

**Integrated Bio-behavioral Survey
(IBBS) among Female Sex Workers
and Behavioral Surveillance Survey
(BSS) among Clients in Kathmandu
Valley - 2004**

April 2005

**Integrated Bio-behavioral Survey (IBBS)
among Female Sex Workers and Behavioral
Surveillance Survey (BSS) among Clients in
Kathmandu Valley - 2004**

Submitted to:

Family Health International/Nepal
Gairi Dhara
P.O. Box 8803
Kathmandu, NEPAL

Submitted by:



**New ERA
P.O. Box 722
Rudramati Marga, Kalopul
Kathmandu, Nepal**

In Collaboration with



**STD/AIDS Counselling and Training Services
P.O. Box 7314
Pyukha, Kathmandu, Nepal**

April 2005

ACKNOWLEDGEMENTS

We would like to extend our sincere and heartfelt gratitude to Family Health International/Nepal (FHI/Nepal) for entrusting us with such an interesting and important study.

The study team expresses special thanks to Dr. James Ross, Former FHI/Nepal Country Director for the valuable inputs provided by him from the design phase through the implementation stage of this study.

The study team is grateful for the contribution and suggestions provided by Ms. Asha Basnyat, Country Director, FHI/Nepal and Ms. Kamala Moktan, Technical Officer - Public Health, FHI/Nepal. Dr. Laxmi Bilas Acharya, Technical Officer - Surveillance and Research, FHI/Nepal, deserves credit for his technical inputs throughout the study.

Thanks are also due to the various NGOs and organizations such as General Welfare Pratisthan (GWP), Women Acting Together for Change (WATCH) and Community Action Center (CAC) for their active participation in different capacities to make the study a success.

Similarly, the study team expresses its acknowledgement to the Nepal Police and the National Center for AIDS and STD Control (NCASC) for providing necessary administrative support during the study period.

Last, but not least, the study team likes to thank all the study participants who provided their valuable time for the interview and shared their personal experiences to bring the study to this shape.

- New ERA Study Team

STUDY TEAM MEMBERS

Key Team Members

1.	Mr. Sidhartha Man Tuladhar	-	Team Leader
2.	Mr. Niranjan Dhungel	-	Project Co-ordinator
3.	Mr. Narayan Prasad Sitaula	-	Senior Research Assistant
4.	Mr. Ramesh Dangi	-	Senior Research Assistant
5.	Ms. Sarita Baidhya	-	Senior Computer Programmer

Field Survey Team Members

1.	Mr. Sachin Shrestha	-	Research Assistant
2.	Mr. Sudeep Acharya	-	Research Assistant
3.	Mr. Deepak Dhungel	-	Research Assistant
4.	Ms. Tara Shrestha	-	Field Supervisor
5.	Ms. Roshani Shrestha	-	Field Supervisor
6.	Ms. Bimala Sharma (Joshi)	-	Field Supervisor
7.	Ms. Sarita Shrestha	-	Field Supervisor
8.	Ms. Devimaya Bogati	-	Field Supervisor
9.	Ms. Janani Magar	-	Field Supervisor
10.	Ms. Sumitra Shrestha	-	Field Supervisor
11.	Ms. Pabitra Koirala	-	Field Supervisor
12.	Ms. Sita Lama	-	Field Supervisor
13.	Ms. Hasina Pradhan	-	Field Supervisor
14.	Ms. Sulochana Swar	-	Field Supervisor
15.	Mr. Madhav Shrestha	-	Field Supervisor
16.	Mr. Shree Krishna Gopali	-	Field Supervisor
17.	Mr. Rabindra Udash	-	Field Supervisor
18.	Mr. Sushil Kumar Joshi	-	Field Supervisor
19.	Mr. Pawan K.C.	-	Field Supervisor
20.	Mr. Janak Chand B. Kshetree	-	Field Supervisor
21.	Mr. Kshitiz Moktan	-	Field Supervisor
22.	Mr. Raju Karki	-	Field Supervisor
23.	Mr. Somdeep Thapaliya	-	Field Supervisor
24.	Mr. Manoj Pyakuryal	-	Field Supervisor
25.	Mr. Pancha Maharjan	-	Field Supervisor
26.	Ms. Basundhara Pradhan	-	Senior Staff Nurse
27.	Ms. Trishna Bogati	-	Staff Nurse
28.	Ms. Kabita Thapa	-	Staff Nurse
29.	Ms. Subina Manandhar	-	Staff Nurse
30.	Mr. Ram Kumar Rijal	-	Runner
31.	Mr. Navin Chaudhari	-	Runner
32.	Mr. Buddhi Bahadur Bhujel	-	Runner

Data Entry/Tabulation/Coding

- | | | | |
|----|----------------------|---|-------------------|
| 1. | Mr. Babu Raja Dangol | - | Coder |
| 2. | Ms. Deepa Shakya | - | Coder |
| 3. | Mr. Rajan Dangol | - | Data Entry Person |

Administration Support

- | | | | |
|----|-----------------------------|---|-----------------------|
| 1. | Mr. Sanu Raja Shakya | - | Senior Word Processor |
| 2. | Mr. Rajendra Kumar Shrestha | - | Office Assistant |

Laboratory Team (SACTS)

- | | | | |
|----|----------------------------|---|------------------------|
| 1. | Dr. Vijay Lal Gurubacharya | - | Consultant Pathologist |
| 2. | Ms. Jyotsna Shrestha | - | Micro Biologist |
| 3. | Mr. Janardan Kuinkel | - | Senior Lab Technician |
| 4. | Mr. Ramesh Baidya | - | Lab Technician |
| 5. | Mr. Purusottam Kuinkel | - | Lab Technician |
| 6. | Mr. Ganesh Thapa | - | Lab Technician |
| 7. | Mr. Dinesh Bista | - | Lab Technician |

TABLE OF CONTENTS

	<u>Page</u>
ACKNOWLEDGEMENTS	i
STUDY TEAM MEMBERS	ii
TABLE OF CONTENTS	iv
LIST OF TABLES	vi
LIST OF ANNEXES.....	viii
LIST OF ABBREVIATIONS	ix
EXECUTIVE SUMMARY	x
CHAPTER 1: INTRODUCTION.....	1
1.1 Background.....	1
1.2 Objectives of the Study.....	2
CHAPTER 2: METHODOLOGY.....	3
2.1 Study Population.....	3
2.2 Sample Design	3
2.3 Sample Size.....	3
2.4 Identification and Recruitment Process	4
2.5 Research Instrument.....	7
2.6 Study Personnel	8
2.7 Recruitment and Training of Research Team	9
2.8 Field Operation Procedures.....	9
2.9 Coordination & Monitoring.....	10
2.10 Ethical Issues	11
2.11 HIV/STI Pre- and Post-Test Counseling and Follow-Up	11
2.12 Control of Duplication.....	11
2.13 Constraints in the Field Work.....	12
2.14 Data Processing and Analysis.....	12
CHAPTER 3: FEMALE SEX WORKERS.....	13
3.1 Socio-Demographic Characteristics.....	13
3.2 Sex Workers, Their Clients and Sex Partners.....	16
3.2.1 Sex Workers and the Clients.....	16
3.2.2 Types of Clients	17
3.2.3 Sex Workers and Their Sex Partners	18
3.3 Types of Sex Practiced by Sex Workers.....	19
3.4 Income of Sex Workers	20
3.5 Knowledge and Use of Condoms among Sex Workers.....	21
3.5.1 Condom Use with Last Client.....	22
3.5.2 Condom Use with Regular Client	22
3.5.3 Condom Use with Non-Paying Partners	22
3.6 Availability of Condoms and Their Brand Names	23
3.7 Knowledge of HIV/AIDS	25
3.7.1 Knowledge of Transmitting and Avoiding HIV/AIDS.....	25

	<u>Page</u>
3.8	Access to FHI/Nepal Messages26
3.9	Knowledge and Treatment of Sexually Transmitted Infections (STIs)28
3.10	Use of Alcohol and Drugs.....29
3.11	HIV and Syphilis Prevalence among Female Sex Workers.....30
3.12	Association of HIV with Socio-Demographic, Behavioral and STI Variables30
CHAPTER 4: THE CLIENTS.....32	
4.1	Socio-Demographic Characteristics of Clients32
4.2	Occupations and Workplaces of Clients34
4.3	Sexual Behavior of Clients35
4.3.1	Clients and Sex Partners35
4.3.2	Sexual Networking and Expenditure on SWs.....36
4.3.3	Sex with Sex Workers in Different Parts of the Country and in India37
4.4	Knowledge and Use of Condoms among Clients37
4.4.1	Places to Get Condoms and Brand Names Known to Clients38
4.4.2	Condom Use with Various Sex Partners39
4.4.3	Reasons for Not Using Condom39
4.5	Knowledge of HIV/AIDS40
4.5.1	Knowledge of HIV/AIDS40
4.5.2	Knowledge of Transmitting HIV/AIDS and Avoiding HIV/AIDS40
4.6	Clients' Exposure to FHI Media Messages41
4.7	Knowledge and Treatment of Sexually Transmitted Infections (STIs)43
4.8	Use of Alcohol and Drugs among Clients43
CHAPTER 5: CONCLUSIONS AND RECOMMENDATIONS 45	
5.1	Conclusions.....45
5.1.1	Female Sex Workers45
5.1.2	Clients46
5.2	Policy and Program Implications.....47

REFERENCES

ANNEXES

LIST OF TABLES

	<u>Page</u>
Table 1: Birthplace of Female Sex Workers	13
Table 2: Socio-Demographic Characteristics of Female Sex Workers.....	14
Table 3: Sexual Behavior of Female Sex Workers	15
Table 4: Number of Clients Reported by Female Sex Workers.....	17
Table 5: Types of Clients Reported by Female Sex Workers.....	18
Table 6: Sex Partners of Female Sex Workers.....	19
Table 7: Types of Sex Practiced by Female Sex Workers	19
Table 8: Income from Sex Work and Other Jobs.....	20
Table 9: Sources of Knowledge of Condom	21
Table 10: Condom Use with Different Types of Partners.....	23
Table 11: Places to Get Condom and Brand Name of Most Used Condom Reported by Female Sex Workers.....	24
Table 12: Sources of Knowledge of HIV/AIDS among Female Sex Workers.....	25
Table 13: Knowledge of Ways of Transmitting HIV/AIDS among Female Sex Workers	25
Table 14: Knowledge of Ways of Avoiding HIV/AIDS among Female Sex Workers.....	26
Table 15: Percentage of FSWs Who Have Knowledge of Three Major Ways of Avoiding HIV/AIDS.....	26
Table 16: Seen/Heard FHI Character/Message in the Past Year by Female Sex Workers.....	27
Table 17: Message Understood by Female Sex Workers	27
Table 18: IEC Materials and Condom Received by Female Sex Workers	27
Table 19: Reported STI and Treatment.....	28
Table 20: Use of Alcohol and Drugs among Female Sex Workers	29
Table 21: Knowledge of IDUs and History of Injecting Drug among Female Sex Workers	30
Table 22: HIV and STI Prevalence among Female Sex Workers.....	30
Table 23: Relationship between HIV and Demographic, Behavioral Variables and STIs.....	31
Table 24: Association between STIs and Demographic Behavioral Variables.....	31
Table 25: Demographic Characteristics of the Clients	33
Table 26: Social Characteristics of the Clients	33
Table 27: Occupations and Workplaces of the Clients	34
Table 28: Sexual Behavior of the Clients	35
Table 29: Clients and Their Sex Partners.....	36
Table 30: Sexual Networking and Expenditure on Female Sex Workers.....	36
Table 31: Sex with FSWs in Other Parts of the Country and in India by Clients in the Past Year.....	37
Table 32: Sources of Knowledge of Condom	37
Table 33: Places From Where Clients Obtain Condoms and Most Popular Brands of Condoms	38

	<u>Page</u>
Table 34: Condom Use by Clients in the Last Sex and Consistent Condom Use with Different Sex Partners in the Past Year	39
Table 35: Sources of Knowledge of HIV/AIDS among Clients	40
Table 36: Knowledge of Ways of Transmitting AIDS among Clients	41
Table 37: Knowledge of Avoiding HIV/AIDS among Clients	41
Table 38: Percentage of Clients Who Have Knowledge of Three Major Ways of Avoiding HIV/AIDS	41
Table 39: Seen, Heard or Read the Following Messages by Clients in the Past Year	42
Table 40: Specific Condom Message Understood by the Clients	42
Table 41: IEC Materials and Condoms Given by Someone to Clients in the Past One Year.....	42
Table 42: Visited and Provided Materials by NGO People to Clients in the Past Year	43
Table 43: Reported STI Symptom and its Treatment among the Clients in the Past Year	43
Table 44: Use of Alcohol and Drugs among Clients in the Past Month.....	44

LIST OF ANNEXES

- Annex A: Sample Size of Participants
- Annex B: Male Screening Questionnaire
- Annex C: Questionnaire
- Annex D: Female Clinical/Lab Checklist
- Annex E: Female Oral Informed Consent
- Annex F: Post-Test Counseling

ABBREVIATIONS

AIDS	-	Acquired Immuno-Deficiency Syndrome
AMDA	-	Association of Medical Doctors of Asia
BCC	-	Behavioral Change Communication
BCI	-	Behavioral Change & Intervention
BSS	-	Behavioral Surveillance Survey
CAC	-	Community Action Center
ELISA	-	Enzyme Linked Immunosorbant Assay
FHI	-	Family Health International
FPAN	-	Family Planning Association of Nepal
FSWs	-	Female Sex Workers
GWP	-	General Welfare Pratisthan
HIV	-	Human Immuno-Deficiency Virus
IBBS	-	Integrated Bio-Behavioral Survey
ID	-	Identification Number
IDU	-	Injecting Drug User
IEC	-	Information, Education and Communication
LALS	-	Life Giving and Life Saving Society
NCASC	-	National Centre for AIDS and STD Control
NFCC	-	Nepal Fertility Care Center
NGO	-	Non-Governmental Organization
NHRC	-	Nepal Health Research Council
NTEA	-	Narayani Transport Enterprise Association
PCR	-	Polymerase Chain Reaction
PHSC	-	Protection of Human Subjects Committee
PPS	-	Probability Proportional Sampling
PSU	-	Primary Sampling Unit
RPR	-	Rapid Plasma Reagin
SACTS	-	STD/AIDS Counseling and Training Services
SLC	-	School Leaving Certificate
SPSS	-	Statistical Package for the Social Sciences
STD	-	Sexually Transmitted Disease
STI	-	Sexually Transmitted Infection
SW	-	Sex Worker
TPHA	-	Treponema Pallidum Hemagglutination Assay
TUTH	-	Tribhuvan University Teaching Hospital
USA	-	United States of America
VCT	-	Voluntary Counseling and Testing
WATCH	-	Women Acting Together for Change
WHO	-	World Health Organization

EXECUTIVE SUMMARY

This study was conducted among 200 street and 300 establishment-based female sex workers (FSWs) and their clients in the Kathmandu Valley.

This was the first round of the integrated bio-behavioral survey (IBBS) conducted among female sex workers and their clients in conjunction with the Behavioral Surveillance Survey in the Kathmandu Valley. The survey was carried out during the months of March and April 2004 to measure HIV and syphilis prevalence among female sex workers and risk behaviors which are associated with a risk of HIV infection, such as condom use, sexual behaviors, knowledge of HIV/AIDS, reported cases of STI and their treatment behaviors, exposure to HIV/AIDS messages and drug habits. This survey will be repeated regularly to measure the prevalence of HIV and identify changes in the behaviors over time.

Method of the Study

Mapping: Mapping was carried out systematically to update the 2001 estimate of the size of FSWs and identify sex work settings such as dance restaurants, cabin restaurants, *bhatti pasals* (traditional taverns), massage parlors, residential settlements (private houses), discos, squatter areas and street corners. The total number of female sex workers, both establishment-based and street-based, was estimated to be about 4,100 (with range of 4000-4500). This has served as the basis for developing a sampling design for the study.

Sampling: All the sites were geographically arranged and a probability proportional to size (PPS) sampling procedure was used, with the primary sampling unit (PSU) being a group of sites (client soliciting sites). A total of 500 FSWs (300 establishment-based and 200 street-based) and 400 clients were sampled. In order to be included in the sample, the criterion set for FSWs was their having worked in the sex business for at least six months prior to the interview, and the client was eligible if he had visited an FSW at least once in the past year.

Lab Testing (Female Sex Workers only): For collecting blood samples required for HIV testing, laboratories/clinics were set up at five different locations in the Kathmandu Valley in order to cover its whole area as prescribed by the sampling procedure. After obtaining an informed consent, a structured questionnaire was administered by trained interviewers to obtain information about socio-demographic characteristics and HIV risk behaviors, such as sexual and drug-using behaviors. Blood samples were collected, syndromic STD treatment was provided and HIV counseling was conducted. Lab analysis included testing for HIV and syphilis for the FSWs. The subjects returned after one month for the results and treatment was given to those testing positive for syphilis.

Findings

Female Sex Workers

The study found that the rate of HIV infection among both types of sex workers was two percent (4/200 among street-based sex workers and 6/300 among establishment-based sex workers). The prevalence of syphilis among the street sex workers was 27% (54/200) and seven percent (20/30) among the establishment-based sex workers. Other findings are given below:

The median age of the street FSWs was slightly higher (26 years) compared to the establishment-based sex workers (21 years) with their ages ranging from 15–58. The FSWs reflected most of the major castes/ethnic groups. Less than 20% of the FSWs' birthplaces were in the Kathmandu Valley.

More than half of the FSWs had sex before the age of 15 years, and the mean age at first sex was 16 years. The average period they had been working as an FSW ranged from 19 months (establishment-based) to 33 months (street-based) with 46% reporting less than a year. This indicates that new FSWs are entering the trade in a relatively short time. Most (90%) had one to two clients (mean 1.6) on any working day. The mean number of working (sex work) days in a week was 4.3.

The average weekly income from sex work ranged from Rs. 2,348 (street-based sex workers) to Rs. 2,748 (establishment-based sex workers) with the average charge per sex act ranging from Rs. 50 to Rs. 8,000.

Knowledge of condoms was universal among the sex workers in Kathmandu. However, condom use during the last sex with clients as reported by the establishment-based sex workers was 70% compared to 80% for the street sex workers. Consistent condom use with clients in the past year was about 56%. Consistent use of condoms with non-paying partners was low. Less than 20% of the sex workers used condoms on a regular basis with their husbands or male friends.

Less than 40% of the sex workers reported the knowledge of **A** (abstinence from sex), 22% of the street sex workers and 31.1% of the establishment-based sex workers reported the knowledge of **B** (being faithful or avoiding multiple sex partners). However the knowledge of **C** (consistent condom use or use of condom during every sex act) was reported by more than 90% of the sex workers.

There is little association between HIV and socio-demographic or risk behavior variables such as condom use and the number of clients served per day. With regard to the street sex workers, HIV is associated with the number of years of working as a sex worker. Due to the low prevalence of HIV among the sex workers, the sample size was not large enough to give a clear picture of the association between HIV and risk variables or demographical variables.

Clients

The median age of the clients was 26, with the ages ranging from 14 to 55 years. Almost all of them (93%) were literate, with 47% having an SLC degree. Half of the

clients were married, 2.8% divorced/widower, and the rest had never been married. 76% of the clients had migrated to Kathmandu from other districts in Nepal. The four most cited occupations by the clients were service (33%), business (30%), wage laborer (14%) and student (7%).

The median age of the clients at first sexual intercourse was 17 years. The average number of FSWs visited in the past year was five, with 64% visiting more than two FSWs.

The mean number of sex partners, including sex workers, in the past year as reported by the clients was 1.8. Around 70% of them reported two or more sex partners. Among the married clients, around 95% had two-three sex partners. On average, the clients spent Rs. 603 per visit. About 18% of the clients had engaged in sex with sex workers in different parts of the country, while one percent had been to India.

All the clients knew about condoms. Condom use with the last sex worker was 85%. And consistent use of condoms with sex workers in the past year was 81%. Consistent use of condoms with the wife was much lower (9.7%).

The knowledge of **A** (abstinence from sex) was reported by 16.6% of the clients. Knowledge of **B** (being faithful or avoiding multiple sex partners) was reported by 46.6% and knowledge of **C** (consistent condom use or use of condom during every sex act) was reported by nearly 98% of the clients as being one of the ways of avoiding HIV/AIDS.

Policy and Program Implications

The data indicated that new and young girls were entering the sex trade every year. Therefore, the low prevalence of HIV and syphilis should not be taken lightly because the sex workers recruited for the study had been exposed to risk behavior for only a short period of time. More than half of the establishment-based sex workers and more than one-third of the street sex workers had been engaged in the sex trade for less than a year. Hence, the sex workers, especially the young ones, should be targeted by HIV/AIDS awareness campaigns, which might include visits by peer educators and condom promotion.

Both FSWs and their clients tend to use condom less frequently while having sex with their regular sex partners such as husbands/wives and other boy/girl friends. Therefore, prevention programs should focus on the promotion of condom use from HIV/STI infection prevention purposes.

Significant proportion of FSWs and clients report the knowledge of the ways of preventing HIV/STI infection but many do not have safe behavior. There is a wide gap between knowledge and risk behavior. So prevention programs should also find out the ways to convey the degree of risk associated with their risky sexual behavior to FSWs and clients.

Prevalence of syphilis among FSWs is less than five and among the clients also reported symptoms of STIs is less. However, the ongoing syphilis control program, including rapid diagnostics and treatment, should be continued.

CHAPTER 1: INTRODUCTION

1.1 Background

The first case of HIV in Nepal was identified in 1988. At the end of March 2005, a cumulative total of 4,861 cases of HIV infection had been reported to the National Center for AIDS and STD Control (NCASC, 2005). Among them, around 56% were clients of female sex workers (FSWs) or patients suffering from sexually transmitted diseases (STDs), 13% were FSWs and 18% were injecting drug users (IDUs). Although the HIV/AIDS reporting system cannot measure the prevalence rate of the infection because of underreporting and delays in reporting, it indicates which sub-populations are affected.

Nepal is presently at the stage known as “concentrated epidemic” in which HIV is limited to high-risk sub-population groups such as FSWs and IDUs. The country has surpassed the five percent “low epidemic stage”. Recent data collected from migrant populations in different parts of the country showed an HIV prevalence rate of 4-10% (New ERA/SACTS/FHI, 2002 and Poudel, KC, et al, 2003).

Until recently, Nepal possessed only scattered data regarding the prevalence of HIV. Almost all the available information is about “high-risk sub-populations” such as FSWs, IDUs and a handful of migrant laborers. The first ever HIV and STI prevalence survey, which covered 16 districts in the Terai along the East-West Highway route, was conducted in 1999. The survey showed that 3.9% of the FSWs and 1.5% of the truckers were HIV-positive (New ERA/SACTS/FHI, 2000). A recent study showed 68% HIV infection among male IDUs in Kathmandu. Similarly, 22% of the male IDUs in Pokhara and 35% in the urban areas of Jhapa, Morang and Sunsari districts in eastern Nepal were carrying the virus (New ERA/SACTS/FHI 2002b; New ERA/SACTS/FHI, 2003a; New ERA/SACTS/FHI, 2003b). Behavioral sentinel surveillance surveys conducted among FSWs and their clients on the Terai highway routes and in the Kathmandu Valley 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).

An expanding sex industry as indicated by these surveys also means that the number of clients of the FSWs is increasing. One of the important findings of the 1999 sero-study conducted by New ERA (New ERA/SACTS/FHI, 2000) was that 50% of the FSWs returning from brothels in Mumbai, India were found to be infected with HIV; and that such Mumbai returnees were nearly 40 times more at risk of contracting the virus than other FSWs. Individuals who have unprotected sex with “Mumbai-returned” FSWs run a higher risk of infection. Studies have shown that a majority of the clients of FSWs have steady partners, and an increased HIV rate among them will ultimately lead to an increased incidence of HIV among their regular sex partners such as their wives and other female sex partners.

It has been nearly three years since SACTS conducted an HIV and STI prevalence survey in the Kathmandu Valley. Interventions targeted at FSWs and their clients have been intensified. Furthermore, Behavioral Surveillance Surveys (BSS)

conducted in 2001 by New ERA in the Kathmandu Valley have shown that use of condoms has been increasing. It is appropriate to determine what biological impact these interventions have had on the respective population groups. However, it should be noted that the behavioral data collected in this study are not strictly comparable with the SACTS' 2001 study results. It has been learnt from previous studies in the Terai highway districts that BSS only and integrated bio-behavioral survey (IBBS) captures different types of the target because of the inbuilt selection of study participants based on their perception towards the study which makes them not comparable.

1.2 Objectives of the Study

The general objectives of the study are to determine the prevalence of sexually transmitted infections (STIs) like human immuno-deficiency virus (HIV) and syphilis among FSWs working in the Kathmandu Valley (urban areas of Kathmandu, Bhaktapur and Lalitpur) and the risk behaviors of their clients.

The specific objectives of this study are to measure the prevalence of the following STIs, STI syndromes and behavioral correlates among FSWs and the behaviors of their clients:

- STI/HIV testing: HIV and syphilis testing for FSWs only
- STI Syndromes: Vaginal discharge and lower abdominal pain (FSWs)
- STI/HIV and Demographic and Behavioral Correlates: Demographic, behavioral and biological correlates of HIV and STI infection (FSWs)
- Socio-demographic and risk behaviors of clients.

CHAPTER 2: METHODOLOGY

2.1 Study Population

The study population for this cross-sectional integrated bio-behavioral survey (IBBS) was the following:

Female Sex Workers (FSWs): FSWs, considered to be one of the high-risk sub-populations, were the subject for this IBBS study. The eligibility criterion for FSWs in order to be recruited for the study was "women reporting having been paid in cash or kind for sexual services". She must have been involved in such sexual activities for at least six months to be eligible as a study participant.

Clients: One of the high-risk sub-population groups included in this Behavioral Surveillance Survey (BSS) were clients of female sex workers (FSWs). "Client" is here defined as a male who buys sex for money or goods. The eligibility criterion for clients in order to be recruited for the study was "one reporting having had sex with a sex worker at least once in the past year". In this survey, no particular sentinel sub-group of male clients was focused upon. The reason for not focusing upon any sentinel group was that there was not enough information on the types of clients who visited sex workers regularly.

2.2 Sample Design

Sampling is important when conducting serostudies since the surveys need to be conducted repeatedly over a period of time in order to measure changes in the prevalence rate of HIV and STIs. Extra efforts were made to conduct a size estimation of FSWs in order to prepare a sampling design. A three-week (February 4-21, 2004) visit was made prior to the survey to do a mapping exercise in order to find out the number of FSWs and their places of work and it was utilized to draw a sampling frame. During the mapping exercise, a total number of about 4000 - 4500 FSWs was estimated.

Conducting a size estimation of the FSWs also helped in finding their clients in various settings of the Kathmandu Valley. During the estimation, the researchers also observed the types of clients, their numbers and their characteristics. The information thus obtained proved helpful later when approaching and interviewing the clients. A sampling of the sex work settings was made during the time of the survey and the prescribed number of clients to be surveyed was determined.

2.3 Sample Size

The sample size of FSWs was 500 (200 street-based and 300 institution-based) in Kathmandu (Annex A). Labs/clinics were set up at five different locations in Kathmandu (Gaushala, Gongabu, Thamel, Sundhara and Koteswar) in order to cover the whole area of the Kathmandu Valley as prescribed by the sampling procedure.

The sample size of clients was 400. Different types of clients from scattered areas were enlisted for the study. A majority of the clients were collected within and in the periphery of the Ring Road in the Kathmandu Valley. Clients based in different settings (street, dance restaurants, cabin restaurants, massage parlors, discos, residential areas, squatter settlements, hotels, etc.) were recruited for the study to include all types of clients in the study.

2.4 Identification and Recruitment Process

FSWs: Many of the researchers were familiar with the working places and behavior of the FSWs in the Kathmandu Valley as they were frequently involved in previous studies, including sero and mapping exercises done for the size estimation of FSWs. Therefore, this research was conducted quite smoothly. Study team members had known some sex workers in each study site which helped them to develop the good confidence between the FSW community and the research team. The sampling method was followed strictly when recruiting FSWs. Both the FSWs and their clients had to come from the same settings and locations as decided before the field work. The researchers working with the clients also helped a lot in identifying FSWs through direct observation. The team working with the client group also helped to bring FSWs to the clinic. It was easy to approach them because the FSWs were always hovering around the clients or searching for them.

FSWs were recruited from the locations such as streets, hotels, restaurants, cabin restaurants, dance restaurants, *dohari* restaurants, discos and settlements as per the sampling list provided to them. First, they observed the activities going on there. Since the settings had already been identified with a particular number of FSWs during the estimation, the researchers had to identify and gather the required number by using various methods. They were as follows: Taking the help of brokers, asking key informants, observing the activities of suspected persons, posing as clients, chatting up the owners/workers of the hotels, restaurants, cabin restaurants, dance restaurants, *dohari* restaurants and discos, approaching the FSWs directly if they were known to them previously by having been involved in other studies or using snowball methods.

The FSWs were asked the following screening questions strictly which helped researchers to confirm that they were FSWs: Whether they had ever experienced sex, whether they had had sexual relations with more than one person, the number of clients they had had, whether they sold sex for money or kind, the period of their involvement in the profession, the amount they earned from the profession, whether they had ever contracted STIs, when they had contact with the last client, whether they knew of any organizations working in the field of HIV/AIDS, whether anybody had given them education on HIV/AIDS and whether they recognized any peer educator.

In a few cases during the interview, the participants could not answer the questions (related to sex work) properly and the researchers went further to find out whether they were real FSWs or not. Only then did they deny that they were FSWs and admitted that they had come for treatment and money and other incentives. Nevertheless, the researchers screened the respondents at least twice and sometimes thrice during the process.

As the FSWs answered the questions without hesitation and the researchers became satisfied with the answers, they briefed them about the purpose and objectives of the study. Once the FSWs felt satisfied and convinced, the researchers took them to the clinic with their consent. Sometimes the researchers had no time or environment to explain the whole process related to the study and they requested the FSWs to go to the clinic where they were briefed in detail.

FSWs who had participated in this study in other clinics or in the same clinic some days before were excluded from the study. In order to prevent duplication, researchers were exchanged between the sites as per need.

Study team members coordinated with various local NGOs, namely, STD/AIDS Counseling and Training Services (SACTS), Women Acting Together for Change (WATCH), Community Action Center (CAC), General Welfare Pratisthan (GWP), etc., who were working with FSWs and clients in the study area was another point that contributed to the timely and successful completion of the study. A study site was set up in a locality for several days and female sex workers from the surrounding areas were recruited for participation. Recruitment was continued at each study site until the desired sample size was achieved.

Sex workers were enrolled after they were informed about the study and what they were required to do. An interviewer made sure that they understood fully what we were asking of them and what services they would be provided. Oral informed consent was administered by the interviewer in a private setting and witnessed by another staffer. Both the interviewer and the witness were required to sign the consent form and date it. The interviewer administered the standard questionnaire in a private room. It included topics relating to socio-demographic profile, sexual behavior and practices, number of partners and condom use and use of drugs. The interviewer issued a laminated ID card with a unique number to each respondent. The same number was used in the questionnaire, medical records and specimens of the particular respondent. The names and addresses of the respondents were not recorded anywhere. The interviewers provided HIV pre-test counseling regarding what an HIV/STI test meant and the ways to reduce risk. A clinician gave the participants pre-test counseling on HIV/AIDS and STIs and asked them if they were currently suffering from any symptoms of STI. They were also examined physically for any evidence of STI symptoms. If they had STI symptoms, the clinician counseled them accordingly. They were given free medicines for syndromic treatment on the basis of "National STI Case Management Guidelines 2001". Additionally, a one-month supply of vitamins and iron and Rs. 150 in cash as compensation for participating in the study were provided to the FSWs.

Clients: Clients were recruited from the pre-selected locations of client-sites. Both the FSWs and their male clients had to come from the same settings and locations. FSWs also helped the research team to identify their clients. It was easy to approach the clients because the FSWs were always hovering around them or searching for them.

When recruiting the clients, male researchers observed the activities going on the selected sites. Since the settings had already been identified with a particular number of clients during the estimation, the researchers had to identify and gather the required number by using various methods. They were as follows: Taking the help of FSWs,

asking key informants, observing the activities of suspected persons, chatting up the owners/workers of the hotels, restaurants, cabin restaurants, dance restaurants, *dohari* restaurants and discos, approaching them directly with the screening questionnaire or using snowball methods.

The following screening questions were asked strictly which helped the researchers to confirm that they were clients: Whether they had ever experienced sex with a woman, whether they had ever experienced sex with a sex worker and whether they had sex with a sex worker within the past year. After successful screening of the client, an interviewer administered the standard questionnaire in a private room. It included topics relating to socio-demographic profile, sexual behavior and practices, number of partners and condom use and use of drugs.

The approaches used to recruit street clients and establishment clients were quite similar. With regard to the street clients, the researchers used peers or friends of previously interviewed clients to seek other clients for interview. To cover different types of specific clients, the researchers went to places like bus parks where there were drivers and helpers and to *bhatti pasals* where they found different types of clients ranging from businessmen and government people to even teachers. The research team also took the help of FSWs who helped them a lot in finding clients at different types of sites. They had a lot of difficulty approaching clients on the street; hence, they had to adopt all kinds of strategies to observe their behavior. Sometimes, they would go to them and ask what time it was or ask them for a light and then slowly strike up a conversation about the health situation in the country, and then broach the subject of our program.

It was comparatively a bit easier approaching clients in cabin restaurants as the owners themselves were clients. The researchers took their help to approach different types of clients who were enjoying themselves. Some even came up on their own to talk to the researchers after they had briefed them about the program. These were effective approaches the researchers used in the cabin restaurants. In the dance and *dohari* restaurants, the researchers used the FSWs themselves to approach the clients. They were a big help at these types of establishments, as they themselves would convince the clients to talk to the researchers. The researchers also took the help of the bouncers at the dance restaurants to approach the clients there. The key to approaching the clients at these institutions was patience. The researchers had to spend a lot of time waiting, as the clients would be enjoying in their own world.

For the sampling process, the researchers had to screen them first by asking them different types of indirect questions related to their sexual activities (Annex B). First, in order to gain their confidence, the researchers had to make them understand that they were the same kind of people as they were and that it was natural to indulge in sexual activities. The researchers had to put a lot of cross-questions to be able to sample them as clients. In order to collect a greater variety of clients, they went to places where previous respondents had told them that they would find clients in great numbers. In such situations, the researchers first cross-questioned them and only took small samples. It was rather random sampling, which was the key to the sampling process.

It was observed that street clients were quite keen in talking to the researchers. They wanted to know more about HIV/AIDS and liked to share their experiences more than the educated people. The most common reasons for refusing to participate were lack of time and fear of their names being published in the media. Similarly, some clients did not even want to hear the word "HIV/AIDS" and did not show any interest in talking.

Due to the difficulty in finding actual clients, the researchers frequently approached FSWs first with the help of female team member friends and through them approached the clients. In the cabin, dance and disco restaurants, the researchers approached males who were teasing the waitresses, using slang words with them or fondling them. Their activities revealed that they were clients.

During the field period, the researchers observed a lot of the communication between FSWs and their clients in the street as they negotiated the price and venue for sex. Similarly, in other restaurants, they saw the same kind of negotiation being done between clients and waitresses/dancers. And after the restaurants closed, they watched whether they went to the waitresses'/dancers' homes or to the clients' homes.

Recruitment and Refusal

FSWs: Refusal to participate in the survey was carefully documented. Refusals were recorded at two stages: (1) At the time of approaching the FSWs at the different locations and (2) after arriving at the study site, i.e., during the final stage of recruitment. Altogether, 744 FSWs were approached through pimps and peer educators. Of the total FSWs approached, 500 agreed to participate in the study and 244 refused. Out of the 244 refusals, 74 showed lack of interest to participate in the study, 44 refused to expose themselves as sex workers, 39 did not meet the condition of sexual contact in the last six months, 35 had recently been tested for HIV, 20 were afraid to provide blood for testing and 20 had no time to participate in the study. Other reasons for refusing were objection of the hotel owner (7), pregnancy (3) and bleeding (2).

Clients: Similarly, 1,778 persons were approached as possible clients. Among them, 479 persons themselves admitted that they were clients. Out of these 479 clients, 29 had no time for interviews, 26 showed lack of interest and 20 were afraid that confidentiality would be broken. Other reasons were they had already given an interview to other researchers (3) and the client was drunk (1).

The fieldwork started on March 2, 2004 and was completed on April 13, 2004.

2.5 Research Instrument

The quantitative research approach was adopted in the study for both the FSWs and their clients. The structured questionnaire that was used earlier in the first BSS survey in the Kathmandu Valley with some additional questions was used to collect data. The questionnaire included demographic characteristics and sexual behaviors - sexual history, use of condoms, risk perception, awareness of HIV/AIDS/STIs, incidence of STI symptoms and alcohol/drug use habit (Annex C). Face-to-face personal interviews were conducted with the FSWs using a structured questionnaire. Apart

from the structured questionnaire, questions related to STI symptoms were asked of the FSWs by a staff nurse to check for presence of such symptoms. The study participants were provided syndromic treatment for STI problems and a lab technician collected blood samples for HIV and syphilis testing. The respondent's confidentiality was maintained.

The respondents were interviewed using a structured questionnaire and confidentiality of all the information collected was strictly maintained.

The researchers frequently practiced questionnaire conducting mock interviews during the training session. And based on these, some minor corrections were made to shape the questionnaire in an appropriate form.

2.6 Study Personnel

Study Team: The study team consisted of a project director, research officer and two research assistants and field teams as described below. The project director was responsible for the overall study. The research officer assisted the project director during all the stages of the study, including preparing the report, checking the data brought from the field, helping in coding when the data was being processed and helping in preparing the tables. Two research assistants were responsible for all the field activities which included making preliminary visits to the field sites to make the entire logistic arrangements, renting rooms to establish the lab, hiring local motivators, assisting the project director and research officer in training the field staff, supervising the field throughout the field period and making arrangements for test result provision.

Field Teams: Three research teams were formed for the FSW survey, each consisting of one male Research Assistant (RA), one male supervisor, three/four female interviewers, one Staff Nurse, one male Lab Assistant, one runner and local motivators (as per need). Field recruiters, here referred to as "motivators", and local NGO personnel who were working with the target populations were also included in the field team.

Similarly, four teams, each consisting of two male supervisors, were formed in Kathmandu. The field supervisors were responsible for proper administration of the questionnaire and adequate addressing of the participants' concerns and problems.

Motivators: Peer educators of local NGOs were used as motivators to motivate the participants and take them to the labs/clinics. Since sex work is not supported by law in Nepal, a trusted contact point/person such as a *dalal* was needed to reach the sex workers. These motivators were also mobilized in the community after the study in order to motivate them to collect their test results. The male researchers themselves played the role of motivator to motivate the clients to give interviews.

Male and Female Interviewers: The interviewers were responsible for further clarification of the study objectives and procedures and administration of the oral consent form. They interviewed the participants using a structured questionnaire. Moreover, the interviewers provided pre-test counseling to the FSWs. All the study team members were given pre-test counseling training before they went to the field.

Staff Nurse: The staff nurse (female) was responsible for examining the sex workers for STI and giving them medication if necessary.

Lab Assistants: The lab assistants were responsible for drawing blood and storing the serum samples. They had to label the blood samples properly before transporting them to the SACTS lab.

Field Supervisors: The field supervisors were responsible for overall management of the mobile team and laboratory. Their responsibilities included ensuring that the study procedures were properly followed, e.g., proper administration of the consent, appropriate handling of the specimens (labeled, stored and shipped to Kathmandu) and adequate addressing of the participants' concerns and problems.

Runners: The runners were responsible for disposing used or infected syringes everyday. They were responsible for sterilizing the needles, speculums and other lab and clinical equipment and proper cleaning of the lab/clinic sites as directed by the staff nurse and lab technician.

2.7 Recruitment and Training of Research Team

A total of 11 female interviewers, six male supervisors, three staff nurses, three lab technicians and three runners were hired for the FSW survey. Likewise, eight male supervisors were recruited for the client survey. When selecting field researchers for the study, priority was given to researchers who had been involved in similar types of studies previously like BSS and sero among FSWs, truckers, migrants, clients and IDUs.

A one-week intensive training was organized for all the field researchers focusing on introduction to the study, administration of the questionnaire including characteristics of the target groups, methods of approaching them, how to build rapport, breaking barriers and sharing previous experiences (problems and solutions). The training involved mock interviews, role-plays, class lectures, etc. Role-play practices were carried out assuming the actual field situation. Possible problems that could be faced while approaching FSWs and clients and ways of overcoming such problems were discussed. . The training also focused on the concept of informed consent and how to get consent from the study participants using the standard form developed for the study, pre-test counseling for the study participants and basic knowledge of HIV and STI.

2.8 Field Operation Procedures

Clinical Procedures

Once a study participant (female sex worker) was recruited, she was briefed thoroughly about the study. Then trained enumerators took her informed consent in the presence of a witness. After that she was administered a behavioral questionnaire. She was given a unique ID number that was written on the questionnaire. The study participant was given an ID card, which had her ID number. A staff nurse then examined her (Annex D).

Laboratory Methods

The Rapid Plasma Reagin (RPR) analysis with quantification was used to diagnose syphilis and the diagnosis was confirmed by a Treponema Pallidum Hemagglutination Assay (TPHA). The TPHA was performed on RPR non-reactive specimens to indicate past infection of syphilis. However, treatment was given to those individuals who were RPR and TPHA reactive.

HIV was detected by repeat positives of two separate enzyme linked immuno assays (ELISAs), so up to three separate tests were performed on each sample. First, the ELISA test was performed. If the result was negative, no more tests were done. If the first test result was positive, a second ELISA test was performed. If the second result was positive, no more tests were done and the test result was confirmed positive. If the second test result was negative, a third test was done. The final test results in these situations were as follows: Positive (if +ve, -ve, +ve) and Negative (if +ve, -ve, -ve). The proposed testing protocol is based on WHO guidelines (strategy 3) and the National VCT Guidelines of Nepal developed by the NCASC.

Storage and Transportation of Samples

The serum samples were stored at the SACTS laboratory maintaining the proper temperature. The specimens collected during the fieldwork in Kathmandu were handed over to the SACTS lab everyday.

Quality Control of Laboratory Tests

Quality control was implemented throughout the specimen collecting, handling and testing stages. All the tests were done using internal controls. These controls were recorded with all the laboratory data. A 10% sample of the total serum collected was submitted for quality control assurance to an independent laboratory for testing for HIV and syphilis. The samples were selected randomly and a quality control test was performed at two-week intervals by a different technician each time in the laboratory. The quality control samples were given a separate code number. This ensured that the person who performed the quality control had no access to the test results.

2.9 Coordination & Monitoring

Overall coordination of the study was done by New ERA. New ERA sub-contracted the lab portion of the study, including the clinical part that consisted of collecting and storing the samples and testing them, to SACTS, which was responsible for setting up a lab in the field.

The principal investigators conducted frequent monitoring of the field activities properly. New ERA study team members visited the field once or twice a week to monitor the activities and coordinated with various concerned organizations to make the study transparent and efficient. One field researcher and two senior field supervisors were responsible on a day-to-day basis to ensure that the study was implemented according to the protocol. Team meetings were held every week to move ahead or solve field level problems if any arose. The field supervisor reported to the senior supervisors or the project coordinator in Kathmandu by telephone

whenever necessary. New ERA coordinated with FHI as needed to send an appropriate person to the field to correct any problems reported. In addition, the principal investigators made periodic site visits throughout the fieldwork. The principal investigators, in conjunction other designated personnel, were responsible for the overall monitoring.

2.10 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 knew that their participation was voluntary and that they were free to withdraw at any time. Mid-term withdrawal did 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 and the benefits and confidentiality issues was read out to them (Annex E).

Since names and addresses were not mentioned in any record, only the ID cards would identify the study participants with their unique number. The participants who came with their ID number were told privately about the HIV results. The study team maintained confidentiality of the data. The social and cultural values of the research participants were respected.

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

The female study participants were provided pre-test counseling about their HIV and syphilis tests, and told how, 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 SACTS counseling centers. Trained HIV/STI counselors distributed the test results two weeks after blood collection (Annex F).

The study participants had the choice to get either the HIV result or the syphilis result or both. They were well informed during the pre-test counseling about their options.

2.12 Control of Duplication

The staff nurses were exchanged since they were more familiar with the participants. Further, the lab technicians, who also had to meet all the participants and thus knew every FSW, were told to be on the lookout for familiar faces, which helped to double crosscheck that the same FSWs were not appearing again and again in the program. The female interviewers were also exchanged to control duplication as per need during the study period.

The following screening questions were asked if the researchers suspected a participant: Has she had a blood test done? If yes, where and when? From which part of the body was the blood taken? Had she been tested for HIV or other diseases? Had

she gone with any peer educator to have her blood tested at that time? Did she have any ID card with a study number?

2.13 Constraints in the Field Work

Frequent "Nepal Bandhs" were a major constraint during the course of the study. They not only made it difficult for the researchers to go to the clinics but also discouraged and frightened away the FSWs from participating in the study. The FSWs would not appear at the prescribed locations one-two days before and after the bandh. Similarly, there was no proper environment for the female researchers to enter the cabin and dance restaurants and discos since their safety could not be guaranteed. The FSWs working in dance restaurants had to get permission from the restaurant owner who refused to allow them to take part in the study. The "Jana Andolan" in the Kathmandu Valley also affected our study, as it was difficult to approach the subjects. A few days after we started our work, many FSWs came repeatedly even though they already had their blood tests done at one of our other clinics.

With regard to approaching clients in the street, the main problem faced by the researchers was that whenever they stopped to talk to somebody, a whole crowd would gather around to listen to the conversation and it made their work really difficult. Regarding meeting clients in cabin restaurants, the researchers found it difficult getting the clients' attention as they would be engrossed in having fun with the waitresses. At the dance and *dohari* restaurants, the disturbance caused by the loud music prevented the researchers from communicating with the clients. Sometimes, the researchers were also harassed by drunken clients. Similarly, when they were waiting in the street to meet the clients, they would be approached by FSWs who wanted to sell their services. When the researchers said no and explained that they were waiting to interview their clients, the girls would get angry and tell them that they were scaring away their clients. Many clients who agreed to be interviewed seemed to be in a hurry and requested that it be completed as quickly as possible. Some clients misbehaved with the researchers when they approached them for an interview. They would be irritated that the researchers bothered them when they were having fun.

2.14 Data Processing and Analysis

All the completed questionnaires were checked by the field supervisors in the field for completeness, and were brought to New ERA for further checking, coding, processing, data entry and analysis. Using the double entry system minimized errors in the data. Simple statistical tools such as mean, median, frequency, percentages, etc. were used to analyze the data. The FoxPro database program was used for data entry and the data was analyzed using the SPSS package.

CHAPTER 3: FEMALE SEX WORKERS

This study categorized female sex workers (FSWs) into two types: Street and establishment-based FSWs. Altogether, 500 FSWs participated in the study – 200 street and 300 establishment-based. Since these two types were sampled independently, the analysis was carried out separately for each type. This chapter describes the characteristics, sexual behavior of the FSWs, prevalence of condom use and prevalence of HIV and syphilis among them.

Table 1 summarizes the residential status of the FSWs in Kathmandu and their birthplaces. Of the 200 street sex workers who were sampled for this study, 17.5% were born in the Kathmandu Valley, 78% had their birthplaces in other districts and 4.5% were born in India and other countries. Similarly, of the 300 establishment-based sex workers, 13.7% were from the Kathmandu Valley, 80% were born in other districts and 6.3% were born in India and other countries. Overall, 85% of the sex workers' birthplaces were other places than the Kathmandu Valley. Further, the table shows that 57.5-66.7% of the sex workers had been living in the Kathmandu Valley for less than five years. This indicates that most of the sex workers were migrants from other districts.

Table 1: Birthplace of Female Sex Workers

Variables	Street		Establishment		Total	
	N=200	%	N=300	%	N=500	%
Birth Districts						
Kathmandu Valley (Kathmandu, Lalitpur, Bhaktapur)	35	17.5	41	13.7	76	15.2
India	8	4.0	18	6.0	26	5.2
Hong Kong	1	0.5	0	0.0	1	0.2
Bhutan	0	0.0	1	0.3	1	0.2
Other Districts	156	78.0	240	80.0	396	79.2
No. of Years Living in Kathmandu Valley						
Since Birth	17	8.5	19	6.3	36	7.2
More than 120 months	37	18.5	29	9.7	66	13.2
61 months – 120 months	31	15.5	52	17.3	83	16.6
13 months – 60 months	71	35.5	117	39.0	188	37.6
Up to 12 months	32	16.0	74	24.7	106	21.2
Missing	12	6.0	9	3.0	21	4.2

3.1 Socio-Demographic Characteristics

The socio-demographic characteristics of the sample FSWs are summarized in Table 2. The median age of the sex workers was 26 (street FSWs) and 21 (establishment FSWs), with a majority of the sex workers being in the 15-29 age group.

In terms of ethnic group, 40% of the sex workers belonged to the Brahmin and Chhetri community. Tibeto-Burman communities (Tamang, Newar, Magar, Rai, Limbu and Gurung) made up 43% (street SWs) and 54% (establishment-based SWs). Occupational caste groups made up less than 5% and the rest belonged to other castes.

A higher proportion of the street sex workers (89%) was at least once married compared to the establishment sex workers (60%). One of the noteworthy characteristics of the sex workers is the higher divorce/separation rate. For example, 39.5% of the street sex workers and 27.7% of the establishment-based sex workers were divorced, separated or widowed. Another characteristic of the married sex

workers was that the husband had another wife. In the sample, 34.3% of the street sex workers and 23.7% of the establishment-based sex workers had a co-wife (husband's another wife).

Table 2: Socio-Demographic Characteristics of Female Sex Workers

Demographic Characteristics	Street		Establishment		Total	
	N	%	N	%	N	%
Age of respondent						
Up to 14	0	0.0	2	0.7	2	0.4
15 – 19	32	16.0	119	39.7	151	30.2
20 – 24	51	25.5	115	38.3	166	33.2
25 – 29	47	23.5	48	16.0	95	19.0
30 – 34	20	10.0	11	3.7	31	6.2
35 – 58	50	25.0	5	1.7	55	11.0
Mean/ Median Age:	-	27.9/26.0	-	21.4/21.0	-	24.0/22.0
Total	200	100.0	300	100.0	500	100.0
Education						
Illiterate	117	58.5	76	25.3	193	38.6
Literate, no schooling	16	8.0	29	9.7	45	9.0
Grade 1 – 5	38	19.0	94	31.3	132	26.4
Grade 6 – 9	20	10.0	86	28.7	106	21.2
SLC and Above	9	4.5	15	5.0	24	4.8
Total	200	100.0	300	100.0	500	100.0
Ethnic/Caste Group						
Brahmin	21	10.5	29	9.7	50	10.0
Chhetri/Thakuri	60	30.0	90	30.0	150	30.0
Newar	21	10.5	26	8.7	47	9.4
Tamang	31	15.5	68	22.7	99	19.8
Magar	12	6.0	26	8.7	38	7.6
Rai/Limbu	10	5.0	24	8.0	34	6.8
Gurung	12	6.0	19	6.3	31	6.2
Damai/Sarki/Kami/Sunar	7	3.5	7	2.3	14	2.8
Other (Chaudhari, Sherpa, Giri/Sanyasi, etc.)	26	13.0	11	3.7	37	7.4
Total	200	100.0	300	100.0	500	100.0
Marital Status						
Married	99	49.5	97	32.3	196	39.2
Divorced/Separated	71	35.5	78	26.0	149	29.8
Widowed	8	4.0	5	1.7	13	2.6
Never Married	22	11.0	120	40.0	142	28.4
Total	200	100.0	300	100.0	500	100.0
Husband Has Co-wife						
Yes	34	34.3	23	23.7	57	29.1
No	65	65.7	74	76.3	139	70.9
Total	99	100.0	97	100.0	196	100.0
Living Status of FSW						
Currently Married Sex Workers Living With Husband/Male Friend (n=99/97/196)	95	96.0	87	89.6	182	92.9
Unmarried Sex Workers Living With Male Friend (n=22/120/142)	0	0.0	4	3.3	4	2.8
Dependents of Sex Workers						
Yes	145	72.5	174	58.0	319	63.8
No	55	27.5	126	42.0	181	36.2
Total	200	100.0	300	100.0	500	100.0
Total Number of Dependents (Adults + Children)						
One	54	37.2	63	36.2	117	36.7
2 – 3	70	48.3	92	52.9	162	50.8
4 and more	21	14.5	19	10.9	40	12.5
Mean Number of Dependents:	-	2.2	-	2.1	-	2.2
Total	145	100.0	174	100.0	319	100.0

Illiteracy was higher among street sex workers (58.5%) than establishment-based sex workers (25.3%). 90 to 96% of the married sex workers were currently living with their husbands/male friends. More than half (53%) of the unmarried street sex workers tended to live with their female friends. Most of the divorced or separated sex workers (street and establishment-based) lived with their children, female friends or

alone. A very small proportion of the establishment-based sex workers (3.3%) were found to be living with male friends. More than 70% of the street sex workers and 58% of the establishment-based sex workers had economically dependent members in the family, with the mean number of dependents being 2.2 and 2.1 respectively.

The median age at which the sex workers were married for the first time was 16 for both the street and establishment-based sex workers, with a slightly greater number of street SWs (32.6%) as compared to establishment-based SWs (25%) being married before the age of 15 (Table 3).

Table 3: Sexual Behavior of Female Sex Workers

Sexual Behavior	Street		Establishment		Total	
	N	%	N	%	N	%
Age at First Marriage						
6 – 14	58	32.6	45	25.0	103	28.8
15 – 19	99	55.6	112	62.2	211	58.9
20 – 24	14	7.9	22	12.2	36	10.1
25 – 33	7	3.9	1	0.6	8	2.2
Mean/Median Age at First Marriage:	-	16.2/16.0	-	16.5/16.0	-	16.3/16.0
Total	178	100.0	180	100.0	358	100.0
Age at First Sexual Intercourse						
9 – 14	64	32.0	83	27.7	147	29.4
15 – 19	121	60.5	188	62.7	309	61.8
20 – 24	10	5.0	29	9.7	39	7.8
25 – 30	5	2.5	0	0.0	5	1.0
Mean/Median Age at First Sex:	-	16.0/16.0	-	16.2/16.0	-	16.1/16.0
Total	200	100.0	300	100.0	500	100.0
Duration of Sexual Exchange for Money						
6 – 12 months	73	36.5	159	53.0	232	46.4
13 – 24 months	47	23.5	90	30.0	137	27.4
25 – 36 months	31	15.5	23	7.7	54	10.8
37– 48 months	11	5.5	12	4.0	23	4.6
More than 48 months	38	19.0	16	5.3	54	10.8
Mean Months:	-	33.3	-	18.5	-	24.5
Total	200	100.0	300	100.0	500	100.0
Working as a SW from the Interview Location						
Up to 6 months	12	6.0	46	15.3	58	11.6
7 – 12 months	66	33.0	129	43.0	195	39.0
13 – 24 months	51	25.5	82	27.3	133	26.6
25 – 36 months	29	14.5	18	6.0	47	9.4
37 – 48 months	11	5.5	11	3.7	22	4.4
More than 48 months	31	15.5	14	4.7	45	9.0
Total	200	100.0	300	100.0	500	100.0
Ever Worked as a SW in Other Places						
Yes	18	9.0	21	7.0	39	7.8
No	182	91.0	279	93.0	461	92.2
Total	200	100.0	300	100.0	500	100.0
Worked in India as a SW						
Yes	6	3.0	3	1.0	9	1.8
No	194	97.0	297	99.0	491	98.2
Total	200	100.0	300	100.0	500	100.0
Coerced or on Own to India						
Coerced	3	50.0	1	33.3	4	44.4
On my own	3	50.0	2	66.7	5	55.6
Total	6	100.0	3	100.0	9	100.0
Duration of Sexual Exchange for Money in India						
Up to 6 months	4	66.7	2	66.7	6	66.7
7-12 months	2	33.3	1	33.3	3	33.3
Total	6	100.0	3	100.0	9	100.0

The sex workers in the sample population had been working in the sex trade earning payment in money or kind for between six months to 12 years. Those who had been working for less than six months were not interviewed because information on their

risk behavior history could not be obtained. The mean number of months of working as a sex worker was 33.3 for the street SWs and 18.5 for the establishment-based SWs. More than half of the establishment-based sex workers (53%) and 36.5% of the street sex workers had been in the sex trade for less than a year, indicating that more sex workers are entering the sex business.

Besides being migrant sex workers (as shown in Table 1) in the Kathmandu Valley, the FSWs moved from one place to another in the course of their work. They moved for different reasons, such as to hide their identities as sex workers or to avoid being apprehended by police during raids. Nearly one-tenth of the FSWs reported that they carried out their trade at a location other than where the interview was conducted. About 15.5% of the street sex workers and 4.7% of the establishment-based sex workers said that they had been living there for four or more years. And more than a third revealed that they had carried out the trade in other places too, including India, in the past.

More of the establishment-based sex workers (58.3%) than street sex workers (39%) had been working in the sex business in Kathmandu for less than a year. Only nine sex workers reported that they had worked for some time in India as sex workers.

3.2 Sex Workers, Their Clients and Sex Partners

3.2.1 Sex Workers and the Clients

Table 4 shows the number of clients (i.e., paying sex partners) a sex worker serves. It depends upon the types of sex workers. The street sex workers reported having an average of 5.9 clients during the past week, and the establishment-based sex workers reported it to be 4.1 per week. The sex workers worked 4.8 days per week (street) and 3.9 days per week (establishment-based) on average with an average of 1.4-1.8 clients per day (Table 4).

They were asked two separate questions regarding the number of clients on the previous day and the number of clients on the last day of sex to find out the number of clients each entertained in a day. The street sex workers reported an average of one client and the establishment-based sex workers reported less than one client on the previous day, with about 55% saying that they had no client at all on the previous day. The sex workers said that they entertained less than two clients on the last day of sex, with more than 71% saying they had one client that day. More than half of the sex workers said they had entertained their last client two days before the interview. Unlike in a brothel situation, the sex workers in the study population did not work everyday.

Table 4: Number of Clients Reported by Female Sex Workers

Number of Clients of Sex Workers	Street		Establishment		Total	
	N=200	%	N=300	%	N=500	%
Average Number of Clients Per Day						
One	117	58.5	219	73.0	336	67.2
Two	57	28.5	59	19.7	116	23.2
Three– Four	19	9.5	21	7.0	40	8.0
More then Four	7	3.5	1	0.3	8	1.6
Mean Clients per Day:	-	1.8	-	1.4	-	1.6
Number of Clients Visited Yesterday						
None	108	54.0	168	56.0	276	55.2
One	48	24.0	88	29.3	136	27.2
Two	30	15.0	33	11.0	63	12.6
Three – Four	11	5.5	11	3.7	22	4.4
More then Four	3	1.5	0	0.0	3	0.6
Mean Number of Clients Yesterday:	-	1.0	-	0.6	-	0.8
Number of Clients in the Past Week						
0	19	9.5	33	11.0	52	10.4
One	24	12.0	50	16.7	74	14.8
Two	26	13.0	43	14.3	69	13.8
3 – 4	52	26.0	74	24.7	126	25.2
5 – 10	59	29.5	83	27.7	142	28.4
More than 10	20	10.0	17	5.7	37	7.4
Mean Number of Clients in the Past Week:	-	5.9	-	4.1	-	4.8
Time of Last Sexual Contact						
On the Day of Interview	21	10.5	18	6.0	39	7.8
1 – 2 Days Before	116	58.0	170	56.7	286	57.2
3 – 5 Days Before	39	19.5	68	22.7	107	21.4
6 and More Days Before	24	12.0	44	14.7	68	13.6
Number of Clients on the Day of Last Sexual Contact						
One	143	71.5	248	82.7	391	78.2
Two	41	20.5	41	13.7	82	16.4
3 – 7	16	8.0	11	3.7	27	5.4
Mean Number of Clients on that Day:	-	1.5	-	1.2	-	1.3
Average Number of Days Worked in a Week						
One	17	8.5	55	18.3	72	14.4
Two	10	5.0	40	13.3	50	10.0
Three	32	16.0	55	18.3	87	17.4
Four to Seven Days	141	70.5	150	50.0	291	58.2
Mean Number of Days Worked in a Week:	-	4.8	-	3.9	-	4.3

3.2.2 Types of Clients

The types of clients as reported by the sex workers were mostly businessmen, people in government/private offices, transport workers and police/army personnel. Two separate questions were asked to find out the types of clients (Table 5). In the first question, the sex workers were asked about the types of clients who were the most frequent visitors. And in the second question, they were asked about the occupation of the last client. In response to both the questions, the most reported types of clients were similar.

Table 5: Types of Clients Reported by Female Sex Workers

Types of Clients	Street		Establishment		Total	
	N=200	%	N=300	%	N=500	%
Occupation of Most Frequent Clients						
Policeman/Soldier	87	43.5	115	38.3	202	40.4
Service Holder/Officer/Doctor	81	40.5	143	47.7	224	44.8
Businessman	76	38.0	189	63.0	265	53.0
Transport Worker/Driver	67	33.5	66	22.0	133	26.6
Migrant Worker/Wage Laborer	41	20.5	9	3.0	50	10.0
Contractor	19	9.5	13	4.3	32	6.4
Foreign Employee	17	8.5	18	6.0	35	7.0
Industrial Worker	12	6.0	7	2.3	19	3.8
Student	7	3.5	34	11.3	41	8.2
Unemployed	4	2.0	7	2.3	11	2.2
Hotel/Restaurant Owner	3	1.5	9	3.0	12	2.4
Tourist	1	0.5	20	6.7	21	4.2
Other (Guide, Guard, Politician, etc.)	23	11.5	36	12.0	59	11.8
Occupation of Last Client						
Service Holder/Officer/Doctor	34	17.0	55	18.3	89	17.8
Businessman	32	16.0	121	40.3	153	30.6
Policeman/Soldier	26	13.0	40	13.3	66	13.2
Migrant Worker/Wage Laborer	22	11.0	3	1.0	25	5.0
Transport Worker/Driver	19	9.5	23	7.7	42	8.4
Contractor	12	6.0	7	2.3	19	3.8
Foreign Employee	9	4.5	6	2.0	15	3.0
Industrial Worker	8	4.0	3	1.0	11	2.2
Student	3	1.5	13	4.3	16	3.2
Unemployed	1	0.5	7	2.3	8	1.6
Hotel/Restaurant Owner	0	0.0	7	2.3	7	1.4
Tourist	0	0.0	6	2.0	6	1.2
Other (Guide, Guard, Politician, etc.)	14	7.0	10	3.3	24	4.8
Don't Know	20	10.0	31	10.3	51	10.2

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

3.2.3 Sex Workers and Their Sex Partners

This section presents additional information on the number of sex partners the sex workers had inclusive of clients (i.e., paying sex partners). Since sexual transmission of infection depends on the number of sex partners, the total number of sex partners of the sex workers was sought. Non-paying partners included boyfriends and regular partners who did not pay for sex. Table 6 shows that about 52% of the sex workers had non-paying sex partners with a minimum of one to a maximum of 10. The mean number of non-paying partners was 0.6–0.7 (Table 6). The mean number of all sex partners (paying and non-paying) in the previous week was 6.6 for street sex workers and 4.7 for establishment-based sex workers (compared to the mean of 6.0 and 4.1 for paying sex partners).

Table 6: Sex Partners of Female Sex Workers

Sex Partners of Sex Workers	Street		Establishment		Total	
	N=200	%	N=300	%	N=500	%
No. of Paying Sex Partners in the Past Week						
0	17	8.5	33	11.0	50	10.0
1 – 2	54	27.0	94	31.3	148	29.6
3 – 5	71	35.5	98	32.7	169	33.8
6 – 10	38	19.0	58	19.3	96	19.2
More than 10	20	10.0	17	5.7	37	7.4
Mean (Paying Partners in the Past Week):	-	6.0	-	4.1	-	4.8
No. of Non-Paying Sex Partners in the Past Week						
0	97	48.5	142	47.3	239	47.8
1 – 2	96	48.0	157	52.3	253	50.6
3 – 10	7	3.5	1	0.3	8	1.6
Mean (Non-Paying Partners in the Past Week):	-	0.7	-	0.6	-	0.6
No. of Paying and Non-Paying Sex Partners in the Past Week						
0	10	5.0	20	6.7	30	6.0
1 – 2	48	24.0	83	27.7	131	26.2
3 – 5	70	35.0	108	36.0	178	35.6
6 – 10	50	25.0	63	21.0	113	22.6
More than 10	22	11.0	26	8.7	48	9.6
Mean (Paying and Non-Paying Partners in the Past Week):	-	6.6	-	4.7	-	5.4

3.3 Types of Sex Practiced by Sex Workers

Many studies on sex workers have reported that they were susceptible to violence or faced undesirable situations. Some of the situations they faced put them at risk of contracting STI. Such situations could be rape, anal sex, etc. In this study, the sex workers were queried if they had ever faced situations such as forceful demand for sex or demand for types of sex acts that were repugnant to them. Table 7 shows that more than 20% of both types of sex workers had faced forced sex in the past year. Twenty-six cases (5.2%) reported they had performed oral sex, another 10 cases (2%) had performed anal sex and 30 (6%) had been victims of rape. Nearly half (47.5%) of the street sex workers and 19% of the establishment-based sex workers reported that they had had to face clients who refused to pay for sexual services in the past six months (Table 7). The mean number of such incidents in the past six months was 3.8 for street sex workers and 2.5 for establishment-based sex workers.

Table 7: Types of Sex Practiced by Female Sex Workers

Type of Sex	Street		Establishment		Total	
	N=200	%	N=300	%	N=500	%
Forced Sex Act Demanded by Clients in the Past Year						
Yes	45	22.5	60	20.0	105	21.0
No	155	77.5	240	80.0	395	79.0
Types of Sex Acts Demanded Forcibly by Clients						
Rape	10	5.0	20	6.7	30	6.0
Oral Sex	3	1.5	4	1.3	7	1.4
Anal Sex	1	0.5	0	0.0	1	0.2
Hand Sex	0	0.0	1	0.3	1	0.2
No Such Incidents	186	93.0	275	91.7	461	92.2
Types of Sex Acts in the Past Year						
Oral Sex	9	4.5	17	5.7	26	5.2
Anal Sex	7	3.5	3	1.0	10	2.0
Hand Sex	1	0.5	8	2.7	9	1.8
Only Vaginal	183	91.5	272	90.7	455	91.0
Clients Refusing to Pay for Sexual Services						
Yes	95	47.5	57	19.0	152	30.4
No	105	52.5	243	81.0	348	69.6
Mean No. of Such Incidences in Past Six Months:	-	3.8	-	2.5	-	3.1

3.4 Income of Sex Workers

The reported income from sex work varies between street sex workers and establishment-based sex workers. These variations 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 the varying rates for married and uneducated sex workers compared to their educated and unmarried counterparts.

The mean income from the last sex with a client was Rs. 544 (street sex workers) and Rs. 968 (establishment-based sex workers) with a minimum of Rs. 50 per sex act to a maximum of Rs. 8,000 (Table 8). Both cash and gifts received by the sex workers have been taken into account when calculating the total income from sex work. It is a common custom for clients to offer dresses or cosmetics as gifts after sex.

The weekly mean income from sex work was Rs. 2,348 (street sex workers) and Rs. 2748 (establishment-based sex workers), with the incomes ranging from Rs. 100 to Rs. 11,000. Nearly half of the sex workers had an income of less than Rs. 2,000 per week. Two of the street sex workers had an income of more than Rs. 10,000 per week (Table 8).

Table 8: Income from Sex Work and Other Jobs

Income from Sex Work and Other Jobs	Street		Establishment		Total	
	N	%	N	%	N	%
Income from Last Time Sex with Client						
0	10	5.0	13	4.3	23	4.6
Up to Rs. 100	19	9.5	1	0.3	20	4.0
Rs. 101 – Rs. 500	111	55.5	91	30.3	202	40.4
Rs. 501 – Rs. 1,000	40	20.0	104	34.7	144	28.8
Rs. 1001 – Rs. 1,500	12	6.0	36	12.0	48	9.6
Rs. 1501 - Rs. 2,000	2	1.0	34	11.3	36	7.2
Rs. 2000 and above	6	3.0	21	7.0	27	5.4
Range: Rs	50-8,000		100-5,000		50-8,000	
Mean Income from Last Sex Work: Rs.	-	544	-	968	-	798
Total	200	100.0	300	100.0	500	100.0
Weekly Income From Sex Work						
Up to Rs. 1,000	56	28.0	36	12.0	92	18.4
Rs 1,001 – Rs. 2,000	52	26.0	106	35.3	158	31.6
Rs 2,001 – Rs. 3,000	43	21.5	63	21.0	106	21.2
Rs 3,001 – Rs. 4,000	22	11.0	46	15.3	68	13.6
Rs 4,001 – Rs. 5,000	12	6.0	21	7.0	33	6.6
Rs 5,001 – Rs. 10,000	13	6.5	28	9.3	41	8.2
More than Rs 10,000	2	1.0	0	0.0	2	0.4
Range: Rs.	150-11,000		100-9,500		100-11,000	
Mean Weekly Income from Sex Work: Rs.	-	2348	-	2748	-	2588
Total	200	100.0	300	100.0	500	100.0
Have Other Jobs Besides Sex Work						
Yes	125	62.5	290	96.7	415	83.0
No	75	37.5	10	3.3	85	17.0
Total	200	100.0	300	100.0	500	100.0
Types of Jobs besides Sex Work						
Wage Laborer	21	16.8	0	0.0	21	5.1
Waitress	19	15.2	209	72.1	228	54.9
Domestic Help	16	12.8	6	2.1	22	5.3
Peer Communicator in NGO	13	10.4	7	2.4	20	4.8
Laborer in Garment/Carpet Factory	13	10.4	1	0.3	14	3.4
Retail Shops	13	10.4	1	0.3	14	3.4
Owner of <i>Bhatti Pasal</i>	9	7.2	0	0.0	9	2.2
Worker in <i>Bhatti Pasal</i>	9	7.2	0	0.0	9	2.2
Service (Accountant, peon, etc.)	4	3.2	2	0.7	6	1.4
Masseuse in Massage Parlor	4	3.2	36	12.4	40	9.6
Dancer in Dance Restaurant	1	0.8	22	7.6	23	5.5
Owner of Cabin Restaurant	0	0.0	4	1.4	4	1.0
Other	4	3.2	9	3.1	13	3.1
Total	125	*	290	*	415	*

Table 8 Cont'd...

Average Weekly Income from Other Sources Besides Sex Work						
0 (No Other Source)	75	37.5	10	3.3	85	17.0
Up to Rs. 500	69	34.5	91	30.3	160	32.0
Rs. 501- Rs. 1,000	46	23.0	134	44.7	180	36.0
Rs. 1001 – Rs. 1,500	5	2.5	37	12.3	42	8.4
Rs. 1501 – Rs. 2,000	2	1.0	14	4.7	16	3.2
Rs. 2,000 and above	3	1.5	14	4.7	17	3.4
Range Rs.	40-4,000		200-7,000		40-7,000	
Mean Weekly Rs.:	-	631	-	943	-	849
Total	200	100.0	300	100.0	500	100.0

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

The sex workers were asked about their other jobs besides sex work. 97% of the establishment-based sex workers and 63% of the street sex workers do other types of work as well. Most of the establishment-based sex workers worked in restaurants as waitresses and some worked as masseuses in massage parlors and as dancers in dance restaurants. Street sex workers did all kinds of manual work. The detailed responses are shown in Table 8. The contribution from other types of work to their income is substantial. The mean income from these jobs was Rs. 631 (street sex workers) and Rs. 943 (establishment-based sex workers), with the incomes ranging from Rs. 40 to Rs. 7,000 per week.

3.5 Knowledge and Use of Condoms among Sex Workers

All the sex workers reported having heard of condoms. Radio and television were the important sources of knowledge of condoms for them, which accounted for 96% or more (Table 9) and more than 83% respectively. Other important sources of knowledge of condoms were pharmacies (82%), friends/neighbors, NGOs, billboards, cinema halls, hospitals and newspapers (Table 9).

Table 9: Sources of Knowledge of Condom

Knowledge and Source of Knowledge of Condoms	Street		Establishment		Total	
	N=200	%	N=300	%	N=500	%
Percentage who Have Heard of Condoms	200	100.0	300	100.0	500	100.0
Sources of Knowledge of Condoms:						
Radio	192	96.0	291	97.0	483	96.6
Television	167	83.5	265	88.3	432	86.4
Pharmacy	160	80.0	247	82.3	407	81.4
Friend/Neighbor	139	69.5	212	70.7	351	70.2
NGOs	133	66.5	167	55.7	300	60.0
Billboard/Signboard	101	50.5	154	51.3	255	51.0
Hospital	99	49.5	141	47.0	240	48.0
Newspaper/Poster	91	45.5	163	54.3	254	50.8
Cinema Hall	57	28.5	121	40.3	178	35.6
Health Post	48	24.0	58	19.3	106	21.2
Community Event/Training	42	21.0	27	9.0	69	13.8
Street Drama	37	18.5	42	14.0	79	15.8
Health Worker/Volunteer	37	18.5	27	9.0	64	12.8
Health Center	32	16.0	34	11.3	66	13.2
Comic Book	20	10.0	30	10.0	50	10.0
Video Van	18	9.0	13	4.3	31	6.2
Community Workers	12	6.0	8	2.7	20	4.0
Other	4	2.0	2	0.7	6	1.2

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

The sex workers reported having three different types of sex partners: (i) Paying partners, i.e., clients (ii) Regular partners, i.e., those who visited them on a regular basis and (iii) Non-paying partners, i.e., husband, boyfriends and cohabiting male friends. The following sections describe condom use with different sex partners.

Consistent use of condoms with non-paying partners is very low, indicating that regular use of condoms with familiar partners was low. Overall consistent use of condoms among the sex workers is low even after the advent of HIV/AIDS. Lower use of condom with regular sex partners such as husbands and non-regular sex partners such as boyfriends indicates that most of the sex workers decide on condom use from the family planning point of view.

3.5.1 Condom Use with Last Client

The reported use of a condom by sex workers when having sex with the last client was 80.5% (street sex workers) and 69.7% (establishment-based sex workers). Consistent use of a condom with clients was more than 56% in both groups of FSWs in the past year (Table 10).

3.5.2 Condom Use with Regular Client

70% of the sex workers reported having regular clients. Consistent use of condoms with clients and regular clients in the past year was nearly 60% (Table 10).

3.5.3 Condom Use with Non-Paying Partners

About two-thirds of the sex workers had non-paying sex partners in the past year. These non-paying partners were mostly persons known to them, such as boyfriend, husband or cohabiting sex partner. Only about 30% of the sex workers who said that they had non-paying sex partners reported that they used a condom with their non-paying partners during the last time they had sex. Table 10 below shows the frequency of condom use by sex workers with different sex partners during the past year. Consistent use of condoms was very low (about 18%) with non-paying partners, indicating that regular use of condoms with familiar partners was low.

Table 10: Condom Use with Different Types of Partners

Condom Use by Female Sex Workers	Street		Establishment		Total	
	N	%	N	%	N	%
Use of Condom with Last Client						
Yes	161	80.5	209	69.7	370	74.0
No	39	19.5	91	30.3	130	26.0
Total	200	100.0	300	100.0	500	100.0
Who Suggested Using a Condom with Last Client?						
Myself	86	53.4	83	39.7	169	45.7
My partner	59	36.6	99	47.4	158	42.7
Joint decision	16	9.9	27	12.9	43	11.6
Total	161	100.0	209	100.0	370	100.0
Consistent Use of Condom with the Client in the Past Year						
Every time	115	57.5	168	56.0	283	56.6
Most of the time	48	24.0	58	19.3	106	21.2
Sometimes	17	8.5	22	7.3	39	7.8
Rarely	3	1.5	7	2.3	10	2.0
Never	17	8.5	45	15.0	62	12.4
Total	200	100.0	300	100.0	500	100.0
Have Regular Client in the Past Year?						
Yes	137	68.5	215	71.7	352	70.4
No	63	31.5	85	28.3	148	29.6
Total	200	100.0	300	100.0	500	100.0
Consistent Use of Condom with Regular Clients in the Past Year?						
Every time	90	65.7	130	60.5	220	62.5
Most of the time	18	13.1	24	11.2	42	11.9
Sometimes	10	7.3	13	6.0	23	6.5
Rarely	3	2.2	6	2.8	9	2.6
Never	16	11.7	42	19.5	58	16.5
Total	137	100.0	215	100.0	352	100.0
Have Non-Paying Partner during Past Year?						
Yes	138	69.0	187	62.3	325	65.0
No	62	31.0	113	37.7	175	35.0
Total	200	100.0	300	100.0	500	100.0
Condom Use with Non-Paying Partner during Last Sex within Past Month						
Yes	40	33.3	53	30.5	93	31.6
No	80	66.7	121	69.5	201	68.4
Total	120	100.0	174	100.0	294	100.0
Consistent Use of Condom with Non-Paying Partner in the Past Year						
Every time	24	17.4	35	18.7	59	18.1
Most of the time	15	10.9	21	11.2	36	11.1
Sometimes	23	16.7	26	13.9	49	15.1
Rarely	10	7.2	15	8.0	25	7.7
Never	66	47.8	90	48.1	156	48.0
Total	138	100.0	187	100.0	325	100.0

3.6 Availability of Condoms and Their Brand Names

All the sex workers were asked whether they usually carried condoms with them. More street sex workers (30%) than establishment-based sex workers (4.7%) said they usually carried condoms. The field interviewers requested the sex workers to show the condoms they were carrying with them at the moment. More than 70% of those who said that they carried condoms were able to show them (Table 11).

More than half (51.5%) of the sex workers said that they could get condoms within five minutes from the place of their work (sex work). Only a few sex workers (less than 11%) said that it took more than 15 minutes to get them. According to a majority of the sex workers (more than 90%), they could get condoms from a pharmacy (Table 11). More than half of the street sex workers (54%) said they could get condoms from an NGO or health worker. Other places to get condoms were private clinics, retail

stores, friends/peers/health posts, etc. The sex workers were queried about the brand names of the condoms used most. The three most popular brands were Dhaal, Number 1 and Panther. A new brand of condoms – Number 1 – has become popular in a short of period of time after its introduction. It is the most popular brand among the establishment-based sex workers. Less than a quarter of the sex workers did not know the brand names of the condoms. There seemed to be a preference for certain brand names among the different categories of sex workers.

Table 11: Places to Get Condom and Brand Name of Most Used Condom Reported by Female Sex Workers

Condom Acquisition	Street		Establishment		Total	
	N	%	N	%	N	%
Do You Usually Carry Condoms with You?						
Yes	60	30.0	14	4.7	74	14.8
No	140	70.0	286	95.3	426	85.2
Total	200	100.0	300	100.0	500	100.0
No. of Condoms You are Carrying Right Now						
1	5	8.3	0	0.0	5	6.8
2	7	11.7	2	14.3	9	12.2
3 – 5	14	23.3	5	35.7	19	25.7
6 – 10	9	15.0	1	7.1	10	13.5
More than 10	9	15.0	5	35.7	14	18.9
Not carrying right now	16	26.7	1	7.1	17	23.0
Total	60	100.0	14	100.0	74	100.0
Time Needed to Obtain Condoms from Nearest Place						
Up to 5 minutes	103	51.5	167	55.7	270	54.0
6 – 10 minutes	54	27.0	92	30.7	146	29.2
11 – 15 minutes	20	10.0	22	7.3	42	8.4
16 – 20 minutes	10	5.0	11	3.7	21	4.2
21 and more minutes	9	4.5	7	2.3	16	3.2
Don't Know	4	2.0	1	0.3	5	1.0
Total	200	100.0	300	100.0	500	100.0
Places Where Condoms are Available						
Pharmacy	181	90.5	285	95.0	466	93.2
NGO/Health Workers/Volunteers	108	54.0	79	26.3	187	37.4
Hospital	48	24.0	92	30.7	140	28.0
General Retail Store (<i>Kirana Pasal</i>)	40	20.0	78	26.0	118	23.6
Private Clinic	22	11.0	42	14.0	64	12.8
Peer/Friends	27	13.5	29	9.7	56	11.2
<i>Paan</i> Shop	20	10.0	31	10.3	51	10.2
Health Post	12	6.0	12	4.0	24	4.8
Health Center	9	4.5	7	2.3	16	3.2
Bar/Guest House/Hotel	8	4.0	18	6.0	26	5.2
Family Planning Association of Nepal Clinic	5	2.5	1	0.3	6	1.2
Massage Center	2	1.0	15	5.0	17	3.4
Other	1	0.5	5	1.7	6	1.2
Don't Know	4	2.0	1	0.3	5	1.0
Total	200	*	300	*	500	*
Brand Names of Condoms Used Most						
Dhaal	92	46.0	61	20.3	153	30.6
Number 1	80	40.0	148	49.3	228	45.6
Panther	62	31.0	100	33.3	162	32.4
Kamasutra	33	16.5	44	14.7	77	15.4
Jodi	21	10.5	34	11.3	55	11.0
Saajan	5	2.5	10	3.3	15	3.0
Black Cobra	5	2.5	3	1.0	8	1.6
Beach	3	1.5	0	0.0	3	0.6
Brands Not Known	44	22.0	48	16.0	92	18.4
Not Used in the Past Year	17	8.5	44	14.7	61	12.2
Total	200	*	300	*	500	*

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

3.7 Knowledge of HIV/AIDS

Knowledge of HIV/AIDS among the sex workers in the Kathmandu Valley was high. Almost all of them had heard about HIV/AIDS. However, section 3.5 shows low use of condoms among FSWs in spite of their extensive knowledge of HIV/AIDS. This finding indicates a big gap between knowledge and behavior. This is an important issue to be addressed by BCC programs. Most of the sex workers reported that radio (94%) and television were the major sources of their knowledge of HIV/AIDS (Table 12). Other important sources of information were friends/relatives, people from NGOs, workplace, billboards, cinema halls, newspapers and pamphlets and posters.

Table 12: Sources of Knowledge of HIV/AIDS among Female Sex Workers

Ever Heard of an Illness Called AIDS?	Street		Establishment		Total	
	N=200	%	N=300	%	N=500	%
Yes	197	98.5	297	99.0	494	98.8
Sources of Knowledge of AIDS:						
Radio	185	93.9	280	94.3	465	94.1
Television	163	82.7	264	88.9	427	86.4
People from NGOs	134	68.0	171	57.6	305	61.7
Friends/Relatives	120	60.9	196	66.0	316	64.0
Workplace	91	46.2	176	59.3	267	54.0
Pamphlet/Poster	85	43.1	147	49.5	232	47.0
Newspaper/Magazine	74	37.6	144	48.5	218	44.1
Billboard/Signboard	74	37.6	122	41.1	196	39.7
Cinema Hall	51	25.9	101	34.0	152	30.8
Community Event/Training	43	21.8	25	8.4	68	13.8
Health Workers	39	19.8	40	13.5	79	16.0
Street Drama	29	14.7	40	13.5	69	14.0
Comic Book	23	11.7	40	13.5	63	12.8
School/Teacher	18	9.1	40	13.5	58	11.7
Video Van	17	8.6	16	5.4	33	6.7
Community Workers	11	5.6	11	3.7	22	4.5
Other Sources	5	2.5	4	1.3	9	1.8

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

3.7.1 Knowledge of Transmitting and Avoiding HIV/AIDS

The sex workers who had heard of HIV/AIDS were asked two questions regarding its transmission and prevention. Nearly 90% of them said that HIV/AIDS was transmitted by having sex without a condom, less than a quarter said having multiple sex partners and more than 40% said HIV/AIDS was transmitted through blood transfusion and by syringe/needle (Table 13).

Table 13: Knowledge of Ways of Transmitting HIV/AIDS among Female Sex Workers

Knowledge of Ways of Transmitting HIV/AIDS	Street		Establishment		Total	
	N=197	%	N=297	%	N=494	%
Percentage Who Said They Knew How HIV/AIDS was Transmitted	193	98.0	290	97.6	483	97.8
Ways of Transmitting HIV/AIDS:						
Sex without Condom	175	90.7	256	88.3	431	89.2
Having Sexual Intercourse	104	53.9	184	63.4	288	59.6
Syringe & Needle	87	45.1	123	42.4	210	43.5
Blood Transfusion	79	40.9	123	42.4	202	41.8
Multiple Sex Partners	41	21.2	71	24.5	112	23.2
Infected Mother to Baby	26	13.5	23	7.9	49	10.1
Other (Mosquito bite, Sharing meal with HIV infected)	6	3.1	5	1.7	11	2.3

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

More than 90% of the sex workers were of the opinion that using a condom could prevent HIV/AIDS. Similarly, more than one-third of the sex workers said that

avoiding blood transfusion, avoiding used needles and abstaining from sex could prevent HIV/AIDS. Other ways of preventing HIV/AIDS as reported by the sex workers were not having multiple sex partners, having one sex partner only and avoiding pregnancy by HIV-infected mothers (Table 14).

Table 14: Knowledge of Ways of Avoiding HIV/AIDS among Female Sex Workers

Knowledge of Avoiding HIV/AIDS	Street		Establishment		Total	
	N=197	%	N=297	%	N=494	%
Percentage Who Said They Knew How to Avoid HIV/AIDS	192	97.5	286	96.3	478	96.8
SWs' Responses Regarding Ways to Avoid HIV/AIDS						
Use Condoms	178	92.7	273	95.5	451	94.4
Avoid using Infected Needles	74	38.5	102	35.7	176	36.8
Abstain from Sex	73	38.0	103	36.0	176	36.8
Avoid Blood Transfusions	60	31.3	96	33.6	156	32.6
Avoid Multiple Sex Partners	29	15.1	50	17.5	79	16.5
Have Only One Sex Partner	27	14.1	57	19.9	84	17.6
Taking Only Tested Blood	13	6.8	5	1.7	18	3.8
Avoid Sex with Sex Worker	5	2.6	4	1.4	9	1.9
Avoid Pregnancy by HIV/AIDS-Infected Mother	2	1.0	3	1.0	5	1.0
Other (Avoid kissing, avoid sex with HIV-infected)	5	2.6	6	2.1	11	2.3

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

Table 15 shows the extent of knowledge of **ABC** for avoiding HIV/AIDS. 38% of the street sex workers and 36% of establishment-based sex workers reported **A** (abstinence from sex), 22.4% of the street sex workers and 31.1% of the establishment-based sex workers mentioned **B** (being faithful or avoiding multiple sex partners) and more than 90% of both types sex workers reported **C** (consistent condom use or use of condom during every sex act) as being one of the ways of avoiding HIV/AIDS. But all the three knowledge responses (**ABC**) were cited by less than 10% of the sex workers.

Table 15: Percentage of FSWs Who Have Knowledge of Three Major Ways of Avoiding HIV/AIDS

Percentage Who have Knowledge of ABC for Avoiding HIV/AIDS	Street		Establishment		Total	
	N=192	%	N=286	%	N=478	%
A (Abstinence)	73	38.0	103	36.0	176	36.8
B (Being faithful to single sex partner or having single sex partner)	43	22.4	89	31.1	132	27.6
C (Consistent use of condom while having sex with all partners)	178	92.7	273	95.5	451	94.4
Knowledge of all the three (ABC)	13	6.8	27	9.4	40	8.4

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

3.8 Access to FHI/Nepal Messages

From the time FHI started intervention programs along the highways to bring awareness about HIV/AIDS among high-risk groups of people, various messages regarding the use of condoms for the prevention of AIDS were broadcast and put up on elevated boards. Different media channels were utilized to broadcast the messages. FHI broadcast new messages on HIV/AIDS through various media in the Kathmandu Valley. New TV and radio messages were broadcast. Similarly, posters depicting various messages along with visual characters were posted at different places, such as health posts and roadsides. All of them are catching on fast. Table 16 below gives the FHI messages and shows what proportion of the sex workers said they had seen or heard the messages. The figures are encouraging because they show that they have reached the targeted population. For example, more than 94.5% of the sex workers reported having seen the new message "*Condom Kina Ma Bhaya Hunna Ra*". Other responses are shown in Table 16.

Table 16: Seen/Heard FHI Character/Message in the Past Year by Female Sex Workers

Heard/Seen/Read the Following Messages/Characters in Past One Year	Street		Establishment		Total	
	N=200	%	N=300	%	N=500	%
<i>Condom Kina Ma Bhaya Hunna Ra</i>	189	94.5	285	95.0	474	94.8
<i>Jhilke Dai Chha Chhaina Condom</i>	183	91.5	287	95.7	470	94.0
<i>Youn Rog Ra AIDS Bata Bachmalai Rakhnu Parchha Sarbatra Paine Condom Lai</i>	170	85.0	262	87.3	432	86.4
<i>Ramro Sangha Prayog Gare Jokhim Huna Dinna Bharpardo Chhu Santosh Dinchhu Jhanjat Manna Hunna</i>	166	83.0	259	86.3	425	85.0
<i>Condom Bata Suraksha, Youn Swasthya Ko Raksha</i>	157	78.5	248	82.7	405	81.0
<i>HIV/AIDS Bare Aajai Dekhi Kura Garau</i>	157	78.5	246	82.0	403	80.6

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

A majority of the sex workers (92%) said they understood the message as “Use condom against AIDS” (Table 17).

Table 17: Message Understood by Female Sex Workers

Meaning of Message to the Sex Workers as	Street		Establishment		Total	
	N=200	%	N=300	%	N=500	%
Use Condom Against AIDS	184	92.0	276	92.0	460	92.0
Use Condom Against STI	130	65.0	181	60.3	311	62.2
Use Condom for Family Planning	62	31.0	98	32.7	160	32.0
Don't Know	0	0.0	1	0.3	1	0.2

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

Table 18 presents data on IEC materials and condoms received by the sex workers. As an awareness-raising program, the implementing partners of FHI distributed condoms, brochures, booklets and information on AIDS in Kathmandu. More street sex workers (61%) than establishment-based sex workers (54%) reported that people from NGOs visited them to give them information about HIV/AIDS and condoms. More than 87% of the street sex workers and about 62% of the establishment-based sex workers admitted receiving condoms from field workers. About half of the establishment-based sex workers and more than a third of the street sex workers said they had received IEC materials on HIV/AIDS (Table 18).

Table 18: IEC Materials and Condom Received by Female Sex Workers

Visits to Sex Worker by NGO/Organization Personnel in the Past Year	Street		Establishment		Total	
	N	%	N	%	N	%
Yes	122	61.0	162	54.0	284	56.8
No	78	39.0	138	46.0	216	43.2
Total	200	100.0	300	100.0	500	100.0
Name of NGOs/Organizations Visiting FSWs						
Women Acting Together for Change (WATCH)	84	68.9	35	21.6	119	41.9
Community Action Center (CAC)	12	9.8	8	4.9	20	7.0
STD/AIDS Counseling and Training Services (SACTS)	5	4.1	0	0.0	5	1.8
General Welfare Pratisthan (GWP)	3	2.5	80	49.4	83	29.2
Life Giving and Life Saving Society (LALS)	1	0.8	0	0.0	1	0.4
Maiti Nepal	1	0.8	0	0.0	1	0.4
Mukti Nepal	1	0.8	0	0.0	1	0.4
Name Not Known	18	14.8	42	25.9	60	21.1
Total	122	*	162	*	284	*
Materials Received from NGO/Organization Personnel						
Condom	107	87.7	101	62.3	208	73.2
IEC Material	44	36.1	80	49.4	124	43.7
Cap	2	1.6	1	0.7	3	1.1
Watch	2	1.6	0	0.0	2	0.7
Medicine	0	0.0	1	0.7	1	0.4
Others	1	0.8	3	1.9	4	1.4
Not Received Anything	12	9.8	27	16.7	39	13.7
Total	122	*	162	*	284	*

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

Four non-governmental organizations, namely, Women Acting Together for Change (WATCH), General Welfare Pratisthan (GWP), Community Action Center (CAC) and STI/AIDS Counseling and Training Services (SACTS) were most cited by the sex workers as keeping in touch with them. Nearly 70% of the street sex workers reported that peer educators from WATCH visited them, and 50% of the establishment sex workers said that peer educators from GWP had visited them.

3.9 Knowledge and Treatment of Sexually Transmitted Infections (STIs)

Sex workers are susceptible to contagious diseases due to the nature of their work, which involves physical contact with sex partners. Most of the STIs are transmitted through genital contact. This kind of transmission could be minimized if their clients were made to wear condoms while having sex with them. To know the extent of the problem of STI and how the sex workers perceived it, they were queried if they had STI symptoms during the past year. The sex workers were asked what they understood by sexually transmitted disease (in Nepali *Youn Rog*). For about 50% of the sex workers, STI meant white discharge/discharge of pus/*Dhatu*; and for more than 30% of the sex workers, it was blisters and ulcer around the genitals. Some of the sex workers gave responses that were not symptoms of STI (Table 19). When asked about the symptoms of STI in the past year, 45.5% of the street sex workers and 38% of the establishment sex workers reported what they thought were symptoms of STIs, like discharge of pus/white discharge, sores around the genitals, pain inside the vagina during intercourse, dysuria, polyuria, lower abdominal pain, etc. (Table 19). Those who reported suffering from STI in the past year said that their places of choice for treatment were NFCC, private clinic, hospital and pharmacy (Table 19).

Table 19: Reported STI and Treatment

Perception of STI and Reported STI Symptoms and Treatment Among the Sex Workers	Street		Establishment		Total	
	N	%	N	%	N	%
SWs' Understanding of STI						
White Discharge/Discharge of Pus/ <i>Dhatu</i> flow	100	50.0	149	49.7	249	49.8
Blisters and Ulcers Around Vagina	70	35.0	88	29.3	158	31.6
Itching in Vagina	56	28.0	79	26.3	135	27.0
Lower Abdominal Pain	24	12.0	49	16.3	73	14.6
Syphilis (<i>Bhiringi</i>)/Gonorrhea	23	11.5	24	8.0	47	9.4
AIDS/HIV	15	7.5	10	3.3	25	5.0
Burning Sensation when Passing Urine	3	1.5	8	2.7	11	2.2
Swelling of Vagina	2	1.0	2	0.7	4	0.8
Pain in Vagina	1	0.5	0	0.0	1	0.2
Bleeding	1	0.5	0	0.0	1	0.2
Don't know	50	25.0	85	28.3	135	27.0
Others (Fever, Weakness, Body itching)	9	4.9	13	4.3	22	4.4
Total	200	*	300	*	500	*
Types of STI Symptoms Experienced in the Past Year						
Lower Abdominal Pain	49	24.5	64	21.3	113	22.6
Painful Sex	44	22.0	55	18.3	99	19.8
Vaginal Itching	44	22.0	46	15.3	90	18.0
Vaginal Odor	40	20.0	44	14.7	84	16.8
Dysuria	30	15.0	28	9.3	58	11.6
Vaginal Discharge	27	13.5	28	9.3	55	11.0
Genital Ulcer or Sore	24	12.0	24	8.0	48	9.6
Polyuria	21	10.5	16	5.3	37	7.4
Unusual Vaginal Bleeding (Discharge)	9	4.5	12	4.0	21	4.2
Genital Warts	3	1.5	0	0.0	3	0.6
Other	2	1.0	5	1.7	7	1.4
Any of the Above Symptoms	91	45.5	114	38.0	205	41.0
None of the Above Symptoms	109	54.5	186	62.0	295	59.0
Total	200	*	300	*	500	*

Table 19 Cont'd...

Treatment of STI Symptoms in the Past Year						
Nepal Fertility Care Center (NFCC)	16	30.8	12	20.3	28	25.2
Hospital	10	19.2	10	16.9	20	18.0
Private Clinic	8	15.4	8	13.6	16	14.4
Pharmacy	7	13.5	14	23.7	21	18.9
Community Action Center (CAC)	4	7.7	2	3.4	6	5.4
Women Acting Together for Change (WATCH)	3	5.8	4	6.8	7	6.3
Self Treatment	2	3.8	0	0.0	2	1.8
General Welfare Pratisthan (GWP)	1	1.9	4	6.8	5	4.5
Association of Medical Doctors of Asia (AMDA) Clinic	1	1.9	3	5.1	4	3.6
Family Planning Association of Nepal (FPAN)	1	1.9	1	1.7	2	1.8
STD/AIDS Counseling and Training Services (SACTS)	1	1.9	0	0.0	1	0.9
Other	3	5.8	4	6.8	7	6.3
Total	52	*	59	*	111	*

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

3.10 Use of Alcohol and Drugs

The questionnaire had a series of questions regarding the use of alcohol and oral and injecting drugs. A majority of the sex workers (76%) reported consumption of alcohol sometimes during the past year. More than 35% of the sex workers admitted that they took alcohol on a daily basis. Others drank less frequently (Table 20). Six percent of the establishment-based sex workers and two percent of the street sex workers had tried drugs, including injecting drugs. On further exploration regarding the use of injecting drugs, following were noted among the sex workers.

Table 20: Use of Alcohol and Drugs among Female Sex Workers

Consumption of Alcohol and Drugs	Street		Establishment		Total	
	N=200	%	N=300	%	N=500	%
Consumption of Alcohol						
On a Daily Basis	72	36.0	119	39.7	191	38.2
Once a Week	56	28.0	77	25.7	133	26.6
Less than Once a Week	29	14.5	33	11.0	62	12.4
Never	43	21.5	71	23.7	114	22.8
Tried Any Types of Drugs?						
Yes	4	2.0	18	6.0	22	4.4
No	196	98.0	282	94.0	478	95.6

Nearly 16% of the 200 street sex workers and 13.3% of the 300 establishment sex workers said that they knew someone who injected drugs. The relationship of the sex workers with injecting drug users was friend, relative, client, husband or local boys. Some of the sex workers admitted that their sex partners were known to be injecting drug users. About one percent of the sex workers had a history of injecting drugs (Table 21).

Table 21: Knowledge of IDUs and History of Injecting Drugs among Female Sex Workers

Use of Injecting Drugs	Street		Establishment		Total	
	N	%	N	%	N	%
Know Injecting Drug Users (IDUs)						
Yes	31	15.5	40	13.3	71	14.2
No	169	84.5	260	86.7	429	85.8
Total	200	100.0	300	100.0	500	100.0
Relationship with Known IDUs						
Friend	21	67.7	30	75.0	51	71.8
Local Boys	3	9.7	2	5.0	5	7.0
Relative	4	12.9	2	5.0	6	8.5
Client	1	3.2	3	7.5	4	5.6
Husband	2	6.5	1	2.5	3	4.2
Other	1	3.2	2	5.0	3	4.2
Total	31	*	40	*	71	*
Sex Workers' Knowledge of Following People Who are IDUs						
Sex Partners Including Clients (n=200/300/500)	9	4.5	16	5.3	25	5.0
Husband (n=99/97/196)	2	2.0	1	1.0	3	1.5
Regular Partners (n=137/215/352)	2	1.5	2	0.9	4	1.1
Clients (n=200/300/500)	8	4.0	15	5.0	23	4.6
Injecting History of Sex Workers						
Injected in Past 12 Months (n=200/300/500)	2	1.0	4	1.3	6	1.2
Usually Get Needle/ Syringe (n=2/4/6)						
From Friend/Relative After Their Use	0	0.0	1	25.0	1	16.7
Used New Needle/Syringe Given by NGO Volunteer	2	100.0	0	0.0	2	33.3
Used Needle/Syringe Which I Purchased	0	0.0	3	75.0	3	50.0
Ever Exchanged Sex for Drugs (n=200/300/500)	2	1.0	3	1.0	5	1.0
Ever Exchanged Sex for Money to Buy Drugs (n=200/300/500)	3	1.5	6	2.0	9	1.8

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

3.11 HIV and Syphilis Prevalence among Female Sex Workers

Among the 200 street FSWs and 300 establishment-based FSWs who participated in the study by providing blood, two percent of both types of sex workers (4/200 street sex workers and 6/300 establishment sex workers) were found to be HIV positive. Nearly 18% (35/200) among the street sex workers and 6.3% (19/300) among the establishment-based sex workers were found to be currently infected with syphilis. Altogether, 27% of the street sex workers (54/200) and seven percent (20/300) of the establishment sex workers had a history of syphilis. Similarly, the number of sex workers with syphilis and/or HIV is greater among the street sex workers. Table 22 provides a detailed picture of the prevalence of HIV and syphilis for which tests were done among the FSWs taking part in the study.

Table 22: HIV and STI Prevalence among Female Sex Workers

STI Infection	Street		Establishment		Total	
	N=200	%	N=300	%	N=500	%
HIV	4	2.0	6	2.0	10	2.0
Active Syphilis	35	17.5	19	6.3	54	10.8
Syphilis History	54	27.0	20	6.7	74	14.8
Any HIV or Active Syphilis	36	18.0	25	8.3	61	12.2

3.12 Association of HIV with Socio-Demographic, Behavioral and STI Variables

There is little association between HIV and socio-demographic or risk behavior variables such as condom use and the number of clients served per day. As can be seen in Table 22, HIV infection by categories such as age, educational level and marital status differ slightly, but that is not statistically significant as it is less than the minimum five percent level of significance.

Tables 23 and 24 show that HIV is associated with the number of years of work as a sex worker among the street sex workers. All the HIV-infected individuals among the establishment sex workers were married and were infected with syphilis. Due to the low prevalence of HIV among the sex workers, the sample size is not enough to give a clear picture of the association between HIV and risk variables or demographical variables.

Table 23: Relationship between HIV and Demographic, Behavioral Variables and STIs

Variables	Street			Establishment		
	N=200	HIV	%	N=300	HIV	%
Age						
<20 years old	32	2	6.3	121	2	1.7
>=20 years old	168	2	1.2	179	4	2.2
Educational Level						
Illiterate and literate with no schooling	133	3	2.3	105	3	2.9
Schooling (Grades 1 to 10 and above SLC)	67	1	1.5	195	3	1.5
Marital Status					*	
Ever Married	178	3	1.7	180	6	3.3
Never married	22	1	4.5	120	0	0.0
Years of Sex Work						
< 2 years	103	3	2.9	224	4	1.8
> =2 years	97	1	1.0	76	2	2.6
Sex Work in India						
Yes	6	0	0.0	3	0	0.0
No	194	4	2.1	297	6	2.0
Worked in Mumbai						
Yes	2	0	0.0	0	0	0.0
No	4	0	0.0	3	0	0.0
Active Syphilis		*				
Yes	35	3	8.6	19	0	0.0
No	165	1	0.6	281	6	2.1
Syphilis History						
Yes	54	2	3.7	20	0	0.0
No	146	2	1.4	280	6	2.1

* Denotes the significant difference ($p < .05$)

Table 24: Association between STIs and Demographic Behavioral Variables

Variables	N=200	Street		N=300	Establishment	
		Active Syphilis			Active Syphilis	
		n	%		n	%
Age						
<20 years old	32	2	6.3	121	4	3.3
> = 20 years old	168	33	19.6	179	15	8.4
Educational Level						
Illiterate and literate with no Schooling	133	26	19.5	105	10	9.5
Schooling (Grades 1 to 10 and above SLC)	67	9	13.4	195	9	4.6
Marital Status						
Ever married	178	33	18.5	180	13	7.2
Never married	22	2	9.1	120	6	5.0
Years Worked as Sex Worker		*				
<2 years	103	12	11.7	224	13	5.8
> = 2 years	97	23	23.7	76	6	7.9

* Denotes the significant difference ($p < .05$)

CHAPTER 4: THE CLIENTS

Four hundred clients of sex workers were recruited for collecting information on background characteristics, sexual behavior, knowledge and use of condoms and knowledge about HIV/AIDS. Reliable information on the most likely male population groups that often visit sex workers was not available. The information gathered by this baseline survey could be utilized to find out potential client groups for future surveillance.

The clients were selected through a systematic process so that different types of clients were enlisted proportionately on the basis of the frequency of visits to sex workers. This was challenging work in the beginning. Clients were not easily identified. The field workers needed to be bold to ask people if they ever visited sex workers. Three screening questions were developed to identify the proper clients. The eligibility criteria for inclusion of the screened individual in the study were that he must have had at least one sexual contact with sex workers in the past year.

The main assumption was that clients could be found in places which sex workers frequent or where they work, such as dance restaurants, cabin restaurants, discos, *bhatti pasals* and street corners where sex workers solicit clients. To recruit different types of clients in the sample, they were recruited from the same sites/establishments where the sex workers were sampled. In this way, it was ensured that all types of clients were recruited from different locations, sites and establishments. The number of clients selected from each site was proportionate to the number of sex workers selected from there. If the required number of clients was not available for interview at the selected site, the remaining clients were interviewed from adjoining areas. It took about six weeks for the eight field workers to complete the interviews with 400 clients.

4.1 Socio-Demographic Characteristics of Clients

Out of the 400 clients of sex workers interviewed for the study, about two-thirds (67.3%) were below the age of 30, with the median age being 26. The ages ranged from 14 to 55. Slightly more than half (53.8%) of the clients were married or had once been married. About one-fourth (27%) of the clients in the sample reported living with their wives and children. Similarly, two out of 10 clients were living alone. Among the currently married clients, more than half (54%) were living with their wives. The percentage of currently married clients who always stayed with their wives during an average month was 38.7% (Table 25). Almost three in five (61.3%) clients were away from their families for some time in a month. The duration of absence ranged from less than a week (13.7%) to 30 days in a month (1%).

Table 25: Demographic Characteristics of the Clients

Demographic Characteristics	N	%
Age		
14	1	0.3
15 – 19	41	10.3
20 – 24	126	31.5
25 – 29	101	25.3
30 – 34	71	17.8
35 – 39	36	9.0
40 – 55	24	6.0
Mean/Median Age:	-	26.8/26
Marital Status		
Married	204	51.0
Divorced/Separated	4	1.0
Widower	7	1.8
Never Married	185	46.3
Currently Living With		
Wife and Children (Spouse)	108	27.0
With Parents	68	17.0
With Friends	110	27.5
With Relatives	34	8.5
Alone	80	20.0
No Response	0	0.0
Total	400	100.0
Currently Living With Wife		
Yes	110	53.9
No	94	46.1
Average Days Away From Wife in a Month		
Up to 7 Days	28	13.7
8 – 14 Days	10	4.9
15 – 21 Days	10	4.9
22 – 29 Days	75	36.8
30 and more days	2	1.0
Always with Wife	79	38.7
Total	204	100.0

A majority of the clients (93.2%) were literate. Moreover, almost half of them had SLC and higher education (Table 26). The survey indicates that 13% of the clients had an education up to bachelor level (data not shown).

Table 26: Social Characteristics of the Clients

Social Characteristics	N=400	%
Literacy		
Illiterate	27	6.8
Literate, no schooling	6	1.5
Grade 1 – 5	63	15.8
Grade 6 – 9	116	29.0
SLC and Above	188	47.0
Ethnic/Caste Group		
Chhetri/Thakuri	119	29.8
Newar	65	16.3
Brahmin	53	13.3
Tamang	48	12.0
Magar	28	7.0
Rai/Limbu	20	5.0
Gurung	19	4.8
Terai caste	16	4.0
Sherpa	8	2.0
Kami/Sunar	8	2.0
Giri/Sanyasi/Puri	4	1.0
Others	12	3.0
Birthplace		
Eastern Region of Nepal	75	18.8
Central Region of Nepal	247	61.8
Western Region of Nepal	37	9.3
Mid-Western Region of Nepal	34	8.5
Far-Western Region of Nepal	3	0.8
Other (India, Bhutan, etc.)	4	1.0

Table 26: Cont'd...

Place of Residence before Moving to Kathmandu		
Eastern Region of Nepal	70	17.5
Central Region of Nepal	153	38.3
Western Region of Nepal	39	9.8
Mid-Western Region of Nepal	34	8.5
Far-Western Region of Nepal	1	0.3
Always Lived In Kathmandu	96	24.0
Other (India, Qatar, Dubai, etc.)	7	1.8
Duration of Stay in Kathmandu		
Up to one year	43	10.8
2 – 5 Years	151	37.8
More than 5 Years	110	27.5
Since Birth	96	24.0
Median Months:	-	48

All major ethnic/caste groups of Nepal were found among the clients of FSWs. The birthplaces of 62% of the clients were in the Central Region of Nepal. About one-fifth (19%) and about one-tenth (9%) were born in the Eastern and Western Regions respectively. The data indicates that many of the clients were migrants to Kathmandu from other districts. Responding to the question, “Where did you live before coming to Kathmandu?” about 24% of the clients responded that they had always lived in the Kathmandu Valley, implying that almost three-fourths of the clients were migrants to the Kathmandu Valley. More than a fourth (27.5%) of the clients who were migrants had been living in Kathmandu for more than five years. The median period of living in Kathmandu was 48 months (Table 26).

4.2 Occupations and Workplaces of Clients

One-third (33%) of the clients in the sample were service holders in government or private offices. Similarly, 29% of the clients were businessmen, about 14% were wage laborers, about seven percent were students and four percent were drivers. The clients’ workplaces varied widely. The reported places of work were hotel/restaurant (15%), vehicle-related establishment (11%), grocery shop (10%) and government office (6.5%). Some other workplaces reported by the clients were travel/manpower businesses, industries, garment/carpet factories, private offices and so forth (Table 27).

Table 27: Occupations and Workplaces of the Clients

Occupation and Workplaces	N =400	%
Occupation		
Service	133	33.3
Business	118	29.5
Wage Laborer	55	13.8
Student	29	7.3
Driver	16	4.0
Contractor of building house/road	10	2.5
Industrial Worker	5	1.3
Not Engaged in Any Job	24	6.0
Other (Foreign Employed, Barber, etc.)	10	2.5
Workplace		
Hotel/Restaurant/ <i>Bhatti Pasal</i>	60	15.0
Vehicle related (Driver/Conductor etc)	44	11.0
Grocery Shop	40	10.0
Government Office	26	6.5
Travel/Manpower Agency	18	4.5
Industry	16	4.0
Garment/Carpet Factory	12	3.0
Private Office	11	2.8
Wage Laborer	11	2.8
<i>Ghumti</i> /Retail Shop	10	2.5
Vegetable/Fruit Vendor	8	2.0
No Work	53	13.3
Other (Contractor, Wholesaler, etc.)	91	22.7

4.3 Sexual Behavior of Clients

The median age of the clients at first sexual intercourse was 17 years. They had visited an average of five sex workers in the past year. The number of sex workers visited ranged from one to 65. Around two-thirds (64.3%) had visited sex workers more than twice in the past year. The frequency of sexual contact with sex workers in the past month was reported to be about two times. About half (48%) of the clients had not visited sex workers in the past month. A majority of the clients (90.5%) admitted that their latest encounter with a sex worker happened in the past three months (Table 28).

Table 28: Sexual Behavior of the Clients

Sexual Behavior	N=400	%
Age at First Sex		
10 – 14	46	11.5
15 – 19	270	67.5
20 – 24	81	20.3
25 – 35	3	0.8
Mean/Median Age:	-	17.4/17
No. of Sex Workers Visited in the Past Year		
1 – 2	143	35.8
3 – 5	146	36.5
6 – 10	55	13.8
More than 10	56	14.0
Mean No. of Sex Workers Visited:	-	5.4
Frequency of Sexual Contact with SW in Past Month		
None	191	47.8
1 – 2	113	28.3
3 – 5	57	14.3
6 – 10	23	5.8
More than 10	16	4.0
Mean No. of Sexual Contact:	-	2.0
Last Time Sex with SW		
Last week	92	23.0
1 - 2 weeks ago	72	18.0
3 - 4 weeks ago	74	18.5
2 - 3 months ago	124	31.0
More than 3 months ago	38	9.5

4.3.1 Clients and Sex Partners

Clients maintaining a sexual relationship with multiple sex partners are at high risk of contracting HIV/STI if sexual activity takes place without the use of a condom. This section describes the types and numbers of sex partners the clients had in the past year.

The clients have reported up to four different types of sex partners - sex worker, wife, girlfriend and other female friend. "Girlfriend" is defined as a female partner who has been known to the client for some time and/or has been living together with him. "Other female friend" is defined as a casual female friend the client may or may not know. Also, he may or may not have lived with her. Among the 400 clients surveyed, 71% had sex partners who were not sex workers (Table 29). Around one-fourth of the clients (24%) reported having sex with girlfriends and 9.5% with other female friends in the past year. The mean number of sex partners in the past year, including sex workers, was 1.8. More than two-thirds (70%) of the clients reported having two or more sex partners. Around 95% of the married clients and about 45% of the unmarried ones had two–three sex partners (Table 29).

Table 29: Clients and Their Sex Partners

Sexual Partners	N	%
Sex with Other Women Besides FSWs		
Yes	284	71.0
No	116	29.0
Total	400	100.0
Sex with Wife in the Past Year		
Yes	196	96.1
No	8	3.9
Total	204	100.0
Sex with Girlfriend in the Past Year		
Yes	96	24.0
No	304	76.0
Sex with Other Females in the Past Year		
Yes	38	9.5
No	362	90.5
Total Number of Sex Partners (Including SW) in the Past Year		
One	116	29.0
Two	243	60.8
Three	36	9.0
Four	5	1.3
Mean Number of Total Partners:	-	1.8
Total	400	100.0
Total Number of Sex Partners (Including SW) in the Past Year by Marital Status		
Married		
One	6	2.9
Two	164	80.4
Three	29	14.2
Four	5	2.5
Total	204	100.0
Never Married		
One	102	55.1
Two	77	41.6
Three	6	3.2
Total	185	100.0

4.3.2 Sexual Networking and Expenditure on FSWs

The clients reported having different places for contacting sex workers. For instance, cabin restaurant (25.8%), on the street (20.5%), massage parlor (12.8%), lodge/hotel (9.5%), *bhatti pasal* (9%) and sex worker's place of residence (8.3%). Hotels/lodges were the places where a majority of the clients had the last sexual contact with sex workers. The next most preferred places for sexual activity were the sex workers' homes or the clients' homes. On average, the clients spent Rs. 603 per visit, with more than three-fourths of them (79.1%) spending less than Rs. 100 to Rs. 1,000 per visit to a sex worker (Table 30).

Table 30: Sexual Networking and Expenditure on Female Sex Workers

Sexual Networking and Expenditure	N =400	%
Place Where Sex Worker was Found by Client during the Last Sex with FSW		
Cabin Restaurant	103	25.8
Street/Market Area/Bus Park	82	20.5
Massage Parlor	51	12.8
Lodge/Hotel	38	9.5
Local Bar (<i>Bhatti Pasal</i>)	36	9.0
SW's House/Rented House	33	8.3
Dance Restaurant	22	5.5
Disco	14	3.5
Garment/Carpet Factory	8	2.0
Forest/Park	4	1.0
Others (Working place, Squatter area, etc.)	17	4.3
Place Where the Client had Sex During the Last Sex with FSW		
Hotel/Lodge	149	37.3
Sex Worker's House	76	19.0
Client's Home/Room	60	15.0
Other people's House	56	14.0
Massage Parlor	40	10.0
Forest/Bushes/Park/Open Field	7	1.8
Other (Truck/Bus/Cabin Restaurant, etc.)	12	3.0

Table 30: Cont'd...

Expenditure for the Last Sexual Contact with FSW (Rs.)		
Not paid	24	6.0
Up to Rs. 100	33	8.3
Rs. 101 – Rs.500	197	49.3
Rs. 501 – Rs. 1,000	86	21.5
Rs. 1,001 – Rs. 2,000	50	12.5
Rs. 2,001 and above	10	2.5
Mean Rs. :	-	603
Minimum Cash Paid Rs. :	-	10
Maximum Cash Paid Rs. :	-	3,500

4.3.3 Sex with Sex Workers in Different Parts of the Country and in India

The clients were asked about their mobility within and outside the country. The information obtained shows that around 18% of the clients had sex with sex workers in different parts of the country, while only one percent had been to India (Table 31).

Table 31: Sex with FSWs in Other Parts of the Country and in India by Clients in the Past Year

Sex with FSWs	N	%
Sex with FSWs in Other Parts of the Country		
Yes	70	17.5
No	330	82.5
Total	400	100.0
Sex with FSWs in India		
Yes	4	1.0
No	396	99.0
Total	400	100.0
Place of Sex in India		
Delhi	1	25.0
Muzzafarpur	1	25.0
Gorakhpur	1	25.0
Bangalore	1	25.0
Total	4	100.0

4.4 Knowledge and Use of Condoms among Clients

All the clients reported having heard of condoms. Radio (89.8%), pharmacies (87.3%) and billboards (87.3%) were the important sources of knowledge of condoms for the clients. Other important sources of knowledge were television (86%) and newspapers (84.5%). Friends, hospitals, cinema halls, health posts, health centers, street drama, etc. were also important sources of knowledge of condoms (Table 32). Some of the responses, such as billboard/signboard, street drama, comic book and video van, were encountered mostly outside the Kathmandu Valley. This may be due to the fact that, as seen in Table 26, many clients were migrants from outside the Kathmandu Valley.

Table 32: Sources of Knowledge of Condom

Sources of Knowledge of Condom	N =400	%
Radio	359	89.8
Pharmacy	349	87.3
Billboard/Signboard	349	87.3
Television	344	86.0
Newspaper/Poster	338	84.5
Friend/Neighbor	332	83.0
Hospital	204	51.0
Cinema Hall	166	41.5
Health Post	147	36.8
Health Center	123	30.8
Street Drama	99	24.8
Health Worker/Volunteer	98	24.5
NGO	86	21.5
Comic Book	68	17.0
Community Worker	50	12.5
Video Van	46	11.5
Community Event/Training	40	10.0
Other	2	0.5

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

4.4.1 Places to Get Condoms and Brand Names Known to Clients

Table 33 shows that pharmacies (98%) were the key places to obtain condoms. Other known places to obtain condoms were health posts/health centers (46.5%), hospitals (36.5%), retail shops (34.8%), peers/friends (33.3%), *paan pasals* (25.3%), private clinics (20%) and FPAN office (14.5%). Four out of five (80%) of the clients purchased condoms. More than three-fourths (88%) preferred to buy them at a pharmacy. Out of the 106 clients who got condoms for free, 80.2% said they preferred to get them from a peer or friend. The three most popular brands of condoms among the clients were Number 1 (37.8%), Panther (36.5%) and Kamasutra (29.3%). Number 1 and Panther are USA-made condoms which are repacked in Nepal with Nepali brand names, while Kamasutra is an Indian product. About one-third (37%) of the respondents said they usually carried condoms with them, but the field researchers found that only one-fourth (25.8%) of them were actually carrying any at the time of the interview.

Table 33: Places from Where Clients Obtain Condoms and Most Popular Brands of Condoms

Condom Acquisition	N	%
Can Obtain Condoms From		
Pharmacy	392	98.0
Health Post/Health Center	186	46.5
Hospital	146	36.5
<i>Khudra Pasal</i> (Retail Shop)	139	34.8
Peers/Friends	133	33.3
<i>Paan Pasal</i>	101	25.3
Private Clinic	80	20.0
FPAN Clinic	58	14.5
NGO/Health Worker	43	10.8
Hotel/Lodge	35	8.8
Super Market/Departmental Store	10	2.5
Massage Parlor	10	2.5
Other	15	3.8
Ways to Acquire Condoms		
Purchase	265	66.2
Both (Free and Purchase)	55	13.8
Get Free of Cost	51	12.8
Not Using Recently	29	7.3
Total	400	100.0
Get Free Condoms From		
Peer/Friend	85	80.2
Health Post	22	20.8
Health Worker/Volunteer/NGO	17	16.0
Hospital	16	15.1
FPAN	14	13.2
Massage Parlor	5	4.7
Other (Community Program)	10	9.4
Total	106	*
Purchase Condoms From		
Pharmacy	281	87.8
Private Clinic	12	3.8
<i>Paan Shop</i>	12	3.8
Retail Shop (<i>Kirana Pasal</i>)	6	1.9
Other	9	2.8
Total	320	100.0
Brand Names of Most Used Condoms		
Number 1	151	37.8
Panther	146	36.5
Kamasutra	117	29.3
Dhaal	114	28.5
Jodi	61	15.3
Black Cobra	29	7.3
Wildcat	15	3.8
Skinless	6	1.5
Other	10	2.5
Not Using Recently	31	7.8

Table 33: Cont'd...

Usually Carry Condoms		
Yes	148	37.0
No	252	63.0
No. of Condoms Carried at the Time of Interview		
1	36	9.0
2	31	7.8
3 – 6	36	9.0
Not carrying	297	74.2
Total	400	100.0

4.4.2 Condom Use with Various Sex Partners

A higher percentage of the clients used a condom while having sex with a sex worker than with any other partner. The reported use of condoms is less with known sex partners. For instance, condom use is lowest when having sex with the wife.

Table 34 shows the use of condoms by clients when having sex with various female sex partners. As many as 85% of the clients reported using a condom during the last sex act with a sex worker. However, consistent use of condoms (during every sex act) with sex workers in the past year was 81.3%.

Table 34: Condom Use by Clients in the Last Sex and Consistent Condom Use with Different Sex Partners in the Past year

Types of Sex Partners Condom Use	Sex Worker		Wife		Girlfriend		Other Female Friend	
	N	%	N	%	N	%	N	%
Condom use during last sex								
Yes	341	85.3	27	13.8	71	74.0	29	76.3
No	59	14.8	196	86.2	25	26.0	9	23.7
Consistent condom use in the past year								
Every time	325	81.3	19	9.7	60	62.5	29	76.3
Most of the time	21	5.3	4	2.0	11	11.5	0	0.0
Some times	13	3.3	8	4.1	5	5.2	0	0.0
Rarely	6	1.5	15	7.7	4	4.2	1	2.6
Never	35	8.8	150	76.5	16	16.7	8	21.1
Total	400	100.0	196	100.0	96	100.0	38	100.0

The clients reported a very low use of a condom during the last sex act with their wives. About 14% of the married ones used a condom with their wives during the last sex act. Consistent use of condoms with wives in the past year was even lower – only 9.7% (Table 34).

The data indicates that use of condoms by clients when having sex with their girlfriends and other female friends is much higher compared to when having sex with their wives. For instance, condom use with girlfriends and other female friends during the last sex act was 74% and 76.3% respectively. Consistent use of condoms is also high with girlfriends and other female friends (Table 34).

4.4.3 Reasons for Not Using Condom

The main reason for not using a condom with familiar partners as reported by the clients was “Didn't think it was necessary”, and for unknown partners it was “Condom not available at the moment”. Other common responses were “No pleasure with condom”, “Partner did not like condom” and “Believed that client had no STDs”. “Didn't think it was necessary” and “Using other methods of contraception” were other responses for not using a condom with the wife.

Those who had used a condom during the most recent sexual encounter with their sex partners were asked who made the decision to use it. Nearly three-fourths (73%) of the clients said they made the decision, 13.8% said it was the decision of the sex worker and about the same percentage (13.5%) said it was a joint decision with the sex worker. Interestingly, out of the 23 clients who used a condom during the last sex act with their wives, 15 clients (65.2%) said their wives suggested using a condom. This indicates that it is important to promote male awareness of condoms and their use during every sex act.

4.5 Knowledge of HIV/AIDS

4.5.1 Knowledge of HIV/AIDS

Almost all the clients (97.8%) in the sample had heard of AIDS. Most of the clients reported TV, radio, poster/pamphlet, billboard/signboard and friends/relatives as popular sources of knowledge of AIDS. An analysis of the clients' responses indicates that different types of mass media were the most cited sources of knowledge of HIV/AIDS. Among non-media sources, they mostly mentioned friends/relatives, workplaces, health workers and street dramas (Table 35).

Table 35: Sources of Knowledge of HIV/AIDS among Clients

Knowledge and Sources of Knowledge of HIV/AIDS	N=400	%
Ever Heard of HIV/AIDS	391	97.8
Sources of Knowledge of HIV/AIDS		
Television	374	95.7
Radio	368	94.1
Pamphlet/Poster	348	89.0
Billboard/Signboard	348	89.0
Friends/Relatives	346	88.5
Newspaper/Magazine	318	81.3
Cinema Hall	198	50.6
Workplace	183	46.8
Street Drama	146	37.3
Health Workers	138	35.3
School/Teacher	137	35.0
People from NGOs	119	30.4
Comic Book	91	23.3
Video Van	63	16.1
Community Workers	61	15.6
Community Event/Training	50	12.8
Other Sources	4	1.0

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

4.5.2 Knowledge of Transmitting HIV/AIDS and Avoiding HIV/AIDS

The clients who said that they had heard of HIV/AIDS were asked if they also knew the ways of transmitting and avoiding it. The top five ways of transmitting HIV/AIDS as reported by the clients were: Sex without a condom, blood transfusion, sharing syringes/needles, having sex and having multiple sex partners. Among these responses, two are risky sexual behaviors – sex without a condom and having multiple sex partners. Other common responses are presented in Table 36.

Table 36: Knowledge of Ways of Transmitting AIDS among Clients

Knowledge of Ways of Transmitting HIV/AIDS	N=391	%
Know the Ways of Transmitting HIV/AIDS	386	98.7
Ways of Transmitting HIV/AIDS		
Sex without Condom	329	85.2
Blood Transfusion	229	59.3
Syringe and Needle	229	59.3
Sex Itself	184	47.7
Multiple Sex Partners	138	35.8
Infected Mother to Baby	48	12.4
Sharing Blades with Other Persons	10	2.6
Other	5	1.3

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

Almost all the clients (97.9%) responded that “using a condom” was one way of avoiding HIV/AIDS. Similarly, more than one-third said that “Avoiding using infected needle” and “Avoiding blood transfusion” were the ways to avoid HIV/AIDS. More than one-fifth of the clients interviewed during the survey felt that “Avoiding using infected needles”, “Avoiding multiple sex partners”, "Having only one sex partner" and “Avoiding sex with sex workers” were better ways of avoiding HIV/AIDS (Table 37).

Table 37: Knowledge of Avoiding HIV/AIDS among Clients

Know the Ways to Avoid HIV/AIDS	N = 386	%
Ways to Avoid HIV/AIDS		
Use Condoms	378	97.9
Avoid Using Infected Needle	225	58.3
Avoid Blood Transfusion	150	38.9
Avoid Multiple Sex Partners	124	32.1
Have Only One Sex Partner	110	28.5
Avoid Sex with Sex Workers	89	23.1
Abstain From Sex	64	16.6
Use Only Tested Blood	13	3.4
Use New Blade While Shaving	7	1.8
Avoid Sex with Homosexual	6	1.6
Other (Avoid kissing/mosquito bite/sex with HIV infected, etc.)	16	4.1

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

Table 38 shows the knowledge of **ABC** for avoiding HIV/AIDS. 16.6% of the clients reported **A** (abstinence from sex), 46.6% reported **B** (being faithful or avoiding multiple sex partners) and nearly 98% reported **C** (consistent condom use or use of condom during every sex act) as being one of the ways of avoiding HIV/AIDS. But all the three knowledge responses (**ABC**) were cited by only 6.7%.

Table 38: Percentage of Clients Who Have Knowledge of Three Major Ways of Avoiding HIV/AIDS

Percentage Who Have Knowledge of ABC for Avoiding HIV/AIDS	N=386	%
A (Abstinence)	64	16.6
B (Being faithful to single sex partner or having single sex partner)	180	46.6
C (Consistent use of condom while having sex with all partners)	378	97.9
Knowledge of all three (ABC)	26	6.7

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

4.6 Clients' Exposure to FHI Media Messages

Since FHI started intervention programs along the highways to bring awareness about HIV/AIDS among high-risk groups, messages regarding the use of condoms for the prevention of HIV/AIDS were broadcast and put up. Different media channels were utilized. Recently, FHI has started using new messages, especially in the Kathmandu

area. Among the new messages are "*HIV/AIDS Bare Aajai Dekhi Kura Garau*", "*Jhilke Dai Chha Chhaina Condom*" and "*Condom Bata Suraksha Youn Swasthya Ko Raksha*". These messages were shown on TV and broadcast over the radio. Posters depicting the messages along with visual characters were posted at different places, such as health posts, roadsides and pharmacies. Newer messages like "*HIV/AIDS Bare Aajai Dekhi Kura Garau*" (87.5%), "*Condom Bata Suraksha Youn Swasthya Ko Raksha*" (83.8%) and "*Jhilke Dai Chha Chhaina Condom*" (83.8%) are catching on very fast (Table 39).

Table 39: Seen, Heard or Read the Following Messages by Clients in the Past Year

Messages	N=400	%
<i>HIV/AIDS Bare Aajai Dekhi Kura Garau</i>	350	87.5
<i>Condom Bata Suraksha, Youn Swasthya Ko Raksha</i>	335	83.8
<i>Jhilke Dai Chha Chhaina Condom</i>	335	83.8
<i>Youn Rog Ra AIDS Bata Bachnalai Rakhnu Parcha Sarbatra Paine Condom Lai</i>	323	80.8
<i>Condom Kina Ma Bhaya Hunna Ra</i>	318	79.5
<i>Ramro Sangha Prayog Gare Jokhim Huna Dinna Bharpardo Chhu Santosh Dinchhu Jhanjat Manna Hunna</i>	304	76.0

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

A majority of the clients (93.5%) reported that they understood the message as "Use condoms against HIV/AIDS". Similarly, 60% of the clients understood the messages as "Use condoms against STD". More than one-fourth (25.8) of the clients said that they understood the messages as "Use condoms for family planning" (Table 40).

Table 40: Specific Condom Message Understood by the Clients

Message as Understood by Clients	N = 400	%
Use Condom Against HIV/AIDS	374	93.5
Use Condom Against STD	240	60.0
Use Condom for Family Planning	103	25.8
Other	5	1.3

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

Table 41 presents data on IEC materials and condoms received by the clients. As an awareness-raising program, the implementing partners of FHI have started the distribution of condoms, brochures, booklets and information on HIV/AIDS in the Kathmandu Valley. The study shows that 30% of the clients received condoms, 23% received information on HIV/AIDS and 17% received brochures or booklets with HIV/AIDS messages.

Table 41: IEC Materials and Condoms Given by Someone to Clients in the Past One Year

Materials Received	N = 400	%
Condoms	120	30.0
Information about HIV/AIDS	91	22.8
Brochures/Booklets	68	17.0

Similarly, with the support of FHI/Nepal, many NGOs/organizations are working in the field of HIV/STI prevention, focusing on different target groups. The clients of the sex workers were asked if anyone from NGOs/organizations had visited them and if they had received things from them in the past year. Very few (6%) admitted that someone from NGOs/organizations had visited them, but a majority of the clients did not know the name of the institution. Out of the 23 clients who had been contacted by NGOs/organizations, around two-thirds had received condoms and almost two in five had received IEC materials (Table 42).

Table 42: Visited and Provided Materials by NGO People to Clients in the Past Year

Visited and Provided Materials	N	%
Contacted by NGOs/Organizations		
Yes	23	5.8
No	377	94.3
Total	400	100.0
Name of NGOs/Organizations		
GWP	2	8.7
SACTS	1	4.3
Other	10	43.5
Name Not Known	10	43.5
Total	23	100.0
Materials Provided by NGOs/Organizations		
Condom	15	65.2
IEC Materials	9	39.1
Other	3	13.0
Nothing	4	17.4
Total	23	*

4.7 Knowledge and Treatment of Sexually Transmitted Infections (STIs)

Most of the STIs are transmitted through genital contact. This kind of transmission can be minimized if the clients wear condoms while having sex with sex workers or other unknown female partners. To find out the extent of the problem of STI and how the clients perceived it, they were queried if they had STI symptoms during the past year.

All the respondent clients were asked whether they had experienced any symptoms of STI (such as sores on the genitals and pus/pain during urination) in the past year. A small proportion of them (7%) admitted having experienced such symptoms. The clients who said they had experienced such symptoms were asked where they went for treatment. A majority of the self-diagnosed clients went to private clinics (35.7%) and the same percentage went to pharmacies for treatment (Table 43).

Table 43: Reported STI Symptom and its Treatment among the Clients in the Past Year

Reported STI Symptoms and Treatment	N	%
Ever Experienced Sores or Pus/Pain During Urination (STI)		
Yes	28	7.0
No	372	93.0
Total	400	100.0
Treatment of STD Symptoms in		
Private Clinic	10	35.7
Pharmacy	10	35.7
Self-Treatment	4	14.3
Hospital	1	3.6
Health Post	1	3.6
No Treatment	7	25.0
Total	28	*

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

4.8 Use of Alcohol and Drugs among Clients

As high a number as 87% of the clients admitted consuming alcohol at least once in the past year. One-third (33%) of the clients consumed alcohol on a daily basis and about 36% said they drank at least once a week (Table 44). Out of the 400 clients interviewed, only 16 or four percent had tried any type of drugs including injecting drugs in the past month.

Table 44: Use of Alcohol and Drugs among Clients in the Past Month

Use of Drugs and Alcohol	N	%
Tried Any Types of Drugs		
Yes	16	4.0
No	378	94.5
Don't Know	6	1.5
Injecting History		
Injected in Past 12 Months	6	1.5
Consumption of Alcohol		
Everyday	131	32.8
Once a Week	144	36.0
Less Than Once a Week	72	18.0
Never	53	13.3
Total	400	100.0

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

CHAPTER 5: CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

This study was conducted among 500 female sex workers (FSWs), among whom 200 were street sex workers and 300 were establishment-based sex workers. The study also interviewed 400 clients of the female sex workers in the Kathmandu Valley. The main objective of the study was to measure the prevalence of HIV among FSWs and to measure their sexual behaviors and demographic characteristics along with those of their clients.

The study found that the rate of HIV infection among both types of sex workers was two percent (4/200 among street sex workers and 6/300 among establishment-based sex workers). The prevalence of syphilis among the street sex workers was 27% (54/200) and seven percent (20/300) among the establishment-based sex workers. Other findings are given below:

5.1.1 Female Sex Workers

- Less than 20% of the FSWs' birthplaces were in the Kathmandu Valley, indicating that most of the sex workers were migrants from other districts.
- The median age of the street FSWs was slightly higher (26 years) compared to the establishment-based sex workers, with their ages ranging from 15–29. The FSWs reflected most of the major castes/ethnic groups.
- About one-third (36%) of the street sex workers and more than half (53%) of the establishment-based sex workers joined the sex trade less than a year ago, indicating that new girls were entering the sex business every year.
- Illiteracy was higher among the street sex workers (58.5%) compared to the establishment-based sex workers (25.3%).
- Nearly 40% of the street sex workers and 27.7% of the establishment-based sex workers were either divorced or separated from their husbands. Many sex workers had a co-wife (57 out of the 196 married sex workers).
- A majority of the sex workers (more than 50%) had experienced sex by the time they were 15. Some had their first sex when they were nine years old.
- Condom use during the last sex act with clients as reported by the establishment-based sex workers was 70% compared to 80% for the street sex workers. However, consistent condom use with clients in the past year was about 56%. Consistent use of condoms with non-paying partners was low. Less than 20% of the sex workers used condoms on a regular basis with their husbands or male friends.

- Very few of the sex workers (8% among the street sex workers and none among the establishment sex workers) were carrying condoms with them at the time of the interview, although 30 of the street sex workers said they usually carried condoms with them.
- The three most popular brands of condoms among the sex workers were Dhaal, Number 1 and Panther.
- Radio and television were the important sources of knowledge of condoms for the sex workers. Other important sources were pharmacies, friends/neighbors, NGOs, billboards, cinema halls, hospitals and newspapers.
- Knowledge of HIV/AIDS among the sex workers in the Kathmandu Valley was high. Almost all of them had heard about HIV/AIDS. Nearly 90% of them said that HIV/AIDS was transmitted by having sex without a condom.
- Regarding knowledge of **ABC** - **A** (abstinence from sex), **B** (being faithful or avoiding multiple sex partners) and **C** (consistent condom use or use of condom during every sex act), less than 40% of the sex workers reported **A**, 22 percent of the street sex workers and 31.1% of the establishment-based sex workers reported **B** and more than 90% of the sex workers reported **C** as being one of the ways of avoiding HIV/AIDS.
- There is little association between HIV and socio-demographic or risk behavior variables such as condom use and the number of clients served per day. With regard to the street sex workers, HIV is associated with the number of years of working as a sex worker. Due to the low prevalence of HIV among the sex workers, the sample size was not large enough to give a clear picture of the association between HIV and risk variables or demographical variables.

5.1.2 Clients

- The median age of the clients was 26, with their ages ranging from 14 to 55 years. Slightly more than half (53.8%) of the clients were married, and 93.2% of them were literate. More than half (54%) of the married clients were currently living with their wives.
- One-third (33%) of the clients in the sample were service holders in government or private offices, and 29% were businessmen. The major reported places of work of the clients were hotel/restaurant/*bhatti pasal*, vehicle-related work and grocery shop.
- The median age of the clients at first sexual intercourse was 17 years. They had visited an average of five sex workers in the past year. Around two-thirds (64.3%) had visited sex workers more than twice in the past year. The frequency of sexual contact with sex workers in the past month was reported to be about two times.

- The mean number of sex partners, including sex workers, in the past year as reported by the clients was 1.8. Around 70% of the clients reported two or more sex partners. Among the married clients, around 95% had two-three sex partners. On average, the clients spent Rs. 603 per visit.
- Around 18% of the clients had engaged in sex with sex workers in different parts of the country while one percent had been to India.
- Pharmacies were the key places to obtain condoms for almost all (98%) of the clients. Other known places to obtain condoms were health posts/health centers, hospitals, retail shops, peers/friends, *paan pasals*, private clinics and FPAN offices. Out of the 320 clients who purchased condoms, 87.8% preferred to buy them at a pharmacy. Similarly, out of the 106 clients who got condoms for free, 80.2% said they preferred to get them from a peer or friend. The three most popular brands of condoms among the clients were Number 1, Panther and Kamasutra.
- Condom use during the last encounter with a sex worker as reported by the clients was 85%, and consistent use of condoms with FSWs in the past year was 81.3%. The study showed a very low use of condoms during the last sex act with wives. About 14% of the married clients used a condom with their wives during the last sex act, and consistent use of condoms was only 9.7% in the past year. Condom use with girlfriends and other female friends was much higher compared to condom use with wives. For example, consistent condom use with girlfriends in the past year was 74%, and with other female friends, it was 76.3%.
- Regarding knowledge of **ABC** for avoiding HIV/AIDS, 16.6% of the clients reported **A** (abstinence from sex), 46.6% reported **B** (being faithful or avoiding multiple sex partners) and nearly 98% reported **C** (consistent condom use or use of condom during every sex act) as being one of the ways of avoiding HIV/AIDS.
- Almost all the respondents (97.8%) had heard about HIV/AIDS. Of the total number of clients, 97.9% thought that using a condom during every sexual encounter could prevent HIV. Similarly, “Avoiding using infected needles” (according to 58.3% of the clients), “Avoiding multiple sex partners” (38.9%) and “Having only one sex partner” (32.1%) were other ways mentioned to prevent HIV/AIDS.

5.2 Policy and Program Implications

The data indicated that new and young girls were entering the sex trade every year. Therefore, the low prevalence of HIV and syphilis should not be taken lightly because the sex workers recruited for the study had been exposed to risk behavior for only a short period of time. More than half of the establishment-based sex workers and more than one-third of the street sex workers had been engaged in the sex trade for less than a year. Hence, the sex workers, especially the young ones, should be targeted by HIV/AIDS awareness campaigns, which might include visits by peer educators and condom promotion.

Both FSWs and their clients tend to use condom less frequently while having sex with their regular sex partners such as husbands/wives and other boy/girl friends. Mainly they tend to make decisions on condom use from family planning point of views. This attitude is a major barrier for the promotion of safe sex behavior among both FSWs and clients. Therefore, prevention programs should focus on the propmotoion of condom use from HIV/STI infection prevention purposes.

Significant proportion of FSWs and clients report the knowledge of the ways of preventing HIV/STI infection but many do not have safe behavior. Main reason for such a wide gap between knowledge and behavior may be the perception of the degree of risk associated to their behavior. So prevention programs should also find out the ways to convey the degree of risk associated with their risky sexual behavior to FSWs and clients.

Prevalence of syphilis among FSWs is less than five and among the clients also reported symptoms of STIs is less. However, the ongoing syphilis control program, including rapid diagnostics and treatment, should be continued.

References

- MEH Consultants (P) Ltd. and Research Group for Health Economics and Development (REGHED), 2000. *Report of Response Analysis on HIV/AIDS in Nepal, Kathmandu*. Draft report submitted to National Center for AIDS and STD Control, Kathmandu, Nepal.
- Mills, S., Benjarattanaporn P., Bennet A., Pattalung R. N., Sundhagul D., Trongasawad P., Gregorich S., Hearst N. and Mandel J. 1997. "*HIV Behavioral Surveillance in Bangkok, Thailand: Sexual Behavior Trends among Eight Population Groups*". AIDS 1997 (suppl 1): S43-S51.
- NCASC. 2005. Cumulative Data on HIV/AIDS, March, 2005.
- New ERA/SACTS/FHI. 2003a. *Behavioral and Sero Prevalence Survey Among IDUs in Pokhara Valley*. A Report submitted to Family Health International/Nepal. Kathmandu. December 2003.
- New ERA/SACTS/FHI.. 2003b. *Behavioral and Sero Prevalence Survey Among IDUs in Eastern Nepal*. A Report submitted to Family Health International/Nepal. Kathmandu. November 2003.
- 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. May 2000.
- New ERA. 2003c. *Behavioral Surveillance Survey in the Highway Route of Nepal: Round No. 5*, A Report submitted to Family Health International/Nepal. Kathmandu. New ERA. December 2003.
- New ERA. 2003d. *Behavioral Surveillance Survey of Female Sex Workers and Clients in Kathmandu Valley: Round I*, A Report submitted to Family Health International/Nepal. Kathmandu. New ERA. July 2003.
- New ERA/SACTS/FHI. 2002a. *HIV/STD Prevalence and Risk Factors among Migrant and Non-Migrant Males of Achham District in Far-Western Nepal*. Volume – 1, Main Report. A Report submitted to Family Health International/Nepal. Kathmandu.
- New ERA/SACTS/FHI. 2002b. *Behavioral and Sero Prevalence Survey Among IDUs in Kathmandu Valley*. A Report submitted to Family Health International/Nepal. Kathmandu. December 2002.
- 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. July 2004.
- Pokharel, B R; Aryal, S; Bhattarai, A; Pyakuryal, A; Suvedi, B K. 2000. *Situation Analysis of HIV/AIDS in Nepal*, Richoi Associates, Kathmandu. Final draft submitted to National Center for AIDS and STD Control, Kathmandu, Nepal.
- Poudel KC, J Okumura, M. Jimba and I. Murakami. 2003. *Tropical Medicine and International Health*, Vol. 8, no. 10:pp 933-939 October 2003.
- SACTS. 2001. *Kathmandu FSW Seroprevalence Study*. A Report submitted to Family Health International/Nepal. Kathmandu. November 2001.

ANNEXES

Annex – A
Sample Size of Participants

Distribution of Sample Size by Location

S.N.	Lab Set up Locations in Kathmandu Valley	No. of Participants
1	Gaushala (FSW)	110
2	Gongabu (FSW)	100
3	Thamel (FSW)	120
4	Sundhara (FSW)	90
5	Koteshwor (FSW)	80
Total		500
1	Kathmandu (Clients)	400

Annex - B
Male Screening Questionnaire

Confidential

**BEHAVIOURAL SURVEILLANCE SURVEY AMONG MALE CLIENTS IN KATHMANDU
VALLEY
FHI/New ERA - 2004**

MALE SCREENING QUESTIONNAIRE

Namaste! My name is, I am here from New ERA to collect data for a research project. During this data collection I will ask you some personal questions that will be about sexual intercourse, use and promotion of condoms, HIV/AIDS and drugs. The information given by you will be strictly treated as confidential. Nobody will know what every we talk because your name will not be mentioned on this form. All the mentioned information will be used only for objective of the study. This survey will take about 30 to 45 minutes.

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

Would you be willing to participate?

1. Yes 2. No

Signature of Interviewer: _____ Date: _____

Respondent Screening Questionnaire

1.0 Respondent ID #: _____

2.0 Interview Location

2.1 Name of location (such as tole, crossing, chowk, bahal, lane, VDC, etc.)

2.2 District: _____

2.3 Place of Interviews (such as hotel, lodge, restaurant, etc.): _____

2.4 Date of Interview: 2060 / ____ / ____

3.0 Information on Sexual Intercourse

3.1 Have you ever had sexual intercourse with a woman before?
1. Yes 2. No (**Stop Interview**) 3. No response

3.2 Have you ever had a sex with a sex worker?
1. Yes 2. No (**Stop Interview**)

3.3 Have you had sex with any sex worker in the past one year?
1. Yes 2. No (**Stop Interview**)

Annex - C
Questionnaire

Confidential

**HIV/STI AND BEHAVIOURAL SURVEILLANCE SURVEY (BSS) AMONG
FEMALE SEX WORKERS IN KATHMANDU VALLEY
FHI/New ERA/SACTS - 2004**

FSW Questionnaire

Namaste! My name is, I am here from New ERA to collect data for a research project. During this data collection I will ask you some personal questions that will be about sexual behavior, use and promotion of condoms, STI/HIV/AIDS and drugs. We will also take your blood sample for laboratory testing. If it is determined that you have any STI symptoms, we will provide treatment free of charge.

The information given by you will be strictly treated as confidential. Nobody will know whatever we talk about because your name will not be mentioned on this form and collected blood samples. All the mentioned information will be used only for objectives of the study. This survey will take about 40 to 60 minutes.

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

Would you be willing to participate?

1. Yes 2. No

Signature of Interviewer: _____ Date: 2060/___/___

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

Name of interviewer: _____

101. Respondent ID number :

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

101.1 Write down how you made contact? _____

102 Type of Sex Work Establishment SW were based:

- | | |
|---------------------|---------------------------|
| 1. Disco | 7. House Settlement |
| 2. Dance Restaurant | 8. Street |
| 3. Cabin Restaurant | 9. Garment/Carpet Factory |
| 4. Call Girl | 10. Squatter |
| 5. Massage Parlor | 11. Other (Specify _____) |
| 6. Bhatti Pasal | |

103. Date of Interview : 2060/_____/_____

104. Interview Starting Time : _____
Interview Completion Time: _____

105. Where were you born?

105.1 District: _____

105.3 Ward #: _____

105.2 VDC/Municipality: _____

105.4 Village/Tole: _____

106. Where do you live now? (Name of Current Place of Residence)

106.1 Districts: _____

106.2 VDC/Municipality: _____

106.3 Ward #: _____

106.4 Village/Tole: _____

107. How long have you been living continuously at this location?
_____ months 0. Always **(Since birth, Go to Q. 201)**

108. Before you moved here, where did you live
108.1 Districts: _____
108.2 VDC/Municipality: _____
108.3 Ward #: _____
108.4 Village/Tole: _____

2.0 PERSONAL INFORMATION

201. How old are you?
_____ **(Write the completed year)**

202. What is your ethnic group?
Ethnicity/Caste _____

203. What class have you passed?
_____ (Write '0' for illiterate, '19' for the literate without attending the school, and exact number for the passed grade)

204. What is your present Marital Status
1. Married **(Go to Q. 204.2)**
2. Divorced/Permanently Separated **(Go to Q. 204.1)**
3. Widow **(Go to Q. 204.1)**
4. Never Married **(Go to Q. 204.2.1 then go to Q. 207)**
5. Others (Specify) _____

204.1 How old were you when you got divorced/separated/Widowed?
_____ (Write completed year) **[Go to Q. 204.2.1]**

204.2 Are you presently living with your husband?

1. Yes **(Go to Q. 205)**
2. No **(Go to Q. 204.2.1)**
9. No Response **(Go to Q. 204.2.1)**

204.2.1 Who are you living with now? **(Multiple Responses)**

1. Male friend/other male
2. Other male relatives
3. Other females
4. Children
5. Alone
6. Others (Specify) _____
9. No Response

[FILTER: If answer in Q. 204 is '4' Go to Q. 207]

205. What was your age at the time of 1st marriage?
_____ Years old **(write completed year)**

[FILTER: If answer in Q. 204 is '2' or '3' Go to Q. 207]

206. Does your husband have co-wife now?
1. Yes 2. No

207. Do you have other persons who are dependent on your income?
1. Yes 2. No **(Go to Q. 208)**

207.1 How many
Adults: _____
Children: _____

208. How long have you been exchanging sexual intercourse for money or other things?
(if answer is less than 6 months stop interview)
For _____ months 98. Don't know 99. No answer

208.1 Did you have any sexual intercourse during past 12 months?
1. Yes 2. No **(STOP INTERVIEW)**

209. How many months have you been working here at this place?
_____ months
- 209.1 Besides here, where else in Kathmandu have you sold sex? (Worked/made/make contact with clients)

(Write type of Sex Work establishment and address)
210. Have you ever worked in this profession in other locations (outside of Kathmandu Valley)?
1. Yes (**Go to Q. 210.1**) 2. No (**Go to Q. 210.2**)
↓
- 210.1 Where did you work? (List all the places mentioned by the respondent)
District VDC/Municipality Village/Tole

- 210.2 Have you ever worked in India in this profession?
1. Yes 2. No (**Go to Q. 211**)
↓
- 210.3 Where did you work in India? (List all the locations worked in India).
Name of Places Name of Nearby City

- 210.3.1 How many months did you work in India in total?
_____ Months
- 210.4 Were you coerced to go there or you went there on your own?
1. Coerced 2. On my own
211. What is your average weekly income from commercial sex?
Cash _____ Rs. +(Gift equivalent to Rupees) _____ Rs. = Total Rs. _____
[Note: If there is '0' in both cash and gift equivalent mentions the reasons]
Other (specify) _____
212. Do you have any other work besides sex work?
1. Yes 2. No (**Go to Q. 214**)
↓
- 212.1 What do you do?

213. What is your average weekly income from other sources?
_____ Rupees
214. Have you ever encountered any client who refuses to give money after having sex?
1. Yes 2. No (**Go to Q. 301**)
↓
- 214.1 How many incidences in past six months _____ Times
- 2.0 INFORMATION ON SEXUAL INTERCOURSE**
301. How old were you at your first sexual intercourse?
_____ Years old 98. Don't know/can't recall
302. Among all of your partners how many were who you had sex with in exchange for money in the past week?
_____ Number 98. Don't know
303. Among all of your partners how many had sex you without paying money in the past week? (Include spouse and live-in sexual partners)
_____ Number 98. Don't know
304. With how many different sexual partners in total have you had sex during the past week? (Note: Check total number of partner in **Q. 302 + Q. 303 and Q 304** to make sure the number match).
_____ Number 98. Don't know
305. Typically, how many clients visit you in a day? _____ Number
305.1 How many clients visited you yesterday? _____ Number

- 305.2 How many clients did you have in the past week? _____ Number
306. Of which professions' client mostly visit you? (Give three most types of client)

- 306.1 In the past month, which profession's client visited you most?

- 306.2 Which profession's client visited you in the last time?

307. How many days in a week (on average) do you do this business?
 _____ Days
308. When did you have the last sexual intercourse with a client?
 _____ Days before (**Write '0' if Today**)
309. How many people did you have sexual intercourse with on that day?
 _____ (Number)
310. How much rupees or other items did the last client pay you?
 Cash _____ Rs. +(Gift equivalent to Rupees) _____Rs. = Total Rs. _____
(Note: If there is '0' in both cash and gift equivalent mention the reasons)
 Others (specify) _____

4.0 USE OF CONDOM AND SEX PARTNERS

401. The last time you had sex with the client, did your client use a condom?
 1. Yes 2. No (**Go to Q. 401.2**)
- 401.1 Who suggested condom use that time?
 1. Myself (**Go to Q. 402**) 3. Joint decision (**Go to Q. 402**)
 2. My partner (**Go to Q. 402**) 4. Don't know (**Go to Q. 402**)
- 401.2 Why didn't your client use a condom that time? ? (**Multiple answers. DO NOT READ the possible answers given below**)
- | | |
|-----------------------------|----------------------------------|
| 1. Not available | 6. Didn't think it was necessary |
| 2. Too expensive | 7. Didn't think of it |
| 3. Partner objected | 8. Client offered more money |
| 4. Partner didn't like them | 9. Other (Specify) _____ |
| 5. Used other contraceptive | 98. Don't know |
402. With what frequency did your clients use condom over the past 12 months?
 1. All of the time 3. Some of the time 5. Never
 2. Most of the time 4. Rarely
- 403 Do you have any client who returns regularly to you?
 1. Yes 2. No (**Go to Q 404**)
 ↓
- 403.1 How often regular clients use of condom with you over the past 12 months?
 1. All of the time (**Go to Q. 404**)
 2. Most of the time
 3. Some of the time
 4. Rarely
 5. Never
- } → (**Go to Q. 403.2**)
- 403.2 Why do you not use condom regularly with them? ? (**Multiple answers. DO NOT READ the possible answers given below**)
- | | |
|-----------------------------|----------------------------------|
| 1. Not available | 6. Didn't think it was necessary |
| 2. Too expensive | 7. Didn't think of it |
| 3. Partner objected | 8. Other (Specify) _____ |
| 4. Partner didn't like them | 98. Don't know |
| 5. Used other contraceptive | |

404. Think about your most recent non-paying sexual partner. How many times did you have sexual intercourse with this person over the last 30 days?
_____ Number of times 98. Don't know

(If answer is '0' in Q 404, go to Q 406)

405. The last time you had sex with the non-paying partner did you and your client use a condom?
1. Yes 2. No (**Go to Q. 405.2**)

405.1 Who suggested condom use that time?
1. Myself (**Go to Q. 406**) 2. My Partner (**Go to Q. 406**)
3. Joint Decision (**Go to Q. 406**) 98. Don't know (**Go to Q. 406**)

405.2 Why didn't your partner use a condom that time? (**Multiple answers. DO NOT READ the possible answers given below**)
1. Not available 6. Didn't think it was necessary
2. Too expensive 7. Didn't think of it
3. Partner objected 8. Other (Specify) _____
4. Partner didn't like them 98. Don't know
5. Used other contraceptive

406. With what frequency did all of your non-paying partners use condoms over the last 12 months?
1. All of the time 4. Rarely
2. Most of the time 5. Never
3. Some of the time 6. Do not have sexual intercourse

407. Do you usually carry condoms with you?
1. Yes 2. No (**Go to Q. 408**)

407.1 How many condoms do you have at-hand right now with you?
_____ Number (Observe and Write)

408. Which places or persons do you know where you can obtain condoms? (**Multiple answers. DO NOT READ the possible answers given below**)
1. Health Post 8. FPAN Clinic
2. Health Center 9. Peer/Friends
3. Pharmacy 10. NGO/Health Workers/Volunteers
4. General retail store (Kirana Pasal) 11. Bar/Guest House/Hotel
5. Private Clinic 12. Other(Specify) _____
6. Paan shop 19. No response
7. Hospital 98. Don't know

408.1 How long does it take you to obtain a condom from your house or from where you work?
_____ Minutes

409. During the past one-year, did any of your sexual partner(s) force you to have sex with them even though you did not want to have sex?
1. Yes 2. No 9. No response

410. In the past year, were there any situations/acts that your clients did to you that you disliked?
1. Yes 2. No (**Go to Q. 411**)

410.1 If yes, what are they?

411. In the past year, did you have any other type of sex than vaginal? (**INSTRUCTION TO INTERVIEWER: Explain what are: The other types of sex besides vaginal (such as oral, anal)**)
1. Yes 2. No (**Go to Q. 501**)

411.1 If yes, what types?
1. Oral 2. Anal 3. Other (specify) _____

411.2 What type of sex did you have with your last client?

5.0 AWARENESS OF HIV/AIDS

501. Have you ever heard of an illness called HIV/AIDS?
1. Yes 2. No (**Go to Q. 601**)
502. Of the following sources of information, from which sources have you learned about HIV/AIDS?
- | | | |
|------------------------------|--------|-------|
| 1. Radio | 1. Yes | 2. No |
| 2. Television | 1. Yes | 2. No |
| 3. Newspapers/Magazines | 1. Yes | 2. No |
| 4. Pamphlets/Posters | 1. Yes | 2. No |
| 5. Health Workers | 1. Yes | 2. No |
| 6. School/Teachers | 1. Yes | 2. No |
| 7. Friends/Relatives | 1. Yes | 2. No |
| 8. Work Place | 1. Yes | 2. No |
| 9. People from NGO | 1. Yes | 2. No |
| 10. Video Van | 1. Yes | 2. No |
| 11. Street Drama | 1. Yes | 2. No |
| 12. Cinema Hall | 1. Yes | 2. No |
| 13. Community Event/Training | 1. Yes | 2. No |
| 14. Bill Board/Sign Board | 1. Yes | 2. No |
| 15. Comic Book | 1. Yes | 2. No |
| 16. Community Workers | 1. Yes | 2. No |
| 17. Others (Specify) _____ | | |
503. Do you know how HIV/AIDS is transmitted?
1. Yes 2. No (**Go to Q. 505**)
- ↓
504. What are those ways? (Multiple answers possible. **DO NOT READ** the possible answers given below).
1. Sexual intercourse
 2. Sex without condom
 3. Multiple sex partners
 4. Blood Transfusion
 5. Syringe and Needle
 6. Infected mother to baby
 7. Other (specify) _____
 98. Don't Know
505. Is there anything a person can do to avoid getting HIV/AIDS or the virus that causes HIV/AIDS?
1. Yes 2. No. (**Go to Q. 506**)
- 505.1 What a person can do? (Multiple responses possible. **DO NOT READ** the possible answers given below)
1. Abstain from sex
 2. Use condom
 3. Have only one sex partner
 4. Stop sex with multiple partners
 5. Avoid sex with sex worker
 6. Avoid sex with homosexual
 7. Avoid blood transfusions
 8. Avoid using infected needle
 9. Avoid kissing
 10. Avoid mosquito bites
 11. Seek protection form traditional healer
 12. Others (Specify) _____
 13. No response
 98. Don't Know
506. Has anyone given you following information or items in the past year?
- | | | |
|---|--------|-------|
| 1. Condom | 1. Yes | 2. No |
| 2. Brochure/booklets/pamphlets about HIV/AIDS | 1. Yes | 2. No |
| 3. Information about HIV/AIDS | 1. Yes | 2. No |
| 8. Others (Specify) _____ | | |

507. Has anyone from NGOs/organizations visited you in the past year?
1. Yes 2. No (**Go to Q. 601**)



507.1 Could you please mention the name of NGOs/organizations?
Name of NGOs/organizations: _____

507.2 Could you mention the things/items you received from them?

6.0 PROMOTION OF CONDOM

601. In the past one-year have you seen, read or heard any advertisements about condoms from the following sources? (**READ THE FOLLOWING LIST**)

- | | | |
|------------------------------|--------|-------|
| 1. Radio | 1. Yes | 2. No |
| 2. TV | 1. Yes | 2. No |
| 3. Pharmacy | 1. Yes | 2. No |
| 4. Health Post | 1. Yes | 2. No |
| 5. Health Center | 1. Yes | 2. No |
| 6. Hospital | 1. Yes | 2. No |
| 7. Health Workers/Volunteers | 1. Yes | 2. No |
| 8. Friends/Neighbors | 1. Yes | 2. No |
| 9. NGOs | 1. Yes | 2. No |
| 10. Newspapers/Posters | 1. Yes | 2. No |
| 11. Video Van | 1. Yes | 2. No |
| 12. Street Drama | 1. Yes | 2. No |
| 13. Cinema Hall | 1. Yes | 2. No |
| 14. Community Event/Training | 1. Yes | 2. No |
| 15. Bill Board/Sign Board | 1. Yes | 2. No |
| 16. Comic Book | 1. Yes | 2. No |
| 17. Community Workers | 1. Yes | 2. No |
| 18. Others (Specify) _____ | | |

602. What message did you get from the advertisement ? (Multiple answers. **DO NOT READ** the possible answers given below)

1. Use condom against HIV/AIDS, Avoid HIV/AIDS
2. Use condom against STI, Avoid STI
3. Use condom for family planning, Other family planning messages
9. Others (specify) _____

603. Have you ever seen, heard or read following messages/characters during past one year?

- | | | |
|--|--------|-------|
| 1. Jhilke Dai Chha Chhaina Condom | 1. Yes | 2. No |
| 2. Condom Kina Ma Bhaya Hunna Ra | 1. Yes | 2. No |
| 3. Youn Rog Ra AIDS Bata Bachnalai
Rakhnu Parchha Sarbatra Paine Condom Lai | 1. Yes | 2. No |
| 4. Ramro Sanga Prayog Gare Jokhim Huna Dinna
Bharpardo Chhu Santosh Dinchhu Jhanjhat Manna Hunna | 1. Yes | 2. No |
| 5. Condom Bata Surakchhya, Youn Swasthya Ko
Rakchhya AIDS Ra Younrog Bata Bachna Sadhai
Condom Ko Prayog Garau | 1. Yes | 2. No |
| 6. HIV/AIDS Bare Aajai Dekhee Kura Garau | 1. Yes | 2. No |

603.1 Besides above messages have you seen, heard or read any other messages on STI/HIV/AIDS Prevention or Condom Uses?

1. Yes

2. No (**Go to Q. 604**)



603.2 What are they?

604. During the past one-year what brand of condoms did you use most of the time? (**Record first three**)

1. _____
2. _____
3. _____

7.0 STI (SEXUALLY TRANSMITTED INFECTION)

701. Which diseases do you understand by STI?

702. Do you currently have any of the following symptoms?

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

(If answer is "No" to all in the Q. No. 702 Go to Q. 706)

703. Have you been treated for any of these symptoms?

1. Yes 2. No (**Go to Q. 706**)

704. Where did you go for the treatment? (Multiple Answers, **Do not read the possible answers given below**)

1. Private Clinic 7. Health Center
 2. AMDA Clinic 8. Hospital
 3. NFCC 9. Pharmacy
 4. SACTS 10. Self Treatment (Specify) _____
 5. FPAN Clinic 11. Others (Specify) _____
 6. Health Post /Sub Health Post

705. For which symptoms did you get treatment? Specify the treatment.

Symptoms	Treatment
1. Pain in the lower abdomen	
2. 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	
7. Vaginal odor or smell	
8. Vaginal bleeding (unusual)	
9. Unusual heavy vaginal discharge and foul vaginal discharge	
10. Genital Warts	
11. Others (Specify) _____	

706. Do 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 vaginal discharge and foul vaginal discharge	1	2
10. Genital Warts	1	2
11. Others (Specify) _____	1	2

(If answer is "No" to all in Q. No. 706, Go to Q. No. 710)

707. Have you been treated for any of these symptoms in the past year?

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

(If answer is "No" to all in Q. No. 707, Go to Q. No. 710)

708. Where did you go for the treatment? (Multiple answers. Do not read the possible answers given below).

1. Private Clinic
2. AMDA Clinic
3. NFCC
4. SACTS
5. FPAN Clinic
6. Health Post /Sub Health Post
7. Health Center
8. Hospital
9. Pharmacy
10. Self Treatment (Specify)_____
11. Others (Specify)_____

709. Did the people you went for treatment tell you about how to avoid the problem?

1. Yes
2. No (Go to Q. 710)

709.1 What did he tell you? (Multiple answers, **DONOT READ** the possible answers given below)

1. Told me to use condom
2. Told me to reduce number of sexual partners
8. Others (Specify)_____

710. I don't want to know the result, but have you ever had an HIV test?

1. Yes
2. No (Go to Q. 714)
9. No response

711. Did you voluntarily undergo the HIV test, or were you required to have the test?

1. Voluntary
2. Required
9. No response

712. Please do not tell me the result, but did you find out the result of your test?

1. Yes
2. No
9. No response

713. When did you have your most recent HIV test?

1. Within 0-3 months
2. Within 4-11 months
3. Between 1-2 years
4. Between 2-4 years
5. More than 4 yeas ago
8. Don't know
9. No response

714. To your knowledge, have any of your sex partners injected drugs?

1. Yes
2. No (Go to Q. 715)

714.1 (For Married SW only) Did your husband inject drug? (Check with Q. 204)

1. Yes
2. No

714.2 (For having regular partner) Did your regular partner inject drug? (Check with Q. 403)

1. Yes
2. No

714.3 (For all) Do you know any of your client ever inject drug?

1. Yes
2. No

715. Do you know anyone who injects?

1. Yes
2. No (Go to Q 801)

715.1 If yes, what is your relationship to him/her (peer, friend, family relationship, etc)

8.0 USE OF DRUGS AND INJECTION

801. During the last 30 days how often have you had drinks containing alcohol? Would you say.....**READ OUT LIST**

- | | |
|--------------------------|-------------------------|
| 1. Everyday | 2. At least once a week |
| 3. Less than once a week | 4. Never |
| 8. Don't Know | 9. No response |

802. Some people have tried a range of different types of drug. Have you also tried any of those drugs in the past 30 days?

- 1. Yes
- 2. No
- 8. Don't Know
- 9. No Response

803. Some people have tried injecting drugs using a syringe. Have you injected drugs in last 12 months? **(DRUGS INJECTED FOR MEDICAL PURPOSES OR TREATMENT OF AN ILLNESS DO NOT COUNT)**

- 1. Yes
 - 2. No
 - 8. Don't Know
 - 9. No Response
- } → **(Go to Q. 805)**

804. Usually how did you get that syringe/needle?

- 1. My friend/relative gave it to me after his use
- 2. Unknown person gave it to me
- 3. I picked it up from a public place which was left there by others
- 4. I picked it up from a public place which was left there by myself
- 5. I used a new needle/syringe given by NGO volunteer
- 6. I used a needle/syringe which I purchased
- 7. Others (Specify) _____

805. Have you ever exchanged sex for drugs?

- 1. Yes
- 2. No

806. Have you ever exchanged sex for money so that you can buy drug?

- 1. Yes
- 2. No

Confidential

**BEHAVIOURAL SURVEILLANCE SURVEY AMONG MALE CLIENTS
IN KATHMANDU VALLEY
FHI/New ERA - 2004**

MALE QUESTIONNAIRE

Namaste! My name is, I am here from New ERA to collect data for a research project. During this data collection I will ask you some personal questions that will be about sexual intercourse, use and promotion of condoms, HIV/AIDS and drugs. The information given by you will be strictly treated as confidential. Nobody will know what every we talk because your name will not be mentioned on this form. All the mentioned information will be used only for objective of the study. This survey will take about 30 to 45 minutes.

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

Would you be willing to participate?

1. Yes 2. No

Signature of Interviewer: _____ Date: _____

Has someone interviewed you from New ERA with a questionnaire in last few weeks?

1. Yes 2. No (Continue interview)

↓

When?

_____ Days ago (Stop interview)

Name of Interviewer: _____

101. Respondent ID #:

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

102. Interview Location

102.1 Name of location (such as tole, crossing, chowk, bahal, lane, VDC, etc.)

102.2 District: _____

103. Place of Interview (such as hotel, lodge, restaurant, etc.): _____

104. Date of Interview: 2060 / ____ / ____

105. Interview Starting Time : _____

Interview Completion Time: _____

106. Where is your birthplace?

Name of the VDC/Municipality: _____

Name of the Village/Tole: _____

District : _____

107. Where do you live now?

Name of the VDC/Municipality: _____

Name of the Village/Tole: _____

District : _____

108. How long have you been living continuously at this location?

_____ months

0. Always (Since Birth) (Go to Q. 201)

109. Before you moved here, where did you live?
Name of the VDC/Municipality: _____
Name of the Village/Tole: _____
District: _____

2.0 Personal Information

201. How old are you?
_____ (write the completed years)

202. What is your caste? (Specify Ethnic Group/Caste)
Ethnicity/Caste _____

203. What class have you passed?
_____ (write '0' for illiterate, '19' for the literate without attending the school, and exact number for the passed grade)

204. What is your occupation? _____

205. What type of establishment do you work?
1. Government Office
2. Hotel
3. Restaurant
4. Travel Agencies
5. Bhatti pasal
6. Contractor for house construction
7. Contractor for Road Construction
8. Garment Factory
9. Industry (specify type of industry) _____
10. Vegetable, fruit vendors
11. Others (Specify) _____

206. What is your position in the establishment? _____

207. What is your present marital status?
1. Married
2. Divorced/Permanently Separated (Go to Q. 210)
3. Widow (Go to Q. 210)
4. Never Married (Go to Q. 210)

208. Are you presently living with your wife?
1. Yes 2. No 9. Others (specify) _____

209. What is the approximate number of days in a month that you stay away from your wife?
_____ days 999. I always stay with my family

210. What is your current living status?
1. With the family (wife and children) 4. With parents
2. With friends 5. With relatives
3. Along 6. Others (Specify) _____

3.0 Information on Sexual Intercourse

301. How old were you at your first sexual intercourse?
_____ Years old (Completed years) 98. Don't know/can't say

302. During the past one year, how many different sex workers did you have sexual intercourse with?
_____ (number)

303. During the past one year when did you have the last sexual intercourse with a sex worker? (Write 0 if the answer is less than a week)
_____ Weeks ago

304. Where did you find that last sex worker for sexual intercourse? (**DO NOT READ** the possible answers given below)
1. Disco 8. CSW's House
2. Dance Restaurant 9. Squatter Area
3. Cabin Restaurant 10. Lodge/Hotel
4. Massage Parlour 11. Dinner (Eating House)
5. Local Bar/Bhatti Pasal 12. In Forest/Park
6. On the street 13. Others (Specify) _____
7. Garment/Carpet Factory

305. Where did you have sex with her?
1. Sex worker's own home
 2. Client's home/room
 3. Hotel/lodge
 4. Forest/Bushes/Park
 5. Other private house
 6. Truck/bus
 9. Others (Specify) _____
306. How much rupees or other items did you pay the sex worker that time? (Ask the money spend for sexual contact only)
 Cash _____ Rs. + (Gift equivalent to Rs.) _____ Rs. = Total Rs. _____
 (Note: If there is '0' in both cash and gift equivalent mention the reasons)
 Others (Specify) _____
307. In the last one months how many times did you have sexual intercourse with sex workers?
 _____(Times)
308. Did you have sexual intercourse with sex worker in other places of Nepal outside of Kathmandu in the past one-year?

1. Yes
2. No (Go. to Q. 309)

308.1 Where?

VDC/Municipality

District

309. Did you have sexual intercourse with sex workers in India in the past one year?
1. Yes
 2. No (Go to Q. 401)

↓
 309.1 Where?

Name of Places

Name of Nearby Cities

4.0 Use of Condom and Sex Partners

401. Did you use a condom when you had the last sexual intercourse with a sex worker?
1. Yes
 2. No (Go to Q. 401.2)

↓
 401.1 Who suggested condom use that time?

1. Myself
2. My partner
3. Joint decision
98. Don't know

→ (Go to Q. 402)

401.2 Why didn't you use a condom that time? (Multiple answers. DO NOT READ the possible answers given below)

1. Not available
2. Too expensive
3. Partner objected
4. Partner didn't like them
5. Didn't think it was necessary
6. Didn't think of it
9. Others (Specify) _____
98. Don't know

402. How often did you use condoms while visiting sex workers in the last 12 months?

1. Always (Go to Q. 403)
 2. Most of the time
 3. Sometimes
 4. Rarely
 5. Never
- (Go to Q 402.1)

402.1 Why you did not use condom always?

(FILTER: If the response is not '1' in Q. 207. Go to Q. 407)

403. During the past one-year have you had sexual intercourse with your wife?
 1. Yes 2. No (**Go to Q 407**)
404. How many times did you have sexual intercourse with your wife over the last 30 days?
 _____ Number of times 98. Don't know
405. The last time you had sex with your wife did you use condom?
 1. Yes 2. No (**Go to Q. 405.2**)
- ↓
- 405.1 Who suggested condom use that time?
 1. Myself
 2. My partner
 3. Joint decision
 98. Don't know
- (Go to Q. 406)
- 405.2 Why didn't you use a condom that time? (**Multiple answers. DO NOT READ the possible answers given below**)
 1. Not available 5. Didn't think it was necessary
 2. Too expensive 6. Didn't think of it
 3. Partner objected 9. Others (Specify) _____
 4. Partner didn't like them 98. Don't know
406. How often did you use condoms with your wife over the last 12 months?
 1. Always (**Go to Q. 407**)
 2. Most of the time
 3. Sometimes
 4. Rarely
 5. Never
- (Go to Q 406.1)
- 406.1 Why you did not use condom always?

407. During the past 12 months have you had sexual intercourse with your girl friend?
 1. Yes 2. No (**Go to Q 411**)
408. How many times did you have sexual intercourse with your girl friend over the last 30 days?
 _____ Number of times 98. Don't know
409. The last time you had sex with your girl friend did you use condom?
 1. Yes 2. No (**Go to Q. 409.2**)
- ↓
- 409.1 Who suggested condom use that time?
 1. Myself
 2. My partner
 3. Joint decision
 98. Don't know
- (Go to Q. 410)
- 409.2 Why didn't you use a condom that time? (**Multiple answers. DO NOT READ the possible answers given below**)
 1. Not available 5. Didn't think it was necessary
 2. Too expensive 6. Didn't think of it
 3. Partner objected 9. Others (Specify) _____
 4. Partner didn't like them 98. Don't know
410. How often did you use condoms with your girl friend over the last 12 months?
 1. Always (**Go to Q. 411**)
 2. Most of the time
 3. Sometimes
 4. Rarely
 5. Never
- (Go to Q 410.1)
- 410.1 Why you did not use condom always?

411. During the past one-year have you had sexual intercourse with your other female friends?
 1. Yes 2. No (**Go to Q. 415**)
412. How many times did you have sexual intercourse with your other female friends over the last 30 days?
 _____ Number of times 98. Don't know
413. The last time you had sex with your other female friends did you use condom?
 1. Yes 2. No (**Go to Q. 413.2**)
- 413.1 ↓ Who suggested condom use that time?
 1. Myself
 2. My partner
 3. Joint decision
 98. Don't know
- } → (**Go to Q. 414**)
- 413.2 Why didn't you use a condom that time? (**Multiple answers. DO NOT READ the possible answers given below**)
 1. Not available
 2. Too expensive
 3. Partner objected
 4. Partner didn't like them
 5. Didn't think it was necessary
 6. Didn't think of it
 9. Others (Specify) _____
 98. Don't know
414. How often did you use condoms with your other female friend over the last 12 months?
 1. Always (**Go to Q. 415**)
 2. Most of the time
 3. Sometimes
 4. Rarely
 5. Never
- } → (**Go to Q. 414.1**)
- 414.1 Why you did not use condom always? _____
415. Do you usually carry condoms with you?
 1. Yes 2. No (**Go to Q. 416**)
- 415.1 ↓ How many condoms do you have at hand right now?
 _____ Number (Observe and Write)
416. Which places or persons do you know where you can obtain condoms?
 (Multiple answers. Do NOT READ the possible answers given below)
 1. Health Post 8. FPAN Clinic
 2. Health Center 9. Peer/Friends
 3. Pharmacy 10. NGO/Health Workers/Volunteers
 4. General Retail Store (Kirana Pasal) 11. Bar/Guest House/Hotel
 5. Private Clinic 12. Others (Specify) _____
 6. Paan Shop 13. No response
 7. Hospital 98. Don't know
417. Do you usually buy condom? or get it free of cost? Or both?
 1. I get it free of cost (**Do not ask Q. 417.2 and Q. 417.2.1**)
 2. I buy (**Go to Q. 417.2**)
 3. Both
 4. Never used condom (**Go to Q. 501**)
- 417.1 Where do you usually get freely?
 (Multiple answers. **DO NOT READ** the possible answers given below).
 1. Health Post 5. Peer/Friend
 2. Health Center 6. During Community Programme
 3. Hospital 7. NGO/Health Workers/Volunteers
 4. FPAN Clinic 9. Others (specify) _____
- 417.1.1 What is the most convenient place for you to get a free condom?
 (**Multiple answers. DO NOT READ the possible answers given below**)
 1. Health Post 5. Peer/Friend
 2. Health Center 6. During Community Programme
 3. Hospital 7. NGO/Health Workers/Volunteers
 4. FPAN Clinic 9. Others (specify) _____

- 417.2 Where do you usually buy?
 1. Pharmacy
 2. General retail store (Kirana Pasal)
 3. Private clinic
 4. Paan Shop
 9. Others (specify) _____

- 417.2.1 What is the most convenient place for you to buy a condom?
 (Multiple answers. **DO NOT READ** the possible answers given below)
 1. Pharmacy
 2. General retail store (Kirana Pasal)
 3. Private clinic
 4. Paan Shop
 9. Otherw)Specify) _____

5.0 Awareness of HIV/AIDS

501. Have you ever heard of an illness called HIV/AIDS?
 1. Yes
 2. No (**Go to Q 601**)

502. Of the following sources of information, from which sources have you learned about HIV/AIDS?
- | | | |
|------------------------------|--------|-------|
| 1. Radio | 1. Yes | 2. No |
| 2. Television | 1. Yes | 2. No |
| 3. Newspapers/Magazines | 1. Yes | 2. No |
| 4. Pamphlets/Posters | 1. Yes | 2. No |
| 5. Health Workers | 1. Yes | 2. No |
| 6. School/Teachers | 1. Yes | 2. No |
| 7. Friends/Relatives | 1. Yes | 2. No |
| 8. Work Place | 1. Yes | 2. No |
| 9. People from NGO | 1. Yes | 2. No |
| 10. Video Van | 1. Yes | 2. No |
| 11. Street Drama | 1. Yes | 2. No |
| 12. Cinema Hall | 1. Yes | 2. No |
| 13. Community Event/Training | 1. Yes | 2. No |
| 14. Bill Board/Sign Board | 1. Yes | 2. No |
| 15. Comic Book | 1. Yes | 2. No |
| 16. Community Workers | 1. Yes | 2. No |
| 17. Other (Specify) _____ | | |

503. Do you know how HIV/AIDS is transmitted?
 1. Yes
 2. No (**Go to Q 505**)

504. What are those ways? (Multiple answers possible. **DO NOT READ** the possible answers given below).
- | | |
|--------------------------|----------------------------|
| 1. Sexual intercourse | 5. Syringe and needle |
| 2. Sex without condom | 6. Infected mother to baby |
| 3. Multiple Sex partners | 7. Other (specify) _____ |
| 4. Blood Transfusion | 98. Don't know |

505. Is there anything a person can do to avoid getting HIV/AIDS or the virus that causes HIV/AIDS?
 1. Yes
 2. No. (**Go to Q 506**)

- ↓
 505.1 What a person can do?
 (Multiple responses possible. **DO NOT READ** the possible answers given below)
- | | |
|------------------------------------|---|
| 1. Abstain from sex | 9. Avoid kissing |
| 2. Use condoms | 10. Avoid mosquito bites |
| 3. Have only one sex partner | 11. Seek protection form traditional healer |
| 4. Stop sex with multiple partners | 12. Other (Specify) _____ |
| 5. Avoid sex with sex worker | 19. No response |
| 6. Avoid sex with homosexual | 98. Don't Know |
| 7. Avoid blood transfusions | |
| 8. Avoid using infected needle | |

506. Has anyone given you following information or items in the past year?
- | | | |
|---|--------|-------|
| 1. Condom | 1. Yes | 2. No |
| 2. Brochure/booklets/pamphlets about HIV/AIDS | 1. Yes | 2. No |
| 3. Information about HIV/AIDS | 1. Yes | 2. No |
| 9. Others (specify) _____ | | |

Annex - D
Female Clinical/Lab Checklist

CONFIDENTIAL

**HIV/STI AND BEHAVIOURAL SURVEILLANCE SURVEY (BSS) AMONG
FEMALE SEX WORKERS IN KATHMANDU VALLEY
FHI/New ERA/SACTS - 2004**

Clinical/Lab Checklist

Respondent ID Number:

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

 Date: 2060/___/___

Name of Clinician : _____

Name of Lab Technician : _____

	(A) Clinical Information	(B) Specimen collection		
			Yes	No
Weight	: _____ Kg.	Pre test counseled	1	2
B.P.	: _____ mm of Hg.	Blood Collected for		
Pulse	: _____	HIV & Syphilis	1	2
Temperature	: _____ ° F	Date & place for		
		post-test results given	1	2
		Condom given	1	2
		Vitamins given	1	2
		Gift given	1	2
		IEC materials given	1	2

1.0 Syndromic Treatment Information

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

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

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

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

[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 - E
Female Oral Informed Consent

FAMILY HEALTH INTERNATIONAL (FHI), NEPAL
Oral Informed Consent to Participate in the Research

Research Topic: Prevalence of HIV, other sexually transmitted infections (STI), and related risk behaviors among female sex workers in Kathmandu and Pokhara Valley and Surrounding Highways

Principal Investigators: Jim Ross, Ph.D.,
Country Director
Family Health International/Nepal
GPO BOX 8803, Gairidhara
Kathmandu, Nepal
Email: ross@fhi.org.np

Co -Principal Investigators: Siddhartha Man Tuladhar,
Deputy Director
New ERA, P.O.Box 722
Kalopul Sifal
Kathmandu, Nepal
Email: siddhartha@newera.wlink.com.np

Dr. Vijaya Lal Gurubacharya
Consultant Pathologist
STD/AIDS Counseling and Training Services
New Road, Kathmandu
Email: lab@medan.wlink.com.np

Laxmi Bilas Acharya, Ph.D.
Programme Officer - Research
Family Health International/Nepal
GPO BOX 8803, Gairidhara
Kathmandu, Nepal
Email: lacharya@fhi.org.np

Stephen Mills
Associate Director, Technical
Family Health International
Asia Regional Office
Bangkok, Thailand
Email: smills@fhibkk.org

Introduction

This Consent Form provides you the information on the above mentioned research. In order to ensure that you are informed about the study and your participation in the study, you will be asked to read it or it will be read for you. You will be asked to show your agreement on whether you are willing to participate in the study or not by saying it loudly in presence of other two witnesses. The whole research work has been designed as per the norms set by Family Health International (FHI) and Nepal Health Research Council (NHRC). The ethics review committee(s) of Family Health International and the Nepal Health Research Council have approved this research. We will provide you a copy of this, if you want. This consent form might contain some words that are unfamiliar to you. Please do not hesitate to ask us if you do not understand or you have any query.

Rational for the Research

You are being asked to participate in the research which aims to find out the rate of STI/HIV among the people who live and travel in Kathmandu and Pokhara Valley and surrounding highways, and what are the risk behaviors among the people that have these infections. The Ministry of Health and local groups will use the findings of this research in planning and formulating strategies to prevent such infections.

General Information on Research Methodology

If you agree to participate in this research we would like to convince you that your name will not be taken in any parts of the research. We will ask you some questions and then ask you to provide blood sample. We will draw 5-6 ml blood by 10 ml disposable syringe from you. If it is determined that you have any symptoms that are consistent with an STI, we will provide treatment free of charge. The diagnosis and treatment of this type of disease will be done on the basis of National STI Case Management Guidelines.

Your Role in the Research

Your participation in the research will take about one hour. About 800 females who live or travel in Kathmandu and Pokhara Valley and surrounding highways will participate in the research.

You will be asked some questions regarding your age and education if you agree to participate in the research. We will also ask you some questions about your travel, the history of your sexual behavior and symptoms of sexually transmitted diseases and provide you counseling on HIV that causes AIDS and other sexually transmitted diseases as well. We will explain you what the laboratory (Lab.) test is and what treatment and care is available to you. We will then take your blood sample.

Your name will neither be recorded on blood sample nor in the questionnaire. All the questionnaire and samples will be labeled with a code number. Syphilis and HIV will be examined from your blood sample. Syphilis and HIV test will be done in Kathmandu by SACTS. If you wish we could provide you syphilis and HIV test results about a month after the completion of the fieldwork. The research team will inform you about the right place and date for you to collect your report. You can collect these reports only by showing the card bearing the study number given to you by the study team. We will not be able to provide you the results if you do not bring your card with you. This is done to keep the test results anonymous.

Possible Risk and Benefits

The risk of participating in this study is the minor discomfort due to bleeding bruising during blood drawing. Since your name has not been recorded anywhere, no one will be able to know that this laboratory test report belongs to you. Some of the questions we ask might put you in trouble or make you feel uncomfortable to answer them. You are free not to answer such questions and also to withdraw yourself from participating the research process at any time you like to do so. You might feel some mental stress after getting your test results. But you will get proper counseling on HIV and STI through a qualified counselor at that time.

To talk about the benefits of this research, you will be provided with free treatment, if currently you have any STI symptoms. You will be given lab test results of syphilis and HIV 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 us plan and formulate strategies to control and prevent further spread of AIDS and other sexually transmitted diseases.

If You do not Give Your Consent to Participate in the Research

You are free to decide whether to participate or not. Whatever be your decision, this will not affect in any way in the health services you have been seeking now.

Confidentiality

We will do our best to deal with the information regarding you and your participation in the research as a highly confidential matter. We are not interested to know your name so it will not be recorded anywhere. A code number will be assigned to each questionnaire and sample of your blood. You will be given a card with the code number. If you want to get the results of HIV only or syphilis only or both, you can do so by showing the card to us. You are free to decide which test result do you want to collect later. We will not be able to identify you and give the report to you without the card given to you at the time of blood sample collection.

We will not record your name anywhere so your name will not be mentioned in the report of this research, if published. However, the officials of International Health Center, in rare cases, might show interest to have a look at the record of the participants of the research and court sometimes might ask to show the record of the research to others. Whatever be the case, these records will not have your name.

Compensation

You will be given vitamin for one month, small gift, condom and some reading materials about HIV/AIDS and STI as compensation for your participation in the research.

Withdraw from Participating the Research

You are free to withdraw yourself from participating the research process at any time you like or not to respond the questions you do not prefer to answer.

Contact

If you have any questions or queries regarding this **research** please contact the following persons/agencies:

Siddhartha Man Tuladhar
New ERA, Kalopool, Kathmandu, Nepal
Phone Number: 01-4413603

Jim Ross
Family Health International (FHI),
Gairidhara, Kathmandu,
Phone Number: 01-4427540

Laxmi Bilas Acharya
Family Health International (FHI),
Gairidhara, Kathmandu,
Phone Number: 01-4427540

If you have some problems or queries regarding **your rights** as a participant of this research please contact:

Jim Ross
Family Health International (FHI)
Gairidhara, Kathmandu, Nepal
Phone Number: 01-4427540

OR

David Borasky
Institutional Representative, Human Rights Protection Committee,
P.O. Box. 13950,
Research Triangle Park, North Carolina, USA
Phone Number: 00-1-919-405-1445,
E-mail: dborasky@fhi.org
OR Cable: FAME.HEALTH

If you encounter any problem just because of **your participation** in this research please contact:

Siddhartha Man Tuladhar
New ERA
Kalopool, Kathmandu, Nepal
Phone No. 01-4413603, 01-4430060

OR

Asha Basnyat
Family Health International (FHI)
Gairidhara, Kathmandu
Phone No. 01-4427540

If you need more help, we can provide you a referral where you may have to pay for the services.

Volunteer Agreement

If you have fully understood what is being asked to you in the process of research, the person who is explaining these things to you will read the following words for you and sign on the form.

"I have read and explained the contents of this consent paper to the respondent. She explained the research activities back to me and from her understanding I am convinced that she is fully aware of the research activities. She has given her oral consent, on her own willingness, to participate in this study. No pressure was given to her to participate in the research work".

Date: _____

Signature of the person who obtained consent

I was present while reading out the benefits, risk and methods of the study for the respondent. All the questions were answered and the respondent has agreed to participate in the study.

Date: _____

Signature of the witness

Annex - F
Post Test Counseling

Dates and Places of Counseling Performed to FSWs

Name of Site	Date of Counseling	Total No. of Study Participants	Attended in Post-test Counseling		
			Total Counseled	With HIV	With Syphilis
Kathmandu	April 15-May 25, 2004 in VCT run by SACTS	500	73 (14.6%)	0	8

Family Health International
HIV/AIDS Prevention, Control and Care Program
Nepal Country Office
PO Box 8803, Gairidhara, Kathmandu, Nepal
Tel: 977-1-4427540, 4437173, Fax: 977-1-414063
E-mail: fhinepal@fhi.org.np, Web: www.fhi.org