using condom  Went to watch film on H	
Participated in discussio	
HIV transmission	
Participated in discussio	
STI transmission	
Participated in training,	
and discussion program	
HIV/AIDS and STI Went to collect IEC mat	
Went to collect IEC mat Went for STI treatment.	
Took friend with me	
Other (Specify)	96

Q. N.	Questions and Filters	Coding Categories	Skip to
611	Do you know which organizations	AMDA1	,
	run those DICs ?	GWP2	
	Tan those Bres .	Trinetra3	
		WATCH4	
	(Multiple answers. DO NOT READ the possible	ICH5	
	answers)	NSARC6	
		NRCS7	
		INF/Paluwa8	
		Siddhartha Club9	
		CAC10	
		SACTS11	
		NFCC12	
		NAPN13	
		SPARSHA14	
		Change Nepal15	
		Indreni Sewa Samaj16	
		PSI17	
		Sathi Sanstha18	
		Step Nepal19	
		Swan Nepal20	
		Others (Specify)96	
		Don't know98	
612	How many times have you visited such	Once1	
	DICs in the last 12 months?	2-3 times	
		4-6 times	
		7-12 times4	
		More than 12 times5	
613	Have you visited any STI clinic in the	Yes1	
	last 12 months?	No2-	<b>→</b> 617
614	What did you do at such STI clinics?	Blood tested for STI1	
		Physical examination conducted	
		for STI identification2	
	(Multiple answers. do not read the possible answers given below)	Was advised to use condom in	
	answers given below)	each sexual intercourse3	
		Was advised to take complete and	
		regular medicine4	
		Was suggested to reduce number	
		of sexual partners	
		Took friend with me	
		Other (Specify)96	

Q. N.	Questions and Filters	<b>Coding Categories</b>	Skip to
615	Do you know which organizations run	AMDA 1	
	those STI clinics?	NSARC 2	
		NRCS	
		INF Paluwa4	
	(Multiple answers. do not read the possible	Siddhartha Club	
	answers)	SACTS 6	
		NFCC7	
		WATCH 8	
		GWP9	
		Private clinic	
		Hospital11	
		Pharmacy12	
		CAC	
		Indreni Sewa Samaj	
		Trinetra	
		Others (Specify) 96	
616	How many times have you visited such	Don't know	
010	STI clinic in the last 12 months?	Once	
	S11 clinic in the last 12 months?	2-3 times	
		4-6 times	
		7-12 times	
		More than 12 times5	
617	Have you visited any voluntary	Yes1	
	counseling and testing (VCT) centers in the last 12 months?	No2-	<b>→</b> 620.1
618	What did you do at such VCT centers?	Received pre-HIV/AIDS test	
0.20		counseling1	
		Blood sample taken for	
	At 16 1 DO NOT DE AD 41	HIV/AIDS test2	
	(Multiple answers. DO NOT READ the possible answers)	Received post HIV/AIDS test	
	answers)	counseling3	
		Got information on HIV/AIDS	
		window period4	
		Received HIV/AIDS test result5	
		Received counseling on using	
		condom correctly in each sexual	
		intercourse6	
		Took a friend with me7	
		Other (Specify) 96	
619	Do you know which organizations run	AMDA1	
01)	those VCT centers?	NSARC2	
	mose ver conters:	NRCS	
	(Multiple answers. DO NOT READ the possible	INF/Paluwa4	
	answers)	Siddhartha Club	
		SACTS6	
		NFCC	
		WATCH8	
		CAC9	
		NNSWA10	
		GWP	
		Indreni sewa samaj	
		Trinetra	
		Others (Specify)96	
		Don't know98	

Q. N.	Questions and Filters	Coding Categories	Skip to
620	For how many times have you visited VCT center in the last 12 months?	Once       1         2-3 times       2         4-6 times       3         7-12 times       4         More than 12 times       5	620.2
620.1	If not visited VCT in the last 12 months, what is the reason for this?  (Multiple answers. DO NOT READ the possible answers)	Do not know about VCT center1 I do not think I need to be tested2 I have no symptoms of HIV3 No VCT near by4 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 Others (Specify)96	
620.2	Have you ever been approached by HIV/AIDS related health workers/ outreach workers to explain you about the need of VCT?	Yes	→621
620.3	If you were approached by health workers/outreach workers, what did they advise you?  (Multiple answers. DO NOT READ the possible answers)	Talked about my sex partners1 Advised to visit VCT if I have some problems	
621	Have you ever participated in HIV/AIDS awareness raising program or community events?	Yes	<b>→</b> 701
622	What were the activities that you participated in?  (Multiple answers. DO NOT READ the possible answers)	Street drama	

Q. N.	Questions and Filters	Coding Categories	Skip to
623	Do you know which organizations	AMDA1	
	organized those activities?	GWP2	
		TRINETRA3	
	(Multiple answers. DO NOT READ the possible	WATCH4	
	answers given below)	ICH5	
		NSARC6	
		NRCS7	
		INF/Paluwa8	
		Siddhartha Club9	
		CAC10	
		SACTS11	
		NFCC12	
		NAPN13	
		Sparsa14	
		Naulo ghumti15	
		Mahila Uddhar Samuha16	
		Maiti Nepal17	
		Indreni Sewa Samaj18	
		Others (specify)96	
		Don't know98	
624	How many times have you participated	Not participate in the past year0	
	in such activities in the last 12 months?	Once1	
		2-3 times2	
		4-6 times3	
		7-12 times4	
		More than 12 times5	

## 7.0 STI (SEXUALLY TRANSMITTED INFECTION)

Q. N.	Questions and Filters	Coding Categories	Skip to
701	Which diseases do you understand by	White discharge/discharge of	
	STI?	Pus/dhatu flow1	
		Itching around vagina2	
		Lower abdominal pain3	
	(Multiple answers. DO NOT READ the possible	Syphilis (Bhiringi)/gonorrhea4	
	answers)	HIV/AIDS5	
		Painful urination6	
		Swelling of vagina7	
		Pain in vagina8	
		Unusual bleeding from vagina9	
		Ulcer or sore around vagina10	
		Fever11	
		Burning during urination12	
		Weight loss/ get thinner13	
		Don't know98	
		Other (Specify)	
		96	

Q. N.	Questions and Filters	Coding C	Categories	Skip to
702	Do you currently have any of the following	symptoms?	-	
	Symptoms	Yes	No	
	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	1	2	
	discharge			_
	10. Genital Warts	1	2	
	96. Others (Specify)	1	2	
	(If answer is 'No' to all in the	Q. No. 702 Go to	Q. 710)	
703	Have you gone through medical treatment	Yes	1	
	for any of these symptoms?	No	2 -	<b>→</b> 710
703.1	If yes, for how long did you wait to go			
	for the treatment?	Week		
	(Write '00' if less than a week)			
704	Where did you go for the treatment?	Private Clinic		
		AMDA Clinic		
	(Multiple answers. DO NOT READ the possible	NFCC		
	answers)	SACTS		
		FPAN Clinic		
		Health Post/ Heal	th Center6	
		Hospital	7	
		Pharmacy	8	
		Self Treatment (S	Specify)9	
		Others (Specify)		
705	For which symptoms did you get			
, 00	treatment? Specify the treatment.			
	Symptoms	Trea	tment	
	Pain in the lower abdomen	1100		
	Pain during urination			
	3. Frequent urination			_
	4. Pain during sex			
	5. Ulcer or sore in the genital area			_
	6. Itching in or around the vagina			1
	7. Vaginal odor or smell			
	8. Vaginal bleeding (unusual)			
	9. Unusual heavy, foul smelling vaginal			
	discharge			
	10. Genital Warts			
	96. Others (Specify)			
706	Did you receive a prescription for	Yes	1	
700	medicine?	No		<b>▶</b> 709
	meatenie:	1 NO		102

Q. N.	Questions and Filters	Coding Categories	Skip to	
707	Did you obtain all the medicine	Yes I obtained all of it1		
	prescribed?	I obtained some but not all2	h l	
		I obtained none3	<b>}</b> 709	
708	Did you take all of the medicine	Yes1	709	
	prescribed?	No2	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	
708.1	If not, why did you not take all of the	Forgot to take1		
	medicine prescribed?	Felt cured2		
	•	Medicine did not help3		
		Others (Specify)96		
709	How much did you pay for the medicine	Rs.		
	that you took?			
	[If not paid mention the reasons]	Reason		
710	Did you have any of the following			
	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, foul smelling vaginal	1 2		
	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. No	o. 801)		
711	Have you gone through medical treatment			
	for any of these symptoms in the past			
	year?	<b>X</b> 7	_	
	Symptoms	Yes No	-	
	Pain in the lower abdomen     Pain during prinction	1 2	-	
	2. Pain during urination	1 2	-	
	3. Frequent urination		-	
	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	1 2		
	foul	1 2		
	vaginal discharge	1 2	-	
	10. Genital Warts	1 2 2	-	
	96. Others (Specify)			
	(If answer is 'No' to all in Q. No. 711, Go to Q. No.	o. 801)		
	(If this wer is 100 to the in Q. 100.711, Go to Q. 100.601)			

Q. N.	Questions and Filters	Coding Categories	Skip to
712	Where did you go for the treatment?	Private clinic	
		NFCC3	
	(Multiple answers. Do not read the possible	SACTS4	
	answers).	FPAN clinic5	
		Health post/ health center6	
		Hospital7	
		Pharmacy8	
		Self treatment (Specify) 9 –	→ 801
		GWP10	
		Siddhartha club clinic11	
		WATCH clinic12	
		CAC13	
		NSARC14	
		Trinetra15	
		Indreni sewa samaj16	
		Others (Specify)96 Yes	
713	Did anyone from the place where you		
	went for treatment counsel you about how to avoid the problem?	No2-	→ 801
713.1	What did he/she tell you?	Told me to use condom1	
	22.1.	Told me to reduce number of	
	(Multiple answers, DONOT READ the possible answers)	sexual partners2	
	answers)	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)96	

### 8.0 USE OF DRUGS AND INJECTION

Q. N.	Questions and Filters	Coding Categories	Skip to
801	During the last 30 days how often did	Everyday1	
	you have drinks containing alcohol?	2-3 times a week	
		At least once a week3	
		Less than once in a week4	
		Never5	
		Don't know98	
802	Some people take different types of	Yes1	
	drugs. Have you also tried any of those	No2	
	drugs in the past 30 days?	Don't know98	
	(Ganja, Bhang, Nitroson, Nitrovet E.)		
803	Some people inject drugs using a syringe.	Yes1	
	Have you ever-injected drugs?	No2	F 809
	(Do not count drugs injected for medical purpose	Don't know98	] 809
	or treatment of an illness)		
804	Have you injected drugs in last 12 months?	Yes1	
	(Do not count drugs injected for medical	No2	<b>}</b> 809
	purposes or treatment of an illness)	Don't know98	J 803
805	Are you currently injecting drugs?	Yes1	
		No2—	▶809

Q. N.	Questions and Filters	Coding Categories	Skip to
806	Think about the last time you injected	Yes1	
	drugs. Did you use a needle or syringe	No2	
	that had previously been used by	Don't know98	
	someone else?		
807	Think about the time you injected drugs	Every Time1	
	during the past one month. How often was	Almost Every Time2	
	it with a needle or syringe that had	Sometimes3	
	previously been used by someone else?	Never4	
		Don't Know98	
808	Usually how do you obtain a syringe/	My friend/relative give it to me	
	needle?	after use1	
		Unknown person give it to me2	
		I pick it up from a public place	
		used and left by others3	
		I pick it up from a public place	
		where I leave my syringes4	
		I use a new needle/syringe given	
		by NGO/volunteer5	
		I purchase a new needle/syringe 6	
		Others (Specify)96	
809	Have you ever exchanged sex for drugs?	Yes1	
		No2	
810	Have you ever exchanged sex for money	Yes1	
	so that you can buy drug?	No2	
811	To your knowledge, have any of your	Yes1	
	sex partners injected drugs?	No2-	▶ 812
811.1	(For Married SW only) Does your	Yes1	
	husband inject drug? (Check with Q. 204)	No2	
		Don't know98	
811.2	(For female having regular client) Did	Yes1	
	your regular client inject drug? (Check	No2	
	with Q. 403)	Don't know98	
811.3	(For all) Do you know any of your client	Yes1	
	ever injecting drugs?	No2	
	J	Don't know98	
812	Do you know anyone who injects drugs?	Yes1	
	, <u>,</u>	No2-	<b>→</b> 901
812.1	If yes, how are you related to her/him?	Client1	
	,	Friend2	
		Family3	
		Relative4	
		Neighbor/male from	
		village/someone not related to5	
		Other (Specify)6	
		(-r J/	l .

## 9.0 STIGMA AND DISCRIMINATION

Q. N.	Questions and Filters	Coding Categories	Skip to
901	If a male relative of yours gets HIV,	Yes1	
	would you be willing to take care of him	No2	
	in your household?	Don't know98	
902	If a female relative of yours gets HIV,	Yes1	
	would you be willing to take care of her	No2	
	in your household?	Don't know98	
903	If a member of your family gets HIV,	Yes1	
	would you want it to remain a secret?	No2	
		Don't know98	

ca Thank You so

### ANNEX - 4

## **Confidential**

# INTEGRATED BIO - BEHAVIORAL SURVEY (IBBS) AMONG FEMALE SEX WORKERS IN KATHMANDU VALLEY – 2008

# Female Clinical/Lab Checklist

Respondent ID Number:  Name of Clinician:		Data: 2065/		
		Date: 2065//		
Name of Lab Technician:				
(A) Clinical Information	<b>(B)</b>	<b>Specimen collection</b>	ollection	
		Yes	<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 Informa</u>				
101. Has any of your sexual partner h	ad urethral discharge in the p	past 3 months?		
<ol> <li>Yes</li> <li>No</li> <li>Don't Know</li> </ol>				

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

Symptoms		Now		In the Past Month	
		Yes	No	Yes	No
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

## (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

#### Family Health International (FHI), Nepal Oral Informed Consent Form for Female Sex Workers

**Title:** Integrated Bio-behavioral Survey among Female Sex Workers in

Kathmandu Valley and Pokhara Valley of Nepal.

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

**Principal Investigator/s:** Jacqueline McPherson, MPH, FHI/Nepal

Laxmi Bilas Acharya, PhD, FHI/Nepal

**Address**: FHI / Nepal

GPO Box 8803, Gopal Bhawan, Anamika Galli, Ward No. 4, Baluwatar, Kathmandu, Nepal

Phone: +977 1 443 7173 Fax: +977 1 441 7475 Email: jackie@fhi.org.np lacharya@fhi.org.np

#### Introduction

We are asking you to take part in this research study to collect information on knowledge of human immunodeficiency virus (HIV)/ sexually transmitted infections (STIs), HIV/STI related risk behaviors, STI treatment practices and to measure the prevalence of HIV and STI among the populations like you. We want to be sure that you understand the purpose of the research and your responsibilities before you decide to participate in the study. If you want to participate in this study, we will ask you to give your consent in front of the witness. Both consent taker and the witness will 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

Study participants are selected using a random process. You are in the pool of possible candidates, but the final selection would be based on your choice. In total 700 female sex workers (FSWs) will be selected for interview (Kathmandu-500 and Pokhara-200). Once you agree to participate in the study we will interview you using a structured questionnaire and then ask you to provide blood sample. We will draw about 5-7 ml blood by a 10 ml disposable syringe from your arm for HIV and Syphilis test. If you have any STIs symptom we will provide free treatment. We provide medical examination also for syndromic treatment of any other STIs. You will be informed about the dates and place from where you can collect the results of HIV and Syphilis test. Test results will be provided with counseling by a qualified counselor.

#### **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 on HIV and STI through a qualified counselor. They will provide you information and address to seek assistance for any mental stress you have. There may be some risk that people may know that you have participated in the study when they see you in the study site. But since your name and detailed address will not be recorded anywhere people will not have access to information you have provided.

#### **Possible Benefits**

If currently you have any other STI symptoms we will also provide treatment. We will refer you for treatment if your HIV test is positive but the study team will not provide the treatment. Follow up treatment costs will not be paid by the research team. You will be given Syphilis and HIV test results and made aware of how STI/HIV is transmitted and how it can be prevented and controlled. You will also 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.

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

#### If You Decide Not to Be in the Research

You are free to decide whether or not to take part in this research. Your decision will not affect in any way in the health services, you would normally receive from the study site.

#### **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 sign the consent form, but only ask you to agree verbally (with spoken words) in front of the witness.

#### **Payment**

We will not pay you for your participation in the study but you will be given condom and reading materials about STI/HIV/AIDS as compensation for your participation in the research. Moreover, we will provide you a fixed amount of Nepalese Rupees (NRs.) 150.00 (approximately, US\$2.06) after completing the study requirements to cover the local transportation you may use to come to the study center for interview.

#### **Leaving the Research**

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

#### If you have a questions about the study

If you have any questions about the research, call:

*Jacqueline McPherson*, ASHA project- FHI/Nepal, Baluwatar, Kathmandu, Phone: 01-4437173; **OR** *Siddhartha Man Tuladhar*, New ERA, Kalopool, Kathmandu, Phone: 01-4413603; **OR** *Laxmi Bilas Acharya*, ASHA project- FHI/Nepal, Baluwatar, Kathmandu, Phone: 01-4437173

We will not be able to provide any kind of assistance or service to you after this 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 *Jacqueline McPherson*, Family Health International (FHI), Baluwatar, Kathmandu, Phone: 01-4437173 *and*/or *Mr. David Borasky*, Protection of Human Subjects Committee, PO Box 13950, Research Triangle Park, NC 27709, USA, phone number: [International Access Code]-1-919-405-1445, e-mail: dborasky@fhi.org

# **VOLUNTEER AGREEMENT**I was present while the benefits, risks

I was present while the benefits, risks and procedures were read to the answered and the volunteer has agreed to take part in the research.	ne volunteer. All questions were
Signature of witness	Date
I certify that the nature and purpose, the potential benefits, and participating in this research have been explained to the above individ	•
Signature of Person Who Obtained Consent	Date

# ANNEX – 6

# **Study Centers**

Districts	Lab Centers	No. of Centers	Sample Covered	Total	
	Gaushala		120		
	Gongabu		59		
Kathmandu Valley	Thamel	5	60	500	
	Koteshwor		160		
	Sundhara		101		

 $\begin{array}{c} \textbf{ANNEX}-7 \\ \textbf{Participation in Post Test Counseling} \end{array}$ 

Date	Counseling Center	g Expected Client Counseled Client		Client Counseled		Client with HIV-	
	Center	Chent	N	%	HIV+	mv-	
July 08 – August 27, 2008	SACTS	417	68	16.3	0	68	
July 13 – August 22, 2008	CAC	83	24	28.9	0	24	
Total		500	92	18.4	0	92	