

**Integrated Bio-Behavioral Survey
among Female Sex Workers
in East-West Highways
Covering 22 Districts of Nepal**

Round III -2006

**Integrated Bio-Behavioral Survey among
Female Sex Workers in East-West Highways
Covering 22 Districts of Nepal**

Round III - 2006

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 Counseling and Training Services
P.O. Box 7314
Pyukha, Kathmandu, Nepal

August 2006

ACKNOWLEDGEMENTS

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

The study team would like to express special thanks to Ms. Asha Basnyat, Country Director, FHI/Nepal, Ms. Jacqueline McPherson, Deputy Director, FHI/Nepal, Ms. Kamala Moktan, Technical Officer-Public Health, FHI/Nepal and Dr. Dimitri Prybylski, Senior Technical Officer, FHI/APD, Bangkok. Their inputs proved invaluable throughout the course of this study.

Dr. Laxmi Bilas Acharya, Team Leader – Surveillance, Research, Monitoring and Evaluation, FHI/Nepal deserves special credit for his technical inputs and guidance throughout the whole process of the study.

We are also indebted to various organizations such as Association of Medical Doctors of Asia (AMDA), Indreni Sewa Samaj, General Welfare Pratisthan (GWP), *Trinetra*, *Diyalo Pariwar*, Women Acting Together for Change (WATCH), Nepal STD and AIDS Research Center (N-SARC), Nepal National Social Welfare Association (NNSWA) and Nepal Red-Cross Society (NRCS) for their valuable suggestions and cooperation. We would like to gratefully acknowledge Nepal Police, National Center for AIDS and STD Control (NCASC) and District Public Health Office and Chief District Officer in the study districts for providing necessary administrative support during the study period.

Furthermore, the study team would like to thank Help Nepal, GWP, WATCH, N-SARC, NRCS, and NNSWA for providing counselor for post test counseling services and test result distribution to the study participants.

The study team would like to express heartfelt thanks to all the study participants who provided their valuable time for the interview and shared their personal experiences to bring the study to this shape.

Last but not the least, the strenuous effort put up by each and every member of the field team, coding members and data analysts have all contributed to give final shape to this report. We sincerely acknowledge their contribution.

Study Team
New ERA

STUDY TEAM MEMBERS

Key Team Members

1.	Mr. Sidhartha Man Tuladhar	-	Project Director
2.	Mr. Niranjan Dhungel	-	Project Co-ordinator
3.	Ms. Pranita Thapa	-	Research Officer
4.	Mr. Narayan Prasad Sitaula	-	Senior Research Assistant
5.	Mr. Ramesh Dangi	-	Senior Research Assistant
6.	Ms. Sarmila Prasai	-	Senior Computer Programmer

Field Study Team Members

1.	Mr. Deepak Dhungel	-	Research Assistant
2.	Mr. Sudeep Acharya	-	Research Assistant
3.	Mr. Shanti Ram Dahal	-	Research Assistant
4.	Mr. Bhim Prasad Upreti	-	Research Assistant
5.	Mr. Pawan K.C.	-	Research Assistant
6.	Mr. Rabindra Udash	-	Field Supervisor
7.	Mr. Pitambar Koirala	-	Field Supervisor
8.	Mr. Durga Prasad Acharya	-	Field Supervisor
9.	Mr. Pancha Maharjan	-	Field Supervisor
10.	Mr. Chandra Bahadur Rai	-	Field Supervisor
11.	Ms. Roshani Shrestha	-	Field Supervisor
12.	Ms. Kalpana Bhatta	-	Field Supervisor
13.	Ms. Chandra Rana	-	Field Supervisor
14.	Ms. Pramila Sharma	-	Field Supervisor
15.	Ms. Sumitra Shrestha	-	Field Supervisor
16.	Ms. Sulochana Swar	-	Field Supervisor
17.	Ms. Devimaya Bogati	-	Field Supervisor
18.	Ms. Saraswati Katuwal	-	Field Supervisor
19.	Ms. Sarita Shrestha	-	Field Supervisor
20.	Ms. Janani Magar	-	Field Supervisor
21.	Ms. Menuka Shrestha	-	Field Supervisor
22.	Ms. Ishwori Swar	-	Field Supervisor
23.	Ms. Laxmi Thapa	-	Field Interviewer
24.	Ms. Sita Acharya	-	Field Interviewer
25.	Ms. Kalpana Bhattarai	-	Field Interviewer
26.	Ms. Sapana Chand	-	Field Interviewer
27.	Ms. Chitrakala Raut	-	Field Interviewer
28.	Ms. Puja Katuwal	-	Field Interviewer
29.	Ms. Laxmi Karki	-	Field Interviewer
30.	Ms. Gita Pokharel	-	Field Interviewer
31.	Ms. Sita Shrestha	-	Field Interviewer
32.	Ms. Sushila Sapkota	-	Staff Nurse
33.	Ms. Menuka Rai	-	Staff Nurse
34.	Ms. Rambha Gurung	-	Staff Nurse
35.	Ms. Ester Rai	-	Staff Nurse
36.	Ms. Sangita Karki	-	Staff Nurse

37.	Mr. Madhu Thapa	-	Runner
38.	Mr. Ram Kumar Rijal	-	Runner
39.	Mr. Saroj Pandey	-	Runner
40.	Mr. Nabin Chaudhary	-	Runner
41.	Mr. Bikash Sapkota	-	Runner
42.	Mr. Ram Prasad Yakha	-	Motivator

Data Entry/Tabulation /Coding

1.	Mr. Babu Raja Dangol	-	Coding Supervisor
2.	Ms. Deepa Shakya	-	Coding Supervisor
3.	Ms. Sharada Dangol	-	Editor
4.	Ms. Nitu Satyal	-	Coder
5.	Ms. Suva Laxmi Ranjit	-	Coder
6.	Ms. Sujaya Dhungel	-	Coder
7.	Mr. Pradeep Dahal	-	Coder
8.	Ms. Sama Shrestha	-	Data Entry Person
9.	Ms. Janani Magar	-	Data Entry Person

Administration Support

1.	Mr. Sanu Raja Shakya	-	Senior Word Processor
2.	Ms. Geeta Shrestha-Amatya	-	Senior Word Processor
3.	Mr. Rajendra Kumar Shrestha	-	Office Assistant

Laboratory Team (SACTS)

1.	Dr. Vijaya Lal Gurubacharya	-	Consultant Pathologist
2.	Ms. Jyotsana Shrestha	-	Micro Biologist
3.	Mr. Janardan Kuinkel	-	Senior Lab Technician
4.	Mr. Binod Shrestha	-	Lab Technician
5.	Ms. Richa Mishra	-	Lab Technician
6.	Ms. Arati Dulal	-	Lab Technician
7.	Ms. Yasodha Bista	-	Lab Technician
8.	Ms. Shanti Khanal	-	Lab Technician

TABLE OF CONTENTS

	<u>Page</u>
ACKNOWLEDGEMENTS	i
STUDY TEAM MEMBERS	ii
TABLE OF CONTENTS	iv
LIST OF TABLES	vi
ABBREVIATIONS	vii
EXECUTIVE SUMMARY	viii
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 Implementation of the Study.....	3
2.5 Identification and Recruitment Process	4
2.6 Research Instrument.....	6
2.7 Study Personnel	6
2.8 Recruitment and Training of Research Team	7
2.9 Field Operation Procedures.....	7
2.10 Quality Control of Laboratory Tests.....	9
2.11 Coordination and Monitoring	9
2.12 Ethical Issues	9
2.13 HIV/STI Pre- and Post-Test Counseling and Follow-Up	10
2.14 Control of Duplication	10
2.15 Constraints in the Field Work	10
2.16 Data Processing and Analysis.....	11
Chapter 3: KEY FINDINGS	12
3.1 Socio-Demographic Characteristics	12
3.2 Sex Workers, their Clients and Other Sex Partners	15
3.3 Type of Sex Practiced by Sex Workers	18
3.4 Income of Sex Workers	19
3.5 Knowledge of Condom among Sex Workers	21
3.6 Condom Use with Different Sex Partners	21
3.7 Availability of Condoms and Their Brand Names	24
3.8 Knowledge of HIV/AIDS	27
3.9 Perception on HIV Test	29
3.10 Access to FHI/Nepal Messages	30
3.11 Knowledge and Treatment of Sexually Transmitted Infections	31
3.12 Use of Alcohol and Drugs.....	33

	<u>Page</u>
3.13 Exposure to HIV/AIDS Awareness Programs.....	34
3.14 Stigma and Discrimination	39
3.15 HIV/STI Prevalence among Female Sex Workers	40
3.16 Association of HIV with Socio-Demographic, Behavioral and STI Variables	41
3.17 Association of STIs with Socio-Demographic and Behavioral Variables	42
3.18 Treatment and Care Seeking Behavior of FSWs	43
3.19 Comparison of Selected Behavioral of HIV and STI Prevalence Indicators with the 1999 and 2003 IBBS Results	43
3.20 Change in Condom Use between 2003 and 2006	45
Chapter 4: CONCLUSIONS AND RECOMMENDATIONS.....	46
4.1 Conclusions.....	47
4.2 Recommendations.....	49
REFERENCES.....	50
ANNEXES	51

LIST OF TABLES

	<u>Page</u>
Table 1: Distribution of Female Sex Workers by Development Regions	12
Table 2: Socio-Demographic Characteristics of Female Sex Workers	13
Table 3: Sexual Behavior of Female Sex Workers	15
Table 4: Number of Clients Reported by Female Sex Workers.....	16
Table 5: Types of Clients Reported by Female Sex Workers	17
Table 6: Sex Partners of Female Sex Workers	18
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 Reported by Female Sex Workers	21
Table 10: Condom Use with Clients, Regular Clients and Non-Paying Sex Partners	22
Table 11: Condom Use with Partners Other than Client, Husband and Male Friend.....	24
Table 12: Condoms Available Places and Brand Name of Most Used Condom Reported by Female Sex Workers	25
Table 13: Reported Places for Obtaining Condoms by Female Sex Workers	26
Table 14: Sources of Knowledge of HIV/AIDS among Female Sex Workers	27
Table 15: Percentage of FSWs Who Have Knowledge of Major Ways of Avoiding HIV/AIDS	28
Table 16: FSWs' Knowledge on Ways of HIV/AIDS Transmission	28
Table 17: Perception on HIV Test	29
Table 18: Seen/Heard FHI Character/Message in the Past Year by Female Sex Workers.....	30
Table 19: Message Understood by Female Sex Workers	30
Table 20: Reported STI and Treatment in the Past Year	31
Table 21: Reported STI Symptom/s at the Time of Survey and their Treatment	33
Table 22: Use of Alcohol and Drugs among Female Sex Workers	33
Table 23: Knowledge of IDUs and History of Injecting Drugs among Female Sex Workers	34
Table 24: Meeting/Interaction of FSWs with Peer Educator/Outreach Educator.....	35
Table 25: DIC Visiting Practices of Female Sex Workers	36
Table 26: STI Clinic Visiting Practices of Female Sex Workers	37
Table 27: VCT Visiting Practices of Female Sex Workers	38
Table 28: Participation of Female Sex Workers in STI/HIV/AIDS Awareness Program	39
Table 29: Attitude of FSWs towards HIV Positive People.....	40
Table 30: HIV and STI Prevalence among FSWs	40
Table 31: Relationship between HIV and Demographic, Behavioral and STIs Variables	41
Table 32: Association between STIs and Demographic and Behavioral Variables..	42
Table 33: STI Symptoms and Treatment Seeking Behavior of Sex Workers.....	43
Table 34: HIV and STI Prevalence Rates in 1999, 2003 and 2006	44
Table 35: HIV and STI Prevalence Rates in 2003 and 2006	44
Table 36: Comparison of HIV Prevalence among Selected Variables	45
Table 37: Comparison of Condom Use between 2003 and 2006	46

ABBREVIATIONS

AIDS	Acquired Immuno-Deficiency Syndrome
CREHPA	Center for Research on Environment, Health and Population Activities
DIC	Drop-in-Center
ELISA	Enzyme Linked Immuno Assays
FSW	Female Sex Worker
GWP	General Welfare Pratisthan
HIV	Human Immuno-Deficiency Virus
IBBS	Integrated Bio-Behavioral Survey
IDU	Injecting Drug User
MSM	Men Who have Sex with Men
NCASC	National Center for AIDS and STD Control
NGO	Non-Governmental Organization
NNSWA	Nepal National Social Welfare Association
NRCS	Nepal Red-Cross Society
NRL	National Reference Laboratory
NSARC	Nepal STD and AIDS Research Center
OE	Outreach Educator
PE	Peer Educator
PHSC	Protection of Human Subjects Committee
RPR	Rapid Plasma Regain
SLC	School Leaving Certificate
STD	Sexually Transmitted Disease
STI	Sexually Transmitted Infections
VCT	Voluntary Counseling and Testing
WHO	World Health Organization

EXECUTIVE SUMMARY

This study is the third round of the Integrated Bio-Behavioral Survey (IBBS) conducted among 600 female sex workers (FSWs), from 22 districts of Terai Highway. Among them, 400 respondents were recruited from four study sites representing 16 districts between Jhapa in the east and Rupandehi in the west along the highway in the Terai, and 200 were recruited from three sites representing 6 districts between Kapilvastu in the west to Kanchanpur in the far western region. The IBBS was carried out during the months of March- June 2006. The survey measured HIV and STIs prevalence among FSWs and variables which are associated with a risk of HIV infection, such as condom use, sexual behaviors, knowledge of HIV/AIDS, reported cases of sexually transmitted infections (STI), STI treatment behaviors, exposure to HIV/AIDS messages and drug habits. This survey was also undertaken to compare the findings for condom use and sexual behavior of the FSWs in 22 districts from this study with findings from the 2003 study.

Study Methodology

Study Population

This cross-sectional IBBS was conducted among FSWs, one of the most at risk sub-populations. The eligibility criterion for recruitment into the study was: “women reporting to have had provided sexual services in return for payment in cash or in kind in the last six or more months in 16 districts stretching from east to west and 6 districts from west to the far west region.”

Sampling

A mapping exercise was conducted to update the estimated size of the study population and the location of their working places. The study team visited the different settings and settlements in the sampled location for the size estimation of the study participants and updated the list prepared during the previous round of the study. After estimating the number of sex workers in different settlements, the study sites were divided into different clusters. FSWs were selected randomly for the interview from different clusters and settings.

Lab Testing

For collecting blood samples required for HIV and Syphilis testing, laboratories/clinics were set up at seven different locations in order to cover the areas 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 and swab samples were collected and syndromic treatment was provided for STI problems after examination by a staff nurse. All study participants were also provided pre test counseling for HIV. Lab analysis included testing for HIV, neisseria gonorrhoeae, chlamydia trachomatis and syphilis among the sex workers. The sex workers returned after one month for the results and treatment was given to those testing positive for STIs.

Findings

A total of 31.7 percent respondents were living in the Eastern Region, 10 percent in Central Region, 25 percent in Western Region, 13.3 percent in Mid-Western Region and 20 percent in far Western Region of Nepal. The median age of the FSWs was 27 years and 18.7 percent of them were less than 20 years of age. Two-thirds (67.3%) were illiterate or had no formal schooling. Approximately 25 percent of the respondents were either divorced or separated from their husbands.

Sex at an early age was the prevalent practice among the study population as 54.3 percent of the sex workers have had their first sexual contact at the age of 15-19 years. In 16 districts, 31.5 percent respondents and in the 6 districts, 24.5 percent were new entries to the sex trade. Almost three-quarters of the respondents in total (72.5%) entertained one client in an average per day. The mean number of their paying and non-paying sex partners in the previous week was 4.4. The respondents were also exposed to different kinds of violence in the hands of their clients. Twenty eight percent of the 6 districts sex workers and 19.8 percent of the 16 districts sex workers had been subjected to forceful sex with their clients in the past year. Twenty percent of them had also been physically assaulted.

Consistent condom use with clients was reported by only some of the FSWs. In the past year, 51.5 percent in 16 districts and 26 percent in 6 districts had used condoms consistently with their clients. Overall, 43 percent of the sex workers had used condom in every commercial sex act. Consistent use of condoms with non-paying partners was very low. Approximately six percent of the total sex workers had used condoms consistently in the past year with their non-paying partners.

Overall, 45.3 percent of the sex workers could get condoms within five minutes from the place of their work (sex work). A total of 44.7 percent of the respondents also reported that they obtained free condoms all the time. Free condoms were mostly obtained from NGO/health workers/ volunteers and the clients. For purchasing condoms, the respondents mostly preferred to go to pharmacies. Number One and *Dhaal* were the two most popular brands of condoms among the respondents.

Almost 98 percent of the sex workers had heard about HIV/AIDS. The radio was reported major source of the information of HIV/AIDS by 92.5 percent of the sex workers. Sixty percent of the respondents correctly identified all A, B and C as HIV preventive measures. However, 41.8 percent only rejected the common local misconception that mosquito bite transmitted HIV virus. In total, only 31.3 percent of the respondents were aware of all the five major indicators of HIV transmission

More than one-half of the respondents (54.7%) had been experiencing at least one STI symptom during the survey. Among them, 97.3 percent had not sought treatment for such symptoms. Among those few who had received treatment, they had visited AMDA clinic (33.3%), private clinic and pharmacy (22.2% each).

In total, 79.2 percent of the sex workers had at least once met or interacted with OEs/PEs from the HIV/AIDS related programs and 38.2 percent had visited DICs (Drop-in-centers). The proportion of the respondents paying their visit to STI clinic and VCT centers during the past year was 31.3 percent and 35.8 percent respectively. The participation of the sex workers in different HIV/AIDS awareness raising program was minimal with only 33.5 percent of them reporting to have participated in such activities in the 12 months preceding the survey. GWP had conducted most of these activities in 6 districts while in 16 districts it was WATCH that had conducted most of the programs.

Overall 1.5 percent (9/600) respondents were found to be HIV positive. There was no difference in HIV prevalence among the FSWs of 16 districts and 6 districts. However, prevalence of gonorrhea and chlamydia among the FSWs in the 6 districts (3.5% gonorrhea and 5.5% chlamydia) was low compared with prevalence among FSWs in 16 districts (gonorrhea 9.8% and chlamydia 18.3%). Nearly five percent (28/600 or 4.7%) of the FSWs had current syphilis. There was no statistical difference in the prevalence of current syphilis between the FSWs in 16 districts and 6 districts.

There has been significant decrease in HIV prevalence in 2006 (1.5% or 6/400) than in the 1999 survey (3.9% or 16/410). Prevalence of current syphilis has also significantly decreased from 11.7 percent in 1999 to 5.0 percent in 2006. The prevalence rate of gonorrhea did not change significantly (9.0% in 1999 and 9.8 % in 2006), but the prevalence of chlamydia has increased progressively from 9.3 percent in 1999, 12.3 percent in 2003 to 18.3 percent in 2006. Such change between 1999 and 2006 is significant.

Recommendations

Young girls are entering the sex trade every year. So the HIV/AIDS awareness campaigns should target youth and adolescent groups. Programs might include visits by peer educators and outreach workers for raising awareness about HIV and STI and for the promotion of condom use. Sex education at school level would also help in creating general awareness.

The sex workers do not use condoms consistently. Condom use with non-paying partners such as husbands/wives and other boy/girl friends was very low. Therefore, prevention programs should focus more on the need for consistent condom use for HIV/STI infection prevention purposes with all kinds of partners.

Free condom distribution programs through NGO/health workers/volunteers should be continued and expanded to cover a larger group of the target population as the sex workers find it convenient to receive condoms from these sources.

The mobilization of peer and outreach educators for educating the target groups has been quite successful in meeting its objectives. It should be continued at a larger scale to cover more sex workers. Comparatively however, fewer sex workers had ever visited the existing DICs, STI clinics and VCT centers. Such facilities should be extended further to facilitate convenient access to the sex workers.

Chapter 1: INTRODUCTION

1.1 Background

Nepal is presently experiencing a concentrated epidemic of HIV with prevalence at or over five percent in certain high risk groups such as injecting drug users (IDUs) and men who have sex with men (MSM). The country's vulnerability to HIV has increased because of several socio-economic factors including poverty coupled with lack of employment opportunities, large-scale migration and ten years of conflict. Sex work is rampant and trafficking of women for sex work in the brothels in Indian cities is a perennial problem.

At the end of July 2006, a cumulative total of 7,373 cases of HIV infection had been reported to the National Center for AIDS and STD Control (NCASC). Among them, 49.6 percent were clients of female sex workers (FSWs) or patients suffering from sexually transmitted diseases (STDs), 8.5 percent were FSWs and 21 percent were 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.

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 percent of the FSWs and 1.5 percent of the truckers were HIV-positive (New ERA/SACTS/ FHI, 2000). A recent study showed 52 percent HIV infection among male IDUs in Kathmandu. Similarly, 22 percent of the male IDUs in Pokhara, 32 percent in the urban areas of Jhapa, Morang and Sunsari districts in eastern Nepal and 12 percent in the highway districts between Rupandehi and Kanchanpur in the western to far western region were carrying the virus (New ERA/SACTS/FHI 2005_a; New ERA/SACTS/FHI, 2005_b; New ERA/SACTS/FHI, 2005_c, New ERA/SACTS/FHI 2005_d). Behavioral 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).

Interventions targeted at FSWs and their clients have been intensified over the years. These programs basically aim at bringing about behavioral change among the sex workers and their clients. Promotion of condom use as a safer sex practice is one of the chief components of these activities. The integrated bio-behavioral survey (IBBS) conducted in 2003 among FSWs in the 22 terai highway districts revealed that 22.7 percent of the sex workers had used condoms consistently with their clients in the past year (New ERA/SACTS/FHI 2004). This 2006 round of IBBS was undertaken to compare condom use practices and other knowledge and risk behaviors of the sex workers in the 22 terai highway districts with that of previous study findings.

1.2 Objectives of the Study

The objectives of the study were to determine the prevalence of HIV, *Neisseria gonorrhoeae* (GC), *Chlamydia trachomatis* (CT) and syphilis among FSWs working at various sites in 22 districts and to assess their HIV/STI related knowledge, risk behaviors and to analyze trends through comparison with data obtained from the 2003 IBBS conducted in the same sites.

The specific objective of the study was to collect information related to socio-demographic characteristics; sexual and drug using behaviors; knowledge of HIV/AIDS; knowledge and treatment of STI problems; knowledge and use of condom; and exposure to available HIV/STI services from female sex workers in 22 districts and to relate them with HIV and STI infection.

Chapter 2: METHODOLOGY

2.1 Study Population

This cross-sectional IBBS study was conducted among Female sex workers (FSWs), who are considered to be one of the high-risk sub-populations. The eligibility criterion for them in order to be recruited for the study was: “women reporting to have had provided sexual services in return for payment in cash or in kind in the last six or more months in the 22 terai highway districts between Jhapa in the East to Kanchanpur in the Far West region.”

2.2 Sample Design

IBBS studies require meticulous and cautious sampling procedures 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. To allow comparison of rates over time, the 2006 survey followed the same sampling procedure used in the previous rounds of IBBS with FSWs in 16 districts conducted in 1999 and 22 districts in 2003. A mapping exercise was conducted to list out the locations where sex workers were active. Then estimates of number of sex workers active in these locations were obtained. The data obtained from CREHPA was used to locate the sample areas. In total, around 7,600 sex workers were estimated in the study sites. The New ERA team visited the different settlements in the sampled location to update the list for sampling purpose.

2.3 Sample Size

As in the 2003 survey, the sample size of the sex workers to be included in the study was 600 consisting of 400 FSWs from 16 district in east-mid west region and 200 FSWs from 6 districts in west to far west region (Annex 1).

Two separate samples in the Eastern and Western clusters was necessitated for the same reason as in the 2003 study (data from BSS round 4 in eastern cluster and BSS round 1 in western cluster had shown significant difference in the characteristics of FSWs in these two clusters). This sample size was estimated to measure about 10 percent change in HIV prevalence among FSWs in 22 districts from the two percent HIV prevalence measured in 2003. Formula used in the sample size estimation is given in Annex 2

2.4 Implementation of the Study

Overall, New ERA was responsible for carrying out the study. The clinical part of the study was conducted in collaboration with STD/AIDS Counseling and Training Services (SACTS) and National Reference Laboratory (NRL). SACTS was responsible for setting up the mobile lab in the field sites, providing training to lab technicians, supervising and collecting blood samples, and conducting HIV and syphilis tests at their Kathmandu based laboratory. NRL was responsible for providing training to staff nurses, supervising the collection of endocervical swab specimens and conducting chlamydia trachomatis and neisseria gonorrhoeae testing at

their Kathmandu based laboratory. New ERA on the other hand designed research methodology including the sampling method, prepared the questionnaire, distributed STI/HIV results to the study participants with pre- and post-test counseling and managed the overall study. Many local organizations also provided assistance for the successful completion of the survey.

2.5 Identification and Recruitment of Study Participants

As in the previous round, the study sites were set up at seven different locations. The study team prepared a list of places with estimated number of sex workers where they could be contacted directly or through some sources. The sex workers were selected randomly in each site.

Sex work, which is illegal in the country, and has huge social stigma associated with it, is carried out clandestinely. It was not an easy task to identify the sex workers in different localities and to convince them to participate in the interview. However, most of the researchers, who conducted these interviews, were acquainted with the working places and behavior of the sex workers, as they had been frequently involved in previous rounds of IBBS and other studies of the same nature, including mapping exercises done for the size estimation of FSWs. The involvement of the trained and experienced researchers thus eased the identification and the recruitment process in many ways. Study team members knew some sex workers in each cluster, which helped them to develop good rapport between the study population and the research team.

Before the inception of the actual field work, the study team visited different local organizations. The study team apprised the different stakeholders about the study objectives and methodology. Meetings were conducted with the staff of different organizations, who had been mobilizing their peer educators, drop in center (DIC) operators and outreach educators among the study population in the selected study sites. The meetings were in general focused on getting acquainted with different organizations' working areas and with the names of staff members who interacted with the target groups. It was considered necessary to collect such information since the study also sought to find out the exposure of the study participants to various HIV/AIDS related programs including peer/outreach education and their visit to the DICs, VCT centers and STI clinics located in the district.

In order to reach the desired sample size and to facilitate their participation, the study team was mobilized along the major highways in the study sites. As in the previous study the study team used their established contacts with pimps (*dalals*) and FSWs in the proposed study areas for recruiting the study population. Strictly in line with the list of location in each cluster, the sex workers were recruited from various locations such as streets, hotels, restaurants, cabin restaurants, tea shops and other settlements. After careful observation of these establishments/sites, the researchers started approaching the study population using various techniques like building good rapport with their employers, visiting the site, taking the help of brokers and key informants, observing the activities of women in major gathering areas for FSWs, posing as clients, chatting with other staff of the establishments, approaching familiar sex workers or using snowball methods. The outreach and peer educators (OEs/PEs) of organizations like Association of Medical Doctors of Asia (AMDA), Help/Nepal,

Indreni Sewa Samaj, General Welfare Pratisthan (GWP), *Trinetra*, *Diyalo Pariwar*, Women Acting Together for Change (WATCH), Nepal STD and AIDS Research Center (N-SARC), Nepal National Social Welfare Association (NNSWA) and Nepal Red-Cross Society (NRCS) also facilitated the recruitment process in some instances.

In order to confirm the identity of the study participants, the sex workers were asked several screening questions. Such questions were related to their sexual experience and behavior; the type of sex partners they had; their involvement in the sex trade; the number of their clients; the period of their involvement in the profession; and their knowledge of HIV/AIDS awareness/prevention activities. If the interviewers found their answers convincing enough to establish their identity as sex workers then only they were interviewed. The respondents were screened at least twice and sometimes thrice during the process.

Respondents who satisfactorily answered all the screening questions were briefed about the purposes, objectives and methodology of the study. Once the selected sex worker was consented to participate in the study, the researchers took them to the clinic.

Informed consent form was administered by the interviewer in a private setting and witnessed by another staff to ensure that the study participants understood the questions well and knew about the services that would be provided to them and that they were participating in the study with their will. 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.

A laminated ID card with a unique number was also issued to each respondent. The same number was used in the questionnaire, medical records, blood and endocervical swab specimens of the particular respondent. The names and addresses of the respondents were not recorded anywhere. A clinician gave the participants pre-test counseling on HIV/AIDS and STIs and asked them if they were currently suffering from any of the STI symptoms. Endo-cervical swab specimens were also collected from each respondent for chlamydia trachomatis and neisseria gonorrhoeae testing. They were also examined physically for any evidence of STI symptoms and in case of any such sign, they were counseled accordingly. They were provided free medicines for syndromic treatment of STIs in accordance with the “National STI Case Management Guidelines 2001”. A lab technician drew a venous blood sample for HIV and syphilis testing. Additionally, a one-month supply of vitamin and iron capsules and Rs. 150 in cash for their transportation cost was also provided to the FSWs.

Field work for the study team started on March 13, 2006 and lasted till June 04, 2006.

Refusal

All the respondents participated voluntarily in the study. Their refusal to participate in the survey was carefully documented. Refusals were recorded at two stages: (1) at the time of approaching the sex workers at different locations and (2) after arriving at the study site, i.e., during the final stage of recruitment. Altogether 187 sex workers refused to take part in the study and 64 were considered clinically unfit for participation as they were menstruating/bleeding. Among them, 146 expressed their unwillingness to take part in the survey when they were approached by the study team members themselves or through pimps and peer educators while 41 refused to take part in the survey after arriving at the study site. Among them, 74 refused to participate in the study as they were not interested in it, 18 had recently been to a clinic/VCT center for check up, 32 denied that they were sex workers, 39 said that they were too busy, two were denied permission by their employer, six said that they were scared of blood test, 14 feared being exposed as a sex worker while two of them were pregnant and denied to take part in the study.

2.6 Research Instrument

A quantitative research approach was adopted in the study. The structured questionnaire that was used earlier in the similar IBBS was used with some additional questions. New sections were added to draw information on several issues like the FSWs' exposure to the ongoing HIV/AIDS awareness and treatment programs and their participation in such activities. Inputs received from the researchers during the mock interview sessions conducted prior to the survey were also duly considered for giving a final shape to the questionnaire. The questionnaire included questions on demographic characteristics and sexual behaviors - sexual history, use of condoms, risk perception, awareness of HIV/AIDS/STIs, incidence of STI symptoms, participation in HIV/AIDS awareness programs, and alcohol/drug using habits (Annex 3). Individual interviews were conducted with each sex worker using a structured questionnaire. Apart from the structured questionnaire, questions related to STI symptoms were asked to the sex workers by a staff nurse to check for presence of such symptoms in the past or during the survey (Annex 4). The study participants were provided syndromic treatment for STI problems. Blood samples for HIV and syphilis testing and endocervical swabs for chlamydia trachomatis and neisseria gonorrhoeae testing were also collected by clinician and lab technician. Strict confidentiality was maintained throughout the entire process.

2.7 Study Personnel

The study was conducted by a team comprised of a study director, a research coordinator, a research officer, two research assistants and field teams.

Five field teams were formed for the survey in seven different locations, each consisting of one male research assistant, one male supervisor, four female supervisors/interviewers, one staff nurse, one male/female lab technician and one runner. Itahari, Lahan, Butwal were covered by one team each while two teams covered four sites at Narayanghat, Nepalgunj, Dhangadi and Mahendranagar.

2.8 Recruitment and Training of Research Team

A total of five research assistants, five male supervisors, 20 female supervisor/interviewers, five staff nurses, five lab technicians and five runners were hired for the FSW 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 (Behavioral Surveillance Survey) and HIV/STI prevalence studies among FSWs, truckers, migrants, clients and IDUs.

A one-week intensive training was organized for all the field researchers/staff focusing on introduction to the study, administration of the questionnaire including characteristics of the target groups, methods of approaching them, rapport building techniques, and sharing of previous experiences (problems and solutions). In addition, the training session also involved mock interviews, role-plays and class lectures as well. Role-play practices were carried out assuming the actual field situation. Possible problems that could be faced while approaching the sex workers and ways of overcoming such problems were discussed. The training also focused on providing a clear concept of informed consent, pre-test counseling and basic knowledge of HIV/AIDS and STIs to the research team.

2.9 Field Operation Procedures

Clinic Set-up

Clinics were set up at seven different locations at Itahari, Lahan, Naraynaghat, Butwal, Nepalgunj, Dhangadi and Mahendranagar in order to cover those areas as outlined by the sampling procedure. These seven centrally located sites were purposively selected considering the convenience in meeting the study population and in bringing them to the clinic. Moreover, to assess the changes over the years, the study clinics were set up at the same sites as in the previous round of the study (2003). Each clinic had a lab facility for blood drawing and centrifuging the blood for separation of sera. There was a separate room for each activity, including administration of the questionnaire. At each clinic site there were altogether five to six rooms.

Clinical Procedures

All the participants were offered clinical examination as incentives to participate in the study. The clinical examination included simple health check up such as measurement of blood pressure, body temperature, weight, pulse, and symptomatic examination of STI with syndromic treatment. The participants were asked whether they had current STI symptoms of genital discharge, ulcers, or lower abdominal pain, and those presenting with these symptoms were treated syndromically according to national guidelines. Other over-the-counter medicines such as para-cetamol, alkalyising agents and vitamins were given as necessary. Endocervical swab specimens were collected for chlamydia trachomatis and neisseria gonorrhoeae testing. Furthermore, external genital examination was complemented with a speculum examination.

Laboratory Methods

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

- TPPA positive with RPR-ve or RPR +ve with Titre \leq 1:8 were categorized as “history of syphilis or past syphilis”.
- TPPA positive with RPR+ve with titre 1:8 or greater were categorized as “current syphilis” requiring immediate treatment.

A total of 229 FSWs (137 in 16 districts and 92 in 6 districts) were provided syndromic treatment for STIs as they went through the clinical procedure of the study.

HIV was detected by repeat positives of two separate enzyme linked immuno assays (ELISAs), so each sample underwent up to three separate tests. If the first ELISA test showed negative result then no further test was conducted, but if the first test showed positive result then a second ELISA test was performed. If the second result too confirmed the first result then no further test was performed. But if the second result contradicted with the first then a third test was done. The final test results thus were declared positive if the test results showed +ve, -ve, +ve and negative if it gave out +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.

PCR was performed for the detection of neisseria gonorrhoeae and chlamydia trachomatis among the study population. The specimen for this purpose was collected by endo cervical swab placed in PCR transport media. This test was conducted in the laboratory of NRL in Kathmandu.

Storage and Transportation of Samples

Blood samples for the HIV/Syphilis test were collected from each of the study participants using a 5ml disposable syringe. Serum samples were separated from the collected blood samples and stored in a fridge in the field. The specimens were handed over to the SACTS lab in Kathmandu twice a week in a cold box. The serum samples were stored at the SACTS laboratory at a temperature of -12 to -20°C . Endocervical swab samples were collected using an Amplicor swab specimen collection and transport kit for chlamydia trachomatis and neisseria gonorrhoeae test. The endocervical swab samples were handed over to NRL in Kathmandu twice a week where it was stored at a room temperature. Two separate cold boxes were used for blood and endocervical sample transportation from the field to Kathmandu.

2.10 Quality Control of Laboratory Tests

Quality control was strictly maintained throughout the process of the collection of the specimen, their handling and testing stages. All the tests were performed using internal controls. These controls were recorded with all the laboratory data. A total of 10 percent sample of the total serum collected was submitted for quality control assurance to an independent laboratory for testing for HIV and syphilis. The quality control samples were given a separate code number to ensure that the person who performed the quality control had no access to the test results.

2.11 Coordination and Monitoring

New ERA carried out the overall coordination of the study. New ERA sub-contracted SACTS to set up the field clinic and perform the laboratory and clinical part of the study including collecting, storing and testing samples.

The key research team member conducted monitoring and supervision of the field activities. New ERA study team members visited the field once or twice a week to monitor the fieldwork and coordinated with various concerned organizations. Research assistants and field supervisors were responsible on a day-to-day basis to ensure that the study was implemented according to the protocol in the field. Team meetings were held every week to plan ahead and solve any field level problems. The field research assistant reported to the senior research assistants or the project coordinator in Kathmandu by telephone whenever necessary. New ERA coordinated with FHI to send an appropriate person to the field to deal with any problems reported from the field as and when necessary. In addition, the key research team member made periodic site visits throughout the fieldwork. The key research team members, in conjunction with other designated personnel, were responsible for the overall monitoring. Occasional field visits were made from FHI as well.

2.12 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 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 refuse to answer any question or to withdraw from the interview at any time. Further, they were also briefed that such withdrawal or refusal would not affect the services they would normally receive from the study. A consent format describing the objectives of the study, the nature of the participant's involvement, the benefits and confidentiality issues was clearly read out to them (Annex 5).

Since names and addresses of the interviewed sex workers were not mentioned in any record, only the ID cards that were provided to the study participants with specific number identified them. HIV test results were provided to the individual participants

in strict confidence. The study team also maintained the confidentiality of the data collected through the survey.

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

After the collection of the blood samples all the study participants were informed about the date, location and place where they could have the test results. It was also informed that they could collect their test results only by showing the ID card bearing their study number that was provided to them by the study team. Pre and post HIV/STI test counseling were provided to the study participants. They were briefed about the importance of receiving the test result and when and where they could receive their HIV and STI results with post-test counseling. For follow-up services, the study participants were referred to AMDA, Help/Nepal, GWP, Trinetra, WATCH, N-SARC, NRCS and NNSWA counseling centers. Trained HIV/STI counselors distributed the test results two weeks after blood collection (Annex 6).

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

Post test counseling and individual report dissemination was completed between May 31, 2006 to June 21, 2006. The respondents were requested to collect their test results within the specified period. Although there was no provision for incentive like reimbursement for travel cost, 124 (20.7%) of the 600 sex workers tested for HIV and Syphilis, came to collect their test results. Test results were provided by trained counselors in different VCT centers and the study centers in the study sites. Test results were provided by Help Nepal in Itahari and Lahan, GWP in Narayanghat, WATCH in Butwal, N-SARC in Nepalgunj, NRCS in Dhangadi, and NNSWA in Mahendranagar.

2.14 Control of Duplication

In order to avoid repeated interviews with the same respondent, several questions were asked to the participants in case of any doubt regarding her first time participation in the study. Such questions included queries relating to her experience of undergoing any blood test, part of the body from where the blood was taken, her experience of HIV test or test for other diseases, meeting with the peer educators for blood test, and the possession of an ID card with a study number.

2.15 Constraints in the Field Work

Frequent "Nepal *bandhs*" called during survey were one of the major constraints faced by the study team. Because of such *bandhs* the field teams had difficulties in going to the study sites. The sex workers would also not appear at the prescribed locations one-two days before and after the *bandh*. Similarly, there was no suitable environment for the female researchers to enter the cabin restaurants since their safety could not be guaranteed. In some cases the owners of the cabin restaurants denied permission to them.

The 'People's movement' for restoring democracy in Nepal started in the first week of April 2006. The nationwide strikes called in the course of the movement created problems for the field team in meeting the respondents and in carrying out the field activities. Owing to the difficult situation in the field, the study team had to be called back to Kathmandu in the middle of the field work. The study was however, resumed afterwards.

2.16 Data Processing and Analysis

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

Chapter 3: KEY FINDINGS

A total of 600 female sex workers (FSWs) participated in the study. Among them, 400 were recruited from four sites representing 16 districts between Jhapa in the East and Rupandehi in the West regions along the highway in the Terai, and 200 were recruited from three sites representing 6 districts between Kapilvastu in the West to Kanchanpur in the Far Western region. This chapter describes the characteristics and sexual behavior of the FSWs and the prevalence of condom use among them. Some of the characteristics of the two groups (FSWs in the 16 districts and 6 districts) are also compared in this chapter.

3.1 Socio-Demographic Characteristics

The FSWs recruited represented Terai belt of the five development regions of Nepal (Eastern, Central, Western, Mid-Western and Far-Western). Out of the 600 FSWs, in the sample 31.7 percent were living in the Eastern Region, 10 percent in Central Region, 25 percent in Western Region, 13.3 percent in Mid-Western Region and 20 percent in far Western Region of Nepal (Table 1).

Table 1: Distribution of Female Sex Workers by Development Regions

Current Places of Residence of Female Sex Workers	Percentage (N=600)
Eastern Region of Nepal	31.7
Central Region of Nepal	10.0
Western Region of Nepal	25.0
Mid-Western Region of Nepal	13.3
Far Western Region of Nepal	20.0
Total	100.0

The median age of the FSWs was 27 years within a range of 13 to 52 years and percentage of FSWs less than 20 years of age was 18.7 percent. Two-third (67.3%) of the FSWs were illiterate or had no formal schooling, and eleven out of 600 (or 1.8%) had passed School Leaving Certificate (SLC).

More than half (55.7%) of the FSWs were married, 31.2 percent were separated, divorced or widowed and 13.2 percent were never married. The high rate of separation from the spouse in the context of Nepal indicates family disharmony among the FSWs. This is one of the noteworthy characteristics of the sex workers. Also among the married ones, one in five (or 19.5%) of the FSWs said that their husbands have co-wife (second wife), whereas 85.3 percent were currently living with their husbands or male friends (Table 2). A very small proportion of the unmarried sex workers (3.8%) were found to be living with their male friends.

About three-quarters (74.3%) of the FSWs had economically dependent members in the family, with the mean number of dependents being 2.5.

In terms of ethnic/caste groups all the major ethnic/caste groups were engaged in the profession of sex workers. As revealed by the study population, ethnicity/caste of the sex workers were as follows: Chhetri/Thakuri 20.7 percent, Tharu 17.2 percent, Terai Caste 17.2 percent, Damai/Sarki/Kami/Sunar 13.7 percent, Magar 7.3 percent, Brahmin 6.8 percent, Tamang 4.5 percent, Newar 3.2 percent, Rai/Limbu, 3.2 percent and Gurung 2.7 percent. Others are shown in Table 2 below.

Table 2: Socio-Demographic Characteristics of Female Sex Workers

Demographic Characteristics	2006					
	6 Districts		16 Districts		Total (22 Districts)	
	N	%	N	%	N	%
Age of respondent						
Up to 14	1	0.5	6	1.5	7	1.2
15 – 19	28	14.0	77	19.3	105	17.5
Less than 20	29	14.5	83	20.8	112	18.7
20 – 24	38	19.0	82	20.5	120	20.0
25 – 29	54	27.0	82	20.5	136	22.7
30 – 34	44	22.0	68	17.0	112	18.7
35 – 39	23	11.5	55	13.8	78	13.0
40 or above	12	6.0	30	7.5	42	7.0
Range	13-50 years		14-52 years		13-52 years	
Mean/ Median Age:	27.7/28.0		27.1/26.0		27.3/27.0	
Total	200	100.0	400	100.0	600	100.0
Education						
Illiterate	103	51.5	203	50.8	306	51.0
Literate, no schooling	38	19.0	60	15.0	98	16.3
Grade 1 – 5	33	16.5	80	20.0	113	18.8
Grade 6 – 9	24	12.0	48	12.0	72	12.0
SLC and Above	2	1.0	9	2.3	11	1.8
Total	200	100.0	400	100.0	600	100.0
Ethnic/Caste Group						
Chhetri/Thakuri	50	25.0	74	18.5	124	20.7
Tharu	52	26.0	54	13.5	106	17.7
Terai Caste	9	4.5	94	23.5	103	17.2
Damai/Sarki/Kami/Sunar	42	21.0	40	10.0	82	13.7
Magar	13	6.5	31	7.8	44	7.3
Brahmin	13	6.5	28	7.0	41	6.8
Tamang	4	2.0	23	5.8	27	4.5
Newar	5	2.5	14	3.5	19	3.2
Rai/Limbu	0	0.0	19	4.8	19	3.2
Gurung	5	2.5	11	2.8	16	2.7
Other (Sanyasi, Kumal, Sherpa, Gaine, Majhi, Badi, etc.)	7	3.5	12	3.0	19	3.2
Total	200	100.0	400	100.0	600	100.0
Marital Status						
Married	111	55.5	223	55.8	334	55.7
Divorced/Separated	52	26.0	99	24.8	151	25.2
Widowed	20	10.0	16	4.0	36	6.0
Never Married	17	8.5	62	15.5	79	13.2
Total	200	100.0	400	100.0	600	100.0
Husband Has Co-wife						
Yes	25	22.5	40	17.9	65	19.5
No	86	77.5	183	82.1	269	80.5
Total	111	100.0	223	100.0	334	100.0
Living Status of FSW						
Currently Married FSWs Living With Husband/Male Friend	85	76.6	200	89.7	285	85.3
Unmarried Sex Workers Living With Male Friend	0	0.0	3	4.8	3	3.8
Dependents on Sex Workers' Income						
Yes	150	75.0	296	74.0	446	74.3
No	50	25.0	104	26.0	154	25.7
Total	200	100.0	400	100.0	600	100.0
Total Number of Dependents (Adults + Children)						
One	29	19.3	67	22.6	96	21.5
2 – 3	90	60.0	183	61.8	273	61.2
4 and more	31	20.7	46	15.5	77	17.3
Mean Number of Dependents:	-	2.6	-	2.5	-	2.5
Total	150	100.0	296	100.0	446	100.0

The median age at which the sex workers were married for the first time was 15 years while majority of the sex workers (94.1%) were married before the age of 20 and some as early as at 6 years of age (Table 3).

Sex at an early age was the prevalent practice among the study population as 95.8 percent of them reported to have had their first sexual contact before the age of 20 years. Around 41.5 percent reported to have undergone the experience much earlier at 9-14 years of age. The median age at first sexual experience was 15 years old.

The respondents had been engaged in the sex trade for a period ranging between six months to four or more years. The mean number of months for which they were involved in the sex trade was 37.7 months, with 29.2 percent of them carrying out sex work for less than a year, indicating the entry of new women into the profession. Among the respondents, 31.5% from 16 districts and 24.5% from 6 districts were new entries to the sex trade (Table 3). As per the study criteria set for the study population, those sex workers involved in the profession for less than six months were not interviewed.

The study revealed that 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 and to avoid being apprehended by police during raids. Only about a fifth (20%) said that they had been living there for four or more years. One-fourth (25.3%) of the respondents had been working as sex workers in and around the interview sites since the last 7-12 months.

A total of 16.3 percent of sex workers said that they had worked as sex workers elsewhere while 3.7 percent of the sex workers (22/600) reported that they had worked for some time in India as sex workers (Table 3). Out of 22 sex workers who worked as sex workers in India, four sex workers reported they were coerced to go to India. Sixty eight percent of them had worked there for less than a year while the rest had worked longer (Table 3).

Table 3: Sexual Behavior of Female Sex Workers

Sexual Behavior	2006					
	6 Districts		16 Districts		Total (22 Districts)	
	N	%	N	%	N	%
Age at First Marriage						
6 – 14	83	45.4	142	42.0	225	43.2
15 – 19	90	49.2	175	51.8	265	50.9
20 – 24	9	4.9	18	5.3	27	5.2
25 – 33	1	0.5	3	0.9	4	0.8
Mean/Median Age at First Marriage:	15.1/15.0		15.1/15.0		15.1/15.0	
Total	183	100.0	338	100.0	521	100.0
Age at First Sexual Intercourse						
9 – 14	96	48.0	153	38.3	249	41.5
15 – 19	98	49.0	228	57.0	326	54.3
20 – 24	5	2.5	17	4.2	22	3.7
25 – 28	1	0.5	2	0.5	3	0.5
Mean/Median Age at First Sex:	14.9/15.0		15.3/15.0		15.2/15.0	
Total	200	100.0	400	100.0	600	100.0
Duration of Sexual Exchange for Money						
6 – 12 months	49	24.5	126	31.5	175	29.2
13 – 24 months	51	25.5	93	23.3	144	24.0
25 – 36 months	33	16.5	52	13.0	85	14.2
37– 48 months	34	17.0	29	7.2	63	10.5
More than 48 months	33	16.5	100	25.0	133	22.2
Mean Months:	-	35.6	-	38.8	-	37.7
Total	200	100.0	400	100.0	600	100.0
Working as a SW from the Interview Location						
Up to 6 months	9	4.5	38	9.5	47	7.8
7 – 12 months	45	22.5	107	26.8	152	25.3
13 – 24 months	53	26.5	86	21.5	139	23.2
25 – 36 months	36	18.0	49	12.2	85	14.2
37 – 48 months	33	16.5	30	7.5	63	10.5
More than 48 months	24	12.0	90	22.5	114	19.0
Total	200	100.0	400	100.0	600	100.0
Ever Worked as a SW in Other Places						
Yes	17	8.5	81	20.3	98	16.3
No	183	91.5	319	79.8	502	83.7
Total	200	100.0	400	100.0	600	100.0
Worked in India as a SW						
Yes	3	1.5	19	4.8	22	3.7
No	197	98.5	381	95.3	578	96.3
Total	200	100.0	400	100.0	600	100.0
Coerced or Voluntarily Went to India						
Coerced	0	0.0	4	21.1	4	18.2
Went Voluntarily	3	100.0	15	78.9	18	81.8
Total	3	100.0	19	100.0	22	100.0
Duration of Sexual Exchange for Money in India						
Up to 6 months	2	66.7	10	52.6	12	54.5
7-12 months	0	0.0	3	15.8	3	13.6
13-24 months	1	33.3	4	21.1	5	22.7
More than 24 months	0	0.0	2	10.5	2	9.1
Total	3	100.0	19	100.0	22	100.0

3.2 Sex Workers, their Clients and Other Sex Partners

3.2.1 Sex Workers and their Clients

Table 4 shows the number of clients (i.e., paying sex partners) that a sex worker serves in general. As seen in the Table, the number of clients served per day ranged from one to four or more clients, with a mean of 1.4 clients served per day. Almost three-quarters of the respondents in total (72.5%) reported that they entertained one client in an average per day (Table 4).

In order to have a clearer picture of the number of clients that the sex workers served, they were further asked about the number of their clients on the previous day of the interview, during one week preceding the survey and on the last day that they had sexual contact. The number of clients served by the sex workers on the previous day of the interview ranged from zero to more than four. The sex workers who had not seen any client on the previous day of the interview were in majority (54.8%). Almost 31 percent had provided service to one client and 5.5 percent had sexual contact with 3-4 clients on the previous day of the interview.

A total of 28.2 percent of the respondents had provided sexual service to 3-4 clients, while 26.7 percent of them had entertained 5-10 clients in the week preceding the survey. The mean number of clients entertained by the sex workers in the past week was four.

Table 4: Number of Clients Reported by Female Sex Workers

Number of Clients of Sex Workers	2006					
	6 Districts		16 Districts		Total (22 Districts)	
	N=200	%	N=400	%	N=600	%
Average Number of Clients Per Day						
One	127	63.5	308	77.0	435	72.5
Two	49	24.5	73	18.3	122	20.3
Three– Four	22	11.0	15	3.8	37	6.2
More than Four	2	1.0	4	1.0	6	1.0
Mean Clients per Day:	-	1.5	-	1.3	-	1.4
Number of Clients on the Previous Day						
None	107	53.5	222	55.5	329	54.8
One	59	29.5	126	31.5	185	30.8
Two	22	11.0	26	6.5	48	8.0
Three – Four	11	5.5	22	5.6	33	5.5
More than Four	1	0.5	4	1.0	5	0.8
Mean Number of Clients on the Previous Day	-	0.7	-	0.7	-	0.7
Number of Clients in the Past Week						
0	14	7.0	45	11.3	59	9.8
One	39	19.5	48	12.0	87	14.5
Two	17	8.5	78	19.5	95	15.8
3 – 4	54	27.0	115	28.8	169	28.2
5 – 10	67	33.5	93	23.3	160	26.7
More than 10	9	4.5	21	5.2	30	5.0
Mean Number of Clients in the Past Week:	-	4.1	-	3.9	-	4.0
Time of Last Sexual Contact						
On the Day of Interview	2	1.0	25	6.3	27	4.5
1 – 2 Days Before	126	63.0	222	55.6	348	58.0
3 – 5 Days Before	50	25.0	105	26.2	155	25.8
6 and More Days Before	22	11.0	48	12.0	70	11.7
Number of Clients on the Day of Last Sexual Contact						
One	147	73.5	335	83.8	482	80.3
Two	38	19.0	38	9.5	76	12.7
Three	13	6.5	22	5.5	35	5.8
Four and More	2	1.0	5	1.3	7	1.2
Mean Number of Clients on that Day:	-	1.4	-	1.2	-	1.3
Average Number of Days Worked in a Week						
One	7	3.5	18	4.5	25	4.2
Two	18	9.0	37	9.3	55	9.2
Three	35	17.5	79	19.8	114	19.0
Four to Seven Days	140	70.0	266	66.5	406	67.7
Mean Number of Days Worked in a Week:	-	4.6	-	4.5	-	4.5

In an average FSWs worked 4.5 days in a week as sex workers. A majority of FSWs (67.7%) reported that they worked four to seven days a week as sex worker (table 4).

3.2.2 Types of Clients

Profession wise, the four most cited clients of the sex workers were business men, policemen/soldiers, transport workers and migrant/industrial workers. In the sub-population of the six far western districts, the most-frequent clients were policemen/soldiers (reported by 68.5 % of the FSWs in the 6 districts).

When asked about the occupation of the last client FSWs have named the same type of clients as in the occupation of the most-frequent client but the ranks are slightly different. For instance, as a most frequent client and the last client also “businessmen” are in the top rank but ranks of other occupations differ in these reporting (Table 5).

Table 5: Types of Clients Reported by Female Sex Workers

Types of Clients	2006					
	6 Districts		16 Districts		Total (22 Districts)	
	N=200	%	N=400	%	N=600	%
Occupation of Most Frequent Clients*						
Businessman	77	38.5	244	61.0	321	53.5
Policeman/Soldier	137	68.5	173	43.3	310	51.7
Transport Worker/Driver	93	46.5	196	49.0	289	48.2
Migrant/Industrial Worker/Wage Laborer	92	46.0	169	42.3	261	43.5
Service Holder/Officer/Doctor	62	31.0	173	43.3	235	39.2
Rickshawala	11	5.5	53	13.3	64	10.7
Student	9	4.5	17	4.2	26	4.3
Foreign Employee	1	0.5	19	4.8	20	3.3
Contractor	6	3.0	0	0.0	6	1.0
Others	5	2.5	28	7.0	33	5.5
Occupation of Last Client						
Businessman	27	13.5	96	24.0	123	20.5
Migrant/Industrial Worker/Wage Laborer	51	25.5	64	16.0	115	19.2
Service Holder/Officer/Doctor	27	13.5	76	19.0	103	17.2
Policeman/Soldier	51	25.5	51	12.8	102	17.0
Transport Worker/Driver	29	14.5	64	16.0	93	15.5
Rickshawala	4	2.0	15	3.8	19	3.2
Student	5	2.5	9	2.2	14	2.3
Foreign Employee	0	0.0	8	2.0	8	1.3
Contractor	3	1.5	0	0.0	3	0.5
Other	2	1.0	16	4.0	18	3.0
Don't Know	1	0.5	1	0.2	2	0.3

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

3.2.3 Sex Workers and Their Paying/Non-paying Sex Partners

The risk of transmission of sexual infection depends largely on the number of sex partners. This section presents additional information on the number of sex partners that the sex workers had inclusive of both paying and non-paying sex partners. Non-paying partners included boyfriends and regular partners who did not pay them for sex. Around 38 percent of the sex workers had 3-5 paying sex partners in the week preceding the survey. About five percent of both the 6 districts and 16 districts sex workers had more than 10 paying sex partners during the period. The mean number of paying partners in the past week was 4.0.

About 45 percent of the sex workers had non-paying sex partners with a minimum of one to a maximum of 10 in the past week. The mean number of non-paying partners entertained by the sex workers in the week preceding the survey was 0.5 (Table 6).

The mean number of both paying and non-paying sex partners in the previous week was 4.4 with 40.8 percent of sex workers serving 3-5 clients during the period. The majority of the sex workers (71.5%) had their last sexual contact with their clients, 27.2 percent of them had their husband/male friends as their last sex partners (Table 6).

Table 6: Sex Partners of Female Sex Workers

Sex Partners of Sex Workers	2006					
	6 Districts		16 Districts		Total (22 Districts)	
	N=200	%	N=400	%	N=600	%
No. of Paying Sex Partners in the Past Week						
0	14	7.0	45	11.3	59	9.8
1 – 2	56	28.0	126	31.5	182	30.3
3 – 5	78	39.0	152	38.0	230	38.3
6 – 10	43	21.5	56	14.0	99	16.5
More than 10	9	4.5	21	5.2	30	5.0
Mean (Paying Partners in the Past Week):	-	4.1	-	3.9	-	4.0
No. of Non-Paying Sex Partners in the Past Week						
0	123	61.5	211	52.8	334	55.7
1 – 2	77	38.5	188	47.1	265	44.2
3 – 10	0	0.0	1	0.3	1	0.2
Mean (Non-Paying Partners in the Past Week):	-	0.4	-	0.5	-	0.5
No. of Paying and Non-Paying Sex Partners in the Past Week						
0	9	4.5	26	6.5	35	5.8
1 – 2	57	28.5	107	26.8	164	27.3
3 – 5	71	35.5	174	43.5	245	40.8
6 – 10	52	26.0	72	18.0	124	20.7
More than 10	11	5.5	21	5.2	32	5.3
Mean (Paying and Non-Paying Sex Partners in the Past Week)	-	4.5	-	4.4	-	4.4
Last Sex Partner						
Client	146	73.0	283	70.8	429	71.5
Husband/Male friend	52	26.0	111	27.8	163	27.2
Other male	2	1.0	6	1.5	8	1.3

3.3 Type of Sex Practiced by Sex Workers

Violence against sex workers, including forced sex is not uncommon and puts sex workers in higher risk of contracting STIs/HIV. In this study, the sex workers were queried if they had ever faced situations such as forced sex or demand for types of sexual acts in which they were reluctant to participate. Table 7 shows that 28.0 percent of the 6 districts and 19.8 percent of the 16 districts sex workers had been subjected to forceful sex with their clients in the past year. Some of the sex workers had performed sex other than vaginal with their different partners in the year preceding the survey (Table 7). Nearly one-third (31.7%) of the respondents also reported that they have had clients who refused to pay for sexual services on at least one occasion (Table 7). The mean number of such incidents in the past six months was 3.0.

The sex workers were further asked if they had been forced to perform any sexual acts against their wishes in the past one year. A total of 103 sex workers replied positively. As the study revealed, oral sex (40.8% or 42/103) followed by masturbation (34% or 35/103) and anal sex (31% or 32/103) were reported as types of activities that they were forced to perform despite their unwillingness to do so in the past one year. Twenty percent had also been subjected to physical assault in the past one year (Table 7).

Table 7: Types of Sex Practiced by Female Sex Workers

Type of Sex	2006					
	6 Districts		16 Districts		Total (22 Districts)	
	N	%	N	%	N	%
Any Partner Forcibly Demanded Sex in the Past Year						
Yes	56	28.0	79	19.8	135	22.5
No	144	72.0	321	80.3	465	77.5
Total	200	100.0	400	100.0	600	100.0
Types of Sex Acts in the Past Year						
Oral Sex	19	9.5	35	8.8	54	9.0
Anal Sex	20	10.0	30	7.5	50	8.3
Masturbation	24	12.0	41	10.3	65	10.8
Only Vaginal	164	82.0	328	82.0	492	82.0
Total	200	*	400	*	600	*
Clients Refusing to Pay for Sexual Services						
Yes	79	39.5	111	27.8	190	31.7
No	121	60.5	289	72.3	410	68.3
Mean No. of Such Incidences in Past Six Months:	-	4.3	-	2.1	-	3.0
Total	200	100.0	400	100.0	600	100.0
Clients Performing Activities that FSWs Disliked in the Past Year						
Yes	36	18.0	67	16.8	103	17.2
No	164	82.0	333	83.3	497	82.8
Total	200	100.0	400	100.0	600	100.0
Types of Activities Performed by Clients Which FSWs Disliked						
Oral Sex	18	50.0	24	35.8	42	40.8
Masturbation	15	41.7	20	29.9	35	34.0
Anal Sex	10	27.8	22	32.8	32	31.1
Rape	0	0.0	12	17.9	12	11.7
Escape Without Paying	2	5.6	9	13.4	11	10.7
Assaulted	1	2.8	6	9.0	7	6.8
Verbal Torture	1	2.8	5	7.5	6	5.8
Theft Money	0	0.0	5	7.5	5	4.9
Others	4	11.1	2	3.0	6	5.8
Total	36	*	67	*	103	*
Types of Sex with Last Client						
Masturbation	6	3.0	26	6.5	32	5.3
Anal Sex	5	2.5	10	2.5	15	2.5
Oral Sex	4	2.0	14	3.5	18	3.0
Vaginal Sex	200	100.0	400	100.0	600	100.0
Total	200	*	400	*	600	*
Physically Assaulted by Any Person for Any Reason in the Past Year						
Yes	43	21.5	78	19.5	121	20.2
No	157	78.5	322	80.5	479	79.8
Total	200	100.0	400	100.0	600	100.0

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

3.4 Income of Sex Workers

The mean income of the sex workers from the last sex with a client was Rs. 330 (6 districts sex workers) and Rs. 726 (16 districts sex workers) with a minimum of Rs. 10 per sex act to a maximum of Rs. 10,000. In an average the respondents made Rs. 594 from the last sex with a client (Table 8). Such variations in their income could be due to the varying rates for sex acts charged by the different categories of sex workers (such as street based, restaurant based, disco based etc) in the study population (New ERA, 2004). Other reasons could be different rates for married and uneducated sex workers compared to their educated and unmarried counterparts. Both cash and gifts received by the sex workers have been taken into account when calculating the total income from sex work.

The sex workers were also asked if they had been doing any other job besides sex work. A majority of the sex workers (61.8 %) reported that they were engaged in other jobs as well. Among them, 51.5 percent from the 6 district and 67 percent from the 16 districts had other jobs. A majority of the respondents (43.7%) in 6 Districts were working as wage laborers and most of the respondents (39.2%) in 16 Districts were working as waitresses in different restaurants/hotels (Table 8). It is to be noted that a negligible number (only two) of sex workers in 6 districts were working as waitresses. Other types of jobs performed by the respondents are shown in Table 8. The sex workers were making a substantial income from such jobs. The weekly income of the respondents from jobs other than the sex work ranged from Rs. 50-5,000 with an average of Rs. 573.

Table 8: Income from Sex Work and Other Jobs

Income from Sex Work and Other Jobs	2006					
	6 Districts		16 Districts		Total (22 Districts)	
	N	%	N	%	N	%
Income from Last Sex with Client						
Up to Rs. 100	53	26.5	42	10.5	95	15.8
Rs. 101 – Rs. 500	110	55.0	174	43.5	284	47.3
Rs. 501 – Rs. 1,000	31	15.5	107	26.8	138	23.0
Rs. 1001 – Rs. 1,500	4	2.0	36	9.0	40	6.7
Rs. 1501 - Rs. 2,000	1	0.5	19	4.8	20	3.3
Rs. 2000 and above	1	0.5	22	5.5	23	3.8
Range: Rs	10-2,500		20-10,000		10-10,000	
Mean Income from Last Sex Work: Rs.	-	330	-	726	-	594
Total	200	100.0	400	100.0	600	100.0
Weekly Income from Sex Work						
Up to Rs. 1,000	106	53.0	130	32.5	236	39.3
Rs 1,001 – Rs. 2,000	56	28.0	90	22.5	146	24.3
Rs 2,001 – Rs. 3,000	22	11.0	79	19.8	101	16.8
Rs 3,001 – Rs. 4,000	13	6.5	39	9.8	52	8.7
Rs 4,001 – Rs. 5,000	2	1.0	22	5.5	24	4.0
Rs 5,001 – Rs. 10,000	1	0.5	28	7.0	29	4.8
More than Rs 10,000	0	0.0	12	3.0	12	2.0
Range: Rs.	100-7,200		100-25,000		100-25,000	
Mean Weekly Income from Sex Work: Rs.	-	1,320	-	2,599		2,173
Total	200	100.0	400	100.0	600	100.0
Have Other Jobs besides Sex Work						
Yes	103	51.5	268	67.0	371	61.8
No	97	48.5	132	33.0	229	38.2
Total	200	100.0	400	100.0	600	100.0
Type of Part-time Jobs						
Wage Laborer	45	43.7	71	26.5	116	31.3
Waitress	2	1.9	105	39.2	107	28.8
Retail Shops/Business	27	26.2	35	13.1	62	16.7
Owner of <i>Bhatti Pasal/Restaurant</i>	14	13.6	22	8.2	36	9.7
Domestic Help	5	4.9	21	7.8	26	7.0
Service (Teacher, peon, etc.)	6	5.8	3	1.1	9	2.4
Sewing/Tailoring	4	3.9	5	1.9	9	2.4
Peer Communicator in NGO	2	1.9	6	2.2	8	2.2
Other	0	0.0	3	1.1	3	0.8
Total	103	*	268	*	371	*

Table 8: Cont'd...

Income from Sex Work and Other Jobs	2006					
	6 Districts		16 Districts		Total (22 Districts)	
	N	%	N	%	N	%
Average Weekly Income from Other Sources Besides Sex Work						
0 (No Other Source)	97	48.5	132	33.0	229	38.2
Up to Rs. 500	46	23.0	179	44.8	225	37.5
Rs. 501- Rs. 1,000	54	27.0	75	18.8	129	21.5
Rs. 1,001 – Rs. 1,500	1	0.5	5	1.3	6	1.0
Rs. 1,501 – Rs. 2,000	1	0.5	3	0.8	4	0.7
Rs. 2,000 and above	1	0.5	6	1.5	7	1.2
Range Rs.	50-3,500		50-5,000		50-5,000	
Mean Weekly Rs.:	-	527	-	590	-	573
Total	200	100.0	400	100.0	600	100.0

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

3.5 Knowledge of Condom among Sex Workers

The survey results revealed that the radio, friends/neighbor, pharmacy, NGOs and television were the most popular sources of information on condoms among the respondents. There is a slight difference in the proportion of respondents from 6 Districts and 16 Districts who named these sources of information (Table 9). Some of the other important sources as mentioned by the respondents were billboard/signboards, newspaper/poster and hospitals (Table 9). A significantly higher proportion of respondents from 6 districts (62%) than those from 16 districts (38.3%) reported that they had heard about condoms from health workers/volunteers.

Table 9: Sources of Knowledge of Condom Reported by Female Sex Workers

Source of Knowledge of Condoms	2006					
	6 Districts		16 Districts		Total (22 Districts)	
	N=200	%	N=400	%	N=600	%
Sources of Knowledge of Condoms:						
Radio	187	93.5	363	90.8	550	91.7
Friend/Neighbor	170	85.0	316	79.0	486	81.0
Pharmacy	140	70.0	342	85.5	482	80.3
NGOs	139	69.5	338	84.5	477	79.5
Television	132	66.0	340	85.0	472	78.7
Hospital	101	50.5	257	64.3	358	59.7
Newspaper/Poster	111	55.5	241	60.3	352	58.7
Health Post/Health Center	90	45.0	203	50.8	293	48.8
Billboard/Signboard	97	48.5	189	47.3	286	47.7
Health Worker/Volunteer*	124	62.0	153	38.3	277	46.2
Community Event/Training	64	32.0	155	38.8	219	36.5
Cinema Hall	38	19.0	116	29.0	154	25.7
Street Drama	63	31.5	73	18.3	136	22.7
Video Van	49	24.5	51	12.8	100	16.7
Comic Book	29	14.5	50	12.5	79	13.2
Clients	3	1.5	60	15.0	63	10.5
Community Workers	28	14.0	32	8.0	60	10.0

Note: * denotes significant difference at $p < .01$

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

3.6 Condom Use with Different Sex Partners

The sex workers reported having two different types of sex partners: (i) Paying partners, i.e., clients, both regular and occasional and (ii) Non-paying partners, i.e., husband, boyfriends and cohabiting male friends. The following sections describe their practice of condom use with different sex partners. The consistent use of condoms with non-paying partners was much lower than with regular partners and

clients in the year preceding the survey. However, the sex workers themselves had suggested condom use in most of the cases.

3.6.1 Condom Use with Client

In their last sexual encounter with a client, 66.3 percent of the respondents had used condoms. Three-quarters (74.6%) of them had themselves suggested the use of condom in these sexual encounters. A significantly higher proportion of the respondents from the 16 districts (51.5%) than from 6 districts (26%) had been consistent condom users with their clients in the past year (Table 10).

3.6.2 Condom Use with Regular Client

A total of 84.2 percent of the sex workers reported having regular clients in the past year. About three-fourths (72.3%) of them had used condom in the last sexual contact with a regular client. Condom use was mostly (78.9%) suggested by the respondents themselves (Table 10). Half of the sex workers had used condom in each of the sexual acts with their regular clients in the past year.

3.6.3 Condom Use with Non-Paying Partners

One-half (53.3%) 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. The infrequent use of condom with familiar partner/s is the prevalent practice among the sex workers as only 5.9 percent of them had used condom consistently in the past year with their non-paying partners.

Table 10: Condom Use with Clients, Regular Clients and Non-Paying Sex Partners

Condom Use by Female Sex Workers	2006					
	6 Districts		16 Districts		Total (22 Districts)	
	N	%	N	%	N	%
Ever used condom with any sex partner	169	84.5	339	84.7	508	84.7
Use of Condom with Client in the Last Sex						
Yes	126	63.0	272	68.0	398	66.3
No	74	37.0	128	32.0	202	33.7
Total	200	100.0	400	100.0	600	100.0
Condom Use Suggested by						
Myself	84	66.7	213	78.3	297	74.6
My partner	42	33.3	59	21.7	101	25.4
Total	126	100.0	272	100.0	398	100.0
Consistent Use of Condom with the Client in the Past Year						
Every time*	52	26.0	206	51.5	258	43.0
Most of the time	61	30.5	83	20.8	144	24.0
Sometimes	36	18.0	36	9.0	72	12.0
Rarely	18	9.0	15	3.8	33	5.5
Never	33	16.5	60	15.0	93	15.5
Total	200	100.0	400	100.0	600	100.0

Table 10: Cont'd...

Condom Use by Female Sex Workers	2006					
	6 Districts		16 Districts		Total (22 Districts)	
	N	%	N	%	N	%
Have Regular Client in the Past Year						
Yes	159	79.5	346	86.5	505	84.2
No	41	20.5	54	13.5	95	15.8
Total	200	100.0	400	100.0	600	100.0
Use of Condom with Regular Client in the Last Sex						
Yes	104	65.4	261	75.4	365	72.3
No	55	34.6	85	24.6	140	27.7
Total	159	100.0	346	100.0	505	100.0
Condom Use Suggested By						
Myself	70	67.3	218	83.5	288	78.9
My partner	34	32.7	43	16.5	77	21.1
Total	104	100.0	261	100.0	365	100.0
Consistent Use of Condom with Regular Clients in the Past Year						
Every time	61	38.4	190	54.9	251	49.7
Most of the time	29	18.2	65	18.8	94	18.6
Sometimes	28	17.6	23	6.6	51	10.1
Rarely	9	5.7	11	3.2	20	4.0
Never	32	20.1	57	16.5	89	17.6
Total	159	100.0	346	100.0	505	100.0
Have Non-Paying Partner during Past Year						
Yes	106	53.0	214	53.5	320	53.3
No	94	47.0	186	46.5	280	46.7
Total	200	100.0	400	100.0	600	100.0
Consistent Use of Condom with Non-Paying Partner in the Past Year						
Every time	3	2.8	16	7.5	19	5.9
Most of the time	6	5.7	6	2.8	12	3.8
Sometimes	8	7.5	12	5.6	20	6.3
Rarely	10	9.4	18	8.4	28	8.8
Never	79	74.5	162	75.7	241	75.3
Total	106	100.0	214	100.0	320	100.0

Note: * denotes significant difference at $p < .01$

3.6.4 Condom Use with Partners Other Than Client, Husband and Male Friend

As high as 22.2 percent of the sex workers reportedly were engaged in sexual acts with people other than their clients, husband or male friend (occasional partners) in the past year. Use of condom in the last sexual act with such partners was reported by 62.4 percent of them and in most cases (68.7%), the sex workers themselves had made suggestions for using condoms (Table 11).

Out of 133 sex workers who had sexual contacts with such occasional sex partners 45.1 percent (60/133) had used condom consistently. The sex workers were more likely to use condom with unknown partners than with familiar partners

Table 11: Condom Use with Partners Other than Client, Husband and Male Friend

Condom Use by Female Sex Workers	2006					
	6 Districts		16 Districts		Total (22 Districts)	
	N	%	N	%	N	%
Have Sex with Partners Other than Client, Husband, Male Friend in the Past Year						
Yes	45	22.5	88	22.0	133	22.2
No	155	77.5	312	78.0	467	77.8
Use of Condom with Partners Other than Client, Husband, Male Friend in the Last Sex						
Yes	28	62.2	55	62.5	83	62.4
No	17	37.8	33	37.5	50	37.6
Total	45	100.0	88	100.0	133	100.0
Condom Use Suggested by						
Myself	19	67.9	38	69.1	57	68.7
My partner	9	32.1	17	30.9	26	31.3
Total	28	100.0	55	100.0	83	100.0
Consistent Use of Condom with Partners Other than Client, Husband, Male Friend in the Past Year						
Every time	20	44.4	40	45.5	60	45.1
Most of the time	5	11.1	13	14.8	18	13.5
Sometimes	5	11.1	14	15.9	19	14.3
Rarely	5	11.1	2	2.3	7	5.3
Never	10	22.2	19	21.6	29	21.8
Total	45	100.0	88	100.0	133	100.0

3.7 Availability of Condoms and Their Brand Names

The respondents were asked whether they usually carried condoms with them. Altogether 39.8 percent of them mentioned that they usually carried condoms with them. However, the majority (74.9%) of those who reported carrying condoms usually did not have a condom with them when they were requested by the interviewers to show them (Table 12).

Regarding the accessibility of condoms almost half (45.3%) of the sex workers said that they could get condoms within five minutes from the place of their work (sex work). A significantly less proportion of the sex workers in 6 districts (30.0%) than those from 16 districts (53%) reported so.

A majority of the sex workers (84.2%) reported that they could get condoms from pharmacies. The NGOs/health workers/volunteers (73.7%) was mentioned as the second in importance for obtaining condoms. Other places where they could reportedly get condoms were general store (59.3%), *paan* shops (38.8%) and hospital (36.3%).

The sex workers were queried about the brand names of the condoms they used most. Condoms available under the brand name of Number One were most popular among 57.2 percent of the sex workers. The other most used brands as mentioned by them were *Dhaal* (50%), *Jodi* (23.3 %) and *Panther* (19.3 %). However, *Dhaal* was more popularly used in West to Far west 6 districts compared to the remaining 16 districts in the sample (Table 12).

Table 12: Condoms Available Places and Brand Name of Most Used Condom Reported by Female Sex Workers

Condom Acquisition	2006					
	6 Districts		16 Districts		Total (22 Districts)	
	N	%	N	%	N	%
Usually Carry Condoms						
Yes	76	38.0	163	40.8	239	39.8
No	124	62.0	237	59.3	361	60.2
Total	200	100.0	400	100.0	600	100.0
No. of Condoms Carried						
1	2	2.6	7	4.3	9	3.8
2	7	9.2	14	8.6	21	8.8
3 – 5	5	6.6	14	8.6	19	7.9
6 – 10	3	3.9	3	1.8	6	2.5
More than 10	1	1.3	4	2.5	5	2.1
Not carrying right now	58	76.3	121	74.2	179	74.9
Total	76	100.0	163	100.0	239	100.0
Time Needed to Obtain Condoms from Nearest Place						
Up to 5 minutes**	60	30.0	212	53.0	272	45.3
6 – 10 minutes	53	26.5	95	23.8	148	24.7
11 – 15 minutes	26	13.0	41	10.3	67	11.2
16 – 20 minutes	10	5.0	18	4.5	28	4.7
21 and more minutes	50	25.0	27	6.8	77	12.8
Don't Know	1	0.5	7	1.8	8	1.3
Total	200	100.0	400	100.0	600	100.0
Places Where Condoms are Available						
Pharmacy	158	79.0	347	86.8	505	84.2
NGO/Health Workers/Volunteers	148	74.0	294	73.5	442	73.7
General Retail Store (<i>Kirana Pasal</i>)	122	61.0	234	58.5	356	59.3
<i>Paan</i> Shop	71	35.5	162	40.5	233	38.8
Hospital	95	47.5	123	30.8	218	36.3
Private Clinic	62	31.0	121	30.3	183	30.5
Health Post/ Health Center	67	33.5	82	20.5	149	24.8
Client	22	11.0	111	27.8	133	22.2
Peer/Friends	49	24.5	70	17.5	119	19.8
Bar/Guest House/Hotel	10	5.0	74	18.5	84	14.0
Family Planning Association of Nepal Clinic	20	10.0	39	9.8	59	9.8
Other	1	0.5	1	0.3	2	0.3
Don't Know	2	1.0	11	2.8	13	2.2
Total	200	*	400	*	600	*
Brand Names of Condoms Used Most						
Number 1	77	38.5	266	66.5	343	57.2
Dhaal	145	72.5	155	38.8	300	50.0
Jodi	48	24.0	92	23.0	140	23.3
Panther	30	15.0	86	21.5	116	19.3
Kamasutra	20	10.0	38	9.5	58	9.7
Black Cobra	8	4.0	22	5.5	30	5.0
Skinless	0	0.0	5	1.3	5	0.8
Others	0	0.0	4	1.0	4	0.7
Brands Not Known	1	0.5	86	21.5	87	14.5
Not Used in the Past Year	31	15.5	61	15.3	92	15.3
Total	200	*	400	*	600	*

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

Note: ** denotes significant difference at $p < .01$

The sex workers were further asked about the mode of availability and the places from where they could obtain condoms. A total of 44.7 percent of the sex workers reported that they obtained free condoms all the time while 7.3 percent bought them. As shown in Table 13, NGO/health workers/volunteers have been able to reach a considerable section of the sex workers through their condom distribution program as a large proportion (72.2%) of respondents said that the NGO/health workers/volunteers provided free condoms for them. More than half of them (58.6%) said that their clients brought condoms with them. Peers/friends were reported as the

next important sources by 23.7 percent of the sex workers. Other reported sources are shown in Table 13.

The majority of the sex workers (63.4 %) maintained that free condom should be made available with NGO/health worker/volunteers for their easy access. Another section of them (53.0 %) pointed out that they felt comfortable to have condoms from their clients. Some (17.5 %) also said that they could comfortably approach their peers/friends for condoms (Table 13).

Table 13: Reported Places for Obtaining Condoms by Female Sex Workers

Condom Acquisition	2006					
	6 Districts		16 Districts		Total (22 Districts)	
	N	%	N	%	N	%
FSWs Obtain Condom						
Always free of cost	99	49.5	169	42.3	268	44.7
Purchase	6	3.0	38	9.5	44	7.3
Obtain both ways	64	32.0	132	33.0	196	32.7
Condom never used	31	15.5	61	15.3	92	15.3
Total	200	100.0	400	100.0	600	100.0
Usually Obtain Free Condom From						
NGO/Health workers/Volunteers	121	74.2	214	71.1	335	72.2
Client	88	54.0	184	61.1	272	58.6
Peers/friends	64	39.3	46	15.3	110	23.7
Health Post/Health Center	20	12.3	16	5.3	36	7.8
FPAN clinics	2	1.2	8	2.7	10	2.2
Hospital	4	2.5	5	1.7	9	1.9
Hotel/Lodge/Restaurant	0	0.0	8	2.7	8	1.7
Community events	5	3.1	1	0.3	6	1.3
Total	163	*	301	*	464	*
Most Convenient Place to Obtain Free Condom						
NGO/Health workers/Volunteers	108	66.3	186	61.8	294	63.4
Client	67	41.1	179	59.5	246	53.0
Peers/friends	43	26.4	38	12.6	81	17.5
Health Post/Health Center	14	8.6	10	3.3	24	5.2
FPAN clinics	1	0.6	6	2.0	7	1.5
Hotel/Lodge/Restaurant	0	0.0	7	2.3	7	1.5
Hospital	3	1.8	2	0.7	5	1.1
Community events	1	0.6	1	0.3	2	0.4
Total	163	*	301	*	464	*
Places of Purchasing Condom						
Pharmacy	44	62.9	140	82.4	184	76.7
General Retail Store (Kirana Pasal)	34	48.6	50	29.4	84	35.0
Pan Shop	13	18.6	43	25.3	56	23.3
Private Clinic	15	21.4	6	3.5	21	8.8
Hotel/Lodge/Restaurant	0	0.0	10	5.9	10	4.2
WATCH	0	0.0	8	4.7	8	3.3
Others	1	1.4	1	0.6	2	0.8
Total	70	*	170	*	240	*
Most Convenient Place to Purchase Condom						
Pharmacy	40	57.1	129	75.9	169	70.4
General Retail Store (Kirana Pasal)	23	32.9	28	16.5	51	21.3
Pan Shop	11	15.7	22	12.9	33	13.8
Private Clinic	9	12.9	3	1.8	12	5.0
Hotel/Lodge/Restaurant	0	0.0	9	5.3	9	3.8
WATCH	0	0.0	7	4.1	7	2.9
Total	70	*	170	*	240	*

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

For purchasing condoms, the respondents mentioned that they felt comfortable to go to pharmacies (70.4 %), general store (*kirana* shop) (21.3%) and *paan* shop (13.8%) respectively (Table 13).

3.8 Knowledge of HIV/AIDS

Almost 98 percent of the sex workers had heard about HIV/AIDS. Radio was reported the major source of the information of HIV/AIDS by 92.5 percent of the sex workers. A large proportion of them (84.1%) also named their friends/relatives, people from NGOs (81.2%), and television (80.3%) as their sources of information. HIV/AIDS awareness message had also been derived from pamphlets and posters as reported by 60.5 percent of the respondents (Table 14).

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

Ever Heard of HIV/AIDS	2006					
	6 Districts		16 Districts		Total (22 Districts)	
	N=200	%	N=400	%	N=600	%
Yes	197	98.5	388	97.0	585	97.5
HIV/AIDS Information Sources:						
Radio	184	93.4	357	92.0	541	92.5
Friends/Relatives	185	93.9	307	79.1	492	84.1
People from NGOs	138	70.1	337	86.9	475	81.2
Television	131	66.5	339	87.4	470	80.3
Pamphlet/Poster	105	53.3	249	64.2	354	60.5
Billboard/Signboard	79	40.1	184	47.4	263	45.0
Health Workers	109	55.3	135	34.8	244	41.7
Community Event/Training	64	32.5	150	38.7	214	36.6
Workplace	43	21.8	133	34.3	176	30.1
Newspaper/Magazine	40	20.3	131	33.8	171	29.2
Cinema Hall	35	17.8	119	30.7	154	26.3
Street Drama	64	32.5	74	19.1	138	23.6
Video Van	49	24.9	56	14.4	105	17.9
Comic Book	29	14.7	51	13.1	80	13.7
Client	2	1.0	64	16.5	66	11.3
Community Workers	27	13.7	33	8.5	60	10.3
School/Teacher	21	10.7	20	5.2	41	7.0

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

3.8.1 Knowledge of ways to prevent HIV/AIDS

Table 15 shows the knowledge of the respondents regarding ways of preventing the sexual transmission of HIV and major misconceptions about HIV transmission. The proportion of sex workers reporting to be aware of **A** (abstinence from sex) **B** (being faithful to one partner or avoiding multiple sex partners) **and C** (consistent condom use or use of condom during every sex act) as HIV preventive measures were 70.5 percent, 81.7 percent and 88 percent respectively. Overall 60 percent of the respondents correctly identified all A, B and C as HIV preventive measures. A total of 83.3 percent knew that a healthy looking person could be infected with HIV and 64.8 percent rejected that sharing of meal with an HIV infected person transmitted HIV. However, 41.8 percent only rejected the common local misconception that mosquito bite transmitted HIV virus. In total, only 31.3 percent of the respondents (Table 15) were aware of all the five major indicators of HIV transmission.

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

Knowledge of Six Major Indicators on HIV/AIDS	2006					
	6 Districts		16 Districts		Total (22 Districts)	
	N=200	%	N=400	%	N=600	%
A Can protect themselves through abstinence from sexual contact	136	68.0	287	71.8	423	70.5
B Can protect themselves through monogamous sexual contact	155	77.5	335	83.8	490	81.7
C Can protect themselves through condom use every time during sex	181	90.5	347	86.8	528	88.0
D A healthy-looking person can be infected with HIV	170	85.0	330	82.5	500	83.3
E A person can not get the HIV virus from mosquito bite	85	42.5	166	41.5	251	41.8
F Can not get HIV by sharing a meal with an HIV infected person	127	63.5	262	65.5	389	64.8
Knowledge of all three indicators – ABC	111	55.5	249	62.3	360	60.0
Knowledge of all five indicators – BCDEF	63	31.5	125	31.3	188	31.3

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

The sex workers were also asked if they were aware of any person infected with HIV or who had died of AIDS. Relatively large proportion of the sex workers in the sample (61%) replied positively. Of the total 366 FSWs in 22 districts, 39 had their close relative and 93 had their close friend who had suffered from HIV/AIDS or had succumbed to it (Table 16).

Table 16: FSWs' Knowledge on Ways of HIV/AIDS Transmission

Statements Related to HIV/AIDS	2006					
	6 Districts		16 Districts		Total (22 Districts)	
	N	%	N	%	N	%
Know Anyone Who is Infected with HIV or Who has Died of AIDS (n=200/400/600)	121	60.5	245	61.3	366	61.0
Have a close relative or close friend who is infected with HIV or has died of AIDS						
Close relative	21	17.4	18	7.3	39	10.7
Close friend	19	15.7	74	30.2	93	25.4
No relation	81	66.9	153	62.4	234	63.9
Total	121	100.0	245	100.0	366	100.0
Awareness on HIV/AIDS (n=200/400/600)						
Blood transfusion from an infected person to the other transmit HIV	193	96.5	385	96.3	578	96.3
A person can get HIV, by using previously used needle/syringe	194	97.0	380	95.0	574	95.7
A pregnant woman infected with HIV/AIDS can transmit the virus to her unborn child	178	89.0	358	89.5	536	89.3
A person can not get HIV by holding an HIV infected person's hand	149	74.5	321	80.3	470	78.3
A woman with HIV/AIDS can transmit the virus to her new-born child through breastfeeding	148	74.0	290	72.5	438	73.0
Ways by which a pregnant woman can reduce the risk of transmission of HIV to her unborn child						
Take medicine	60	33.7	81	22.6	141	26.3
Others	0	0.0	7	2.0	7	1.3
Don't Know	118	66.3	270	75.4	388	72.4
Total	178	100.0	358	100.0	536	100.0

The sex workers' understanding of HIV/AIDS and its different modes of transmission were also tested with the help of certain probing questions. A large proportion of the respondents reported that HIV could be transmitted through the transfusion of blood from an infected person to another (96.3%), that a person can get HIV by using previously used needles/syringes (95.7%), and that an infected mother could transmit the virus to her unborn child (89.3%). Additionally, 78.3 percent maintained that HIV cannot be transmitted by holding an HIV positive person's hand and 73 percent said that a woman with HIV/AIDS can transmit the virus to her new-born child through breastfeeding.

Of the 536 respondents who had reported that HIV virus could be transmitted from an infected mother to her unborn child, 72.4 percent expressed their unawareness of any measure to minimize such risk. Some of them (26.3%) however said that taking medicine would be helpful (Table 16).

3.9 Perception on HIV Test

In response to the question on the availability of HIV test facility, 59.3 percent reported that it was possible for them to have a confidential HIV test in their community. However, a significantly higher proportion of the respondents in 6 districts (32%) than in 16 districts (10.5%) said that a confidential HIV test facility was not available in their community. Around 49 percent of the sex workers had ever undertaken the test, a majority (90.4%) had taken the test of their own free will, and the rest were either sent or advised for it. Most of them (85.9%) had got the test results while the others had not collected them because they forgot about it, felt it was not necessary, were afraid to obtain the result, and were sure of not being infected (Table 17). A majority (74.9%) had tested themselves within last 12 months preceding the survey while 19.2 percent had undergone the test 1-2 years before.

Table 17: Perception on HIV Test

Perception on HIV Test	2006					
	6 Districts		16 Districts		Total (22 Districts)	
	N	%	N	%	N	%
Confidential HIV test facility available in the community						
Yes	88	44.0	268	67.0	356	59.3
No*	64	32.0	42	10.5	106	17.7
Don't Know	45	22.5	78	19.5	123	20.5
Never Heard about HIV	3	1.5	12	3.0	15	2.5
Total	200	100.0	400	100.0	600	100.0
Ever had an HIV test						
Yes	78	39.0	213	53.3	291	48.5
No	119	59.5	175	43.8	294	49.0
Never Heard about HIV	3	1.5	12	3.0	15	2.5
Total	200	100.0	400	100.0	600	100.0
Voluntarily underwent the HIV test or because it was required						
Voluntarily	73	93.6	190	89.2	263	90.4
Required	5	6.4	23	10.8	28	9.6
Total	78	100.0	213	100.0	291	100.0
Received HIV test result						
Yes	68	87.2	182	85.4	250	85.9
No	10	12.8	31	14.6	41	14.1
Total	78	100.0	213	100.0	291	100.0
Reason for Not Receiving the Test Result						
Forgot it	4	40.0	11	35.5	15	36.6
Felt unnecessary	3	30.0	8	25.8	11	26.8
Afraid of result	0	0.0	6	19.4	6	14.6
Sure of not being infected	1	10.0	1	3.2	2	4.9
Others	2	20.0	5	16.1	7	17.1
Total	10	100.0	31	100.0	41	100.0
Most Recent HIV Test						
Within Last 12 months	46	59.0	172	80.8	218	74.9
Between 1-2 years	24	30.8	32	15.0	56	19.2
Between 2-4 years	8	10.3	9	4.2	17	5.8
More than 4 years ago	0	0.0	0	0.0	0	0.0
Total	78	100.0	213	100.0	291	100.0

* Note: * denotes significant difference at $p < .01$

3.10 Access to FHI/Nepal Messages

From the time FHI started intervention programs in Nepal to bring awareness about HIV/AIDS among high-risk groups of people, various messages regarding the use of condoms for the prevention of AIDS were aired through radio and television. Elevated hoarding boards and posters were also put up with pictorial and rhetorical messages at different places including health posts, highways and roadsides. In an effort to review the impact of such interventions, the sex workers were asked about their awareness of such information. Table 18 below illustrates the FHI messages and the responses provided by the sex workers regarding their awareness of the messages. More than 70 percent of the sex workers were found to be aware of messages like “*Youn rog ra AIDS bata bachnalai rakhnu parchha sarbatra paine condom lai*” and “*Condom bata suraksha, youn swasthya ko raksha*”. A large proportion of the respondents were also aware of messages like “*Condom Kina Ma Bhaya Hunna Ra*”, “*Jhilke dai chha chhaina condom*”, “*Ramro sangha prayog gare jokhim huna dinna Bharpardo chhu santosh dinchhu jhanjat manna hunna*”, and “*HIV/AIDS bare aajai dekhi kura garau*” (Table 18).

Table 18: Seen/Hheard FHI Character/Message in the Past Year by Female Sex Workers

Heard/Seen/Read the Following Messages/Characters in Past One Year	2006					
	6 Districts		16 Districts		Total (22 Districts)	
	N=200	%	N=400	%	N=600	%
<i>Youn Rog Ra AIDS Bata Bachnalai Rakhnu Parchha Sarbatra Paine Condom Lai</i>	130	65.0	297	74.3	427	71.2
<i>Condom Bata Suraksha, Youn Swasthya Ko Raksha</i>	136	68.0	286	71.5	422	70.3
<i>Condom Kina Ma Bhaya Hunna Ra</i>	131	65.5	284	71.0	415	69.2
<i>Jhilke Dai Chha Chhaina Condom</i>	131	65.5	283	70.8	414	69.0
<i>Ramro Sangha Prayog Gare Jokhim Huna Dinna Bharpardo Chhu Santosh Dinchhu Jhanjat Manna Hunna</i>	122	61.0	266	66.5	388	64.7
<i>HIV/AIDS Bare Aajai Dekhi Kura Garau</i>	113	56.5	261	65.3	374	62.3
<i>Maya Garaun Sadbhav Badaun</i>	69	34.5	117	29.3	186	31.0
<i>Ek Apas Ka Kura</i>	61	30.5	106	26.5	167	27.8
<i>Des Pardes</i>	40	20.0	52	13.0	92	15.3

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

The majority (94.7%) of the sex workers reported that these messages had made them understand that the use of condom prevented transmission of AIDS, 64.3 percent of them also said that these messages had made them aware that use of condom helped to prevent oneself against STIs while 58.3 percent had understood the condoms to be a family planning device through such messages (Table 19).

Table 19: Message Understood by Female Sex Workers

Information Derived From the Message	2006					
	6 Districts		16 Districts		Total (22 Districts)	
	N=200	%	N=400	%	N=600	%
Use Condom Against AIDS	194	97.0	374	93.5	568	94.7
Use Condom Against STI	147	73.5	239	59.8	386	64.3
Use Condom for Family Planning	118	59.0	232	58.0	350	58.3
Not heard about condom	1	0.5	8	2.0	9	1.5
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.

3.11 Knowledge and Treatment of Sexually Transmitted Infections (STIs)

Sex workers are at high risk for sexually transmitted infections due to the nature of their work. To know the extent of the problem of STIs among the respondents and their perception towards it, they were asked about their understanding of STIs and if they had experienced any STI symptom during the past year. The respondents understood symptoms like genital discharges (76.8%), itching in vagina (62.8%) blisters and ulcers around vagina (51.8%) and lower abdominal pain (43.3%) as some of the STI symptoms (Table 20).

Table 20: Reported STI and Treatment in the Past Year

Perception on STI, Reported STI Symptoms and Treatment Among the Sex Workers	2006					
	6 Districts		16 Districts		Total (22 Districts)	
	N	%	N	%	N	%
FSWs' Understanding of STI						
White Discharge/Discharge of Pus/Dhatuflow	147	73.5	314	78.5	461	76.8
Itching in Vagina	129	64.5	248	62.0	377	62.8
Blisters and Ulcers Around Vagina	98	49.0	213	53.3	311	51.8
Lower Abdominal Pain	93	46.5	167	41.8	260	43.3
AIDS/HIV	44	22.0	114	28.5	158	26.3
Syphilis (<i>Bhiringi</i>)/Gonorrhea	53	26.5	70	17.5	123	20.5
Burning Sensation when Passing Urine	25	12.5	45	11.3	70	11.7
Swelling of Vagina	19	9.5	51	12.8	70	11.7
Pain in Vagina	11	5.5	27	6.8	38	6.3
Don't know	27	13.5	43	10.8	70	11.7
Others (Fever, Weight loss)	2	1.0	15	3.8	17	2.8
Total	200	*	400	*	600	*
Types of STI Symptoms Experienced in the Past Year						
None of the Above Symptoms	111	55.5	194	48.5	305	50.8
Any of the Above Symptoms	89	44.5	206	51.5	295	49.2
Lower Abdominal Pain	54	27.0	131	32.8	185	30.8
Vaginal Itching	45	22.5	114	28.5	159	26.5
Vaginal Discharge	45	22.5	98	24.5	143	23.8
Vaginal Odor	36	18.0	81	20.3	117	19.5
Painful Sex	32	16.0	57	14.3	89	14.8
Dysuria	23	11.5	53	13.3	76	12.7
Genital Ulcer or Sore	20	10.0	41	10.3	61	10.2
Polyuria	12	6.0	20	5.0	32	5.3
Genital Warts	4	2.0	13	3.3	17	2.8
Unusual Vaginal Bleeding (Discharge)	4	2.0	11	2.8	15	2.5
Other	1	0.5	1	0.3	2	0.3
Total	200	*	400	*	600	*
Places Visited for Treatment of STI Symptoms in the Past Year						
AMDA Clinic	0	0.0	66	52.4	66	40.0
WATCH	0	0.0	31	24.6	31	18.8
Private Clinic	9	23.1	19	15.1	28	17.0
N-SARC	22	56.4	0	0.0	22	13.3
GWP	1	2.6	14	11.1	15	9.1
Trinetra Nepal	0	0.0	12	9.5	12	7.3
Hospital	1	2.6	7	5.6	8	4.8
Pharmacy	3	7.7	4	3.2	7	4.2
Indreni Sewa samaj	0	0.0	6	4.8	6	3.6
Health Center/Health Post	3	7.7	1	0.8	4	2.4
Self Treatment	0	0.0	4	3.2	4	2.4
Family Planning Association of Nepal	0	0.0	1	0.8	1	0.6
Siddhartha Club	0	0.0	1	0.8	1	0.6
Don't Know	0	0.0	1	0.8	1	0.6
Others	1	2.6	0	0.0	1	0.6
Total	39	*	126	*	165	*

Table 20: Cont'd...

Perception on STI, Reported STI Symptoms and Treatment Among the Sex Workers	2006					
	6 Districts		16 Districts		Total (22 Districts)	
	N	%	N	%	N	%
Received Counseling to Avoid the Problem from the Place of Treatment						
Yes	32	82.1	117	95.9	149	92.5
No	7	17.9	5	4.1	12	7.5
Total	39	100.0	122	100.0	161	100.0
Types of Counseling Received						
Use Condom	29	90.6	96	82.1	125	83.9
Take Medicine Regularly	19	59.4	85	72.6	104	69.8
Reduce Number of Sexual Partners	14	43.8	50	42.7	64	43.0
Regular Check-up	1	3.1	2	1.7	3	2.0
Not to Make Sexual Contact while Using Medicine	0	0.0	1	0.9	1	0.7
Others	0	0.0	2	1.7	2	1.3
Total	32	*	117	*	149	*

When asked about the STI symptom that they had experienced in the past year, 49.2 percent of the sex workers reported to have had experienced at least one symptom. Some of the reported STI symptoms experienced by the respondents in the past year were lower abdominal pain (30.8%), vaginal itching (26.5%), and vaginal discharge (23.8%). For treatment purposes, the respondents in 16 districts had mostly visited AMDA clinic (52.4%) while in 6 districts 56.4 percent had been to N-SARC clinic (Table 20).

As seen in the Table 20, a majority of the sex workers (92.5% or 149/161) who had sought treatment had received counseling to avoid the problem from the place that they had visited. They were counseled to consistently use condom during sexual acts (83.9%), take medicines regularly (69.8%) and reduce number of their sex partners (43%).

Apart from their past year's experiences, the sex workers were further asked if they had been currently experiencing any STI symptoms. More than one-half of them (54.7%) reported that they were experiencing at least one STI symptom; some of the symptoms currently experienced by them were lower abdominal pain (32.5%), vaginal itching (28.2%), vaginal odor (24.3%), vaginal discharge (24%) and painful sex (21.5%) (Table 21).

Table 21: Reported STI Symptom/s at the Time of Survey and Their Treatment

Perception on STI, Reported STI Symptoms and Treatment Among Sex Workers	2006					
	6 Districts		16 Districts		Total (22 Districts)	
	N	%	N	%	N	%
Types of STI Symptoms Experienced Currently						
Any of the Above Symptoms	125	62.5	203	50.8	328	54.7
None of the Above Symptoms	75	37.5	197	49.3	272	45.3
Lower Abdominal Pain	77	38.5	118	29.5	195	32.5
Vaginal Itching	53	26.5	116	29.0	169	28.2
Vaginal Odor	46	23.0	100	25.0	146	24.3
Vaginal Discharge	60	30.0	84	21.0	144	24.0
Painful Sex	62	31.0	67	16.8	129	21.5
Dysuria	39	19.5	46	11.5	85	14.2
Polyuria	35	17.5	23	5.8	58	9.7
Genital Ulcer or Sore	17	8.5	21	5.3	38	6.3
Unusual Vaginal Bleeding (Discharge)	10	5.0	4	1.0	14	2.3
Genital Warts	8	4.0	4	1.0	12	2.0
Other	1	0.5	1	0.3	2	0.3
Total	200	*	400	*	600	*
Went for Treatment for any of Above Symptoms						
Yes	1	0.8	8	3.9	9	2.7
No	124	99.2	195	96.1	319	97.3
Total	125	100.0	203	100.0	328	100.0
Place Visited for Treatment						
AMDA Clinic	0	0.0	3	37.5	3	33.3
Private Clinic	0	0.0	2	25.0	2	22.2
Pharmacy	0	0.0	2	25.0	2	22.2
Hospital	0	0.0	1	12.5	1	11.1
Others	1	100.0	0	0.0	1	11.1
Total	1	*	8	*	9	*

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

A majority of 97.3 percent respondents had not sought treatment for the STI symptom/s that they had been experiencing at the time of survey. Among those few who had done so, they had visited AMDA clinic (33.3% or 3/9), private clinic and pharmacy (22.2% each or 2/9). Eight of the nine respondents who had sought treatment had received prescription for medicine and six had taken all the medicines prescribed to them (Data not shown in the Table).

3.12 Use of Alcohol and Drugs

A series of questions were asked regarding the use of alcohol and oral and injecting drugs by the sex workers. As high as 66.3 percent sex workers, had consumed alcohol sometimes during the past one month. Among them, 23.5 percent of the sex workers admitted that they took alcohol on a daily basis. Others drank less frequently (Table 22). Fourteen of the 600 respondents (2.3%) had at least once tried some drugs.

Table 22: Use of Alcohol and Drugs among Female Sex Workers

Consumption of Alcohol and Drugs	2006					
	6 Districts		16 Districts		Total (22 Districts)	
	N=200	%	N=400	%	N=600	%
Consumption of Alcohol						
On a Daily Basis	24	12.0	117	29.3	141	23.5
Two-Three Times a Day	41	20.5	114	28.5	155	25.8
Once a Week	17	8.5	29	7.3	46	7.7
Less than Once a Week	28	14.0	28	7.0	56	9.3
Never	90	45.0	112	28.0	202	33.7
Tried Any Types of Drugs						
Yes	5	2.5	9	2.3	14	2.3
No	195	97.5	391	97.8	586	97.7

Of the 600 respondents, 99(16.5%) said that they knew someone who injected drugs. The IDUs were their friends, local acquaintances, relatives, clients and/or their spouses. Five sex workers also admitted of ever having sex in exchange for drugs while four had at least once been engaged in sexual contact for money to buy drugs.

Table 23: Knowledge of IDUs and History of Injecting Drugs among Female Sex Workers

Use of Injecting Drugs	2006					
	6 Districts		16 Districts		Total (22 Districts)	
	N=200	%	N=400	%	N=600	%
Know Injecting Drug Users (IDUs)						
Yes	23	11.5	76	19.0	99	16.5
No	177	88.5	324	81.0	501	83.5
Relationship with Known IDUs	n=23	%	n=76	%	n=99	%
Friend	6	26.1	27	35.5	33	33.3
Local Boys	7	30.4	20	26.3	27	27.3
Relative	5	21.7	19	25.0	24	24.2
Client	5	21.7	7	9.2	12	12.1
Family (Husband)	0	0.0	3	3.9	3	3.0
Injecting History of Sex Workers						
Ever Exchanged Sex for Drugs	3	1.5	2	0.5	5	0.8
Ever Exchanged Sex for Money to Buy Drugs	2	1.0	2	0.5	4	0.7

3.13 Exposure to HIV/AIDS Awareness Programs

3.13.1 Peer/Outreach Education

The 2006 IBBS included questions on exposure of the sex workers to the ongoing HIV/AIDS awareness and prevention programs. One of the major components of the ongoing STI and HIV/AIDS intervention is the mobilization of outreach and peer educators (OEs and PEs) for educating the target population on HIV/AIDS/STI and its preventive measures. Therefore, the sex workers were asked if they had met any OEs or PEs. In response, 79.2 percent reported that they had at least once met or interacted with them. More respondents from 16 districts (84.3%) than 6 districts (69%) had met OEs/PEs. Their meetings were focused on interaction regarding HIV/STI transmission methods (89.3%), use of condom (77.7%), discussion on how STI is transmitted (74.5%), and demonstration on using condom correctly (65.1%). The respondents from 6 districts had mostly met OEs/PEs from GWP (62.3%) and NRCS (44.2%) while those from 16 districts had met OEs/PEs from AMDA (41.5%) and WATCH (31.8%) mostly. It is further evident from the Table that the sex workers meet OEs/PEs quite often as 60 percent of the 475 sex workers had seen them for 4-12 or more times in the last 12 months.

Table 24: Meeting/Interaction of FSWs with Peer Educator/Outreach Educator

Peer Educator/Outreach Educator Visit to Female Sex Workers	2006					
	6 Districts		16 Districts		Total (22 Districts)	
	N	%	N	%	N	%
Met or discussed or interacted with Peer Educators (PE) or Outreach Educators (OE) in the Last 12 months						
Yes	138	69.0	337	84.3	475	79.2
No	62	31.0	63	15.8	125	20.8
Total	200	100.0	400	100.0	600	100.0
Activities Involved in with PE or OE s						
Discussion on how HIV/AIDS is/isn't transmitted	129	93.5	295	87.5	424	89.3
Regular/non-regular use of condom	98	71.0	271	80.4	369	77.7
Discussion on how STI is/isn't transmitted	115	83.3	239	70.9	354	74.5
Demonstration on using condom correctly	69	50.0	240	71.2	309	65.1
STI treatment/cure after treatment	9	6.5	100	29.7	109	22.9
Training on HIV and STI, Condom day, AIDS day, participation in discussions and interaction programs	18	13.0	63	18.7	81	17.1
Counseling on reducing number of sex partner	9	6.5	65	19.3	74	15.6
Others	2	1.4	1	0.3	3	0.6
Total	138	*	337	*	475	*
Organizations Represented by PE or OEs						
AMDA	0	0.0	140	41.5	140	29.5
GWP	86	62.3	52	15.4	138	29.1
WATCH	0	0.	107	31.8	107	22.5
NRCS	61	44.2	0	0.0	61	12.8
Indreni Sewa Samaj	0	0.0	55	16.3	55	11.6
Trinetra	0	0.0	30	8.9	30	6.3
N-SARC	8	5.8	0	0.0	8	1.7
CAC	0	0.0	1	0.3	1	0.2
NAPN	0	0.0	1	0.3	1	0.2
INF/Paluwa	0	0.0	1	0.3	1	0.2
Others	1	0.7	1	0.3	2	0.4
Total	138	*	337	*	475	*
Number of Visits/Meetings in the last 12 months						
Once	10	7.2	26	7.7	36	7.6
2-3 times	22	15.9	132	39.2	154	32.4
4-6 times	42	30.4	70	20.8	112	23.6
7-12 times	30	21.7	58	17.2	88	18.5
More than 12 times	34	24.6	51	15.1	85	17.9
Total	138	100.0	337	100.0	475	100.0

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

3.13.2 Drop-in-Center

Drop-in-centers are another important component of HIV prevention programs. The DICs not only provide a safe space for the target communities to socialize but are also the site for educational and counseling activities. A total of 38.2 percent of the respondents had visited DIC during the last year. A higher proportion of respondents from 6 districts (50.5%) than those from the 16 district (32%) had ever visited DICs. During their DIC visits the respondents had participated in discussions on HIV/AIDS transmission (81.7%), learnt the correct ways of using condom (77.3%), collected condoms (72.5%), discussed on STI transmission methods (68.1%) and watched film on HIV/AIDS (62%). In 6 districts the respondents had mostly visited DICs run by GWP (68.3%) and NRCS (35.6%) and in 16 districts they had been to DICs run by WATCH (33.6%) and GWP (25.8%). Ten percent of the total respondents had visited different DICs just once, the rest had been there twice or more times in the past year (Table 25).

Table 25: DIC Visiting Practices of Female Sex Workers

DIC Visiting Practices of Female Sex Workers	2006					
	6 Districts		16 Districts		Total (22 Districts)	
	N	%	N	%	N	%
DIC Visit in the Last 12 months						
Yes	101	50.5	128	32.0	229	38.2
No	99	49.5	272	68.0	371	61.8
Total	200	100.0	400	100.0	600	100.0
Activities Involved in at DIC						
Participated in discussion on HIV transmission	84	83.2	103	80.5	187	81.7
Went to learn the correct way of using condom	72	71.3	105	82.0	177	77.3
Went to collect condoms	65	64.4	101	78.9	166	72.5
Participated in discussion on STI transmission	68	67.3	88	68.8	156	68.1
Went to watch film on HIV/AIDS	62	61.4	80	62.5	142	62.0
Participated in training, interaction and discussion programs on HIV/AIDS and STI	30	29.7	40	31.3	70	30.6
Went for STI treatment	3	3.0	35	27.3	38	16.6
Took friend with me	5	5.0	25	19.5	30	13.1
Went to collect IEC materials	13	12.9	15	11.7	28	12.2
Others	1	1.0	0	0.0	1	0.4
Total	101	*	128	*	229	*
Name of Organizations that run DIC visited by Them						
GWP	69	68.3	33	25.8	102	44.5
WATCH	0	0.0	43	33.6	43	18.8
NRCS	36	35.6	0	0.0	36	15.7
AMDA	0	0.0	28	21.9	28	12.2
Trinetra	0	0.0	24	18.8	24	10.5
N-SARC	4	4.0	0	0.0	4	1.7
Indreni Sewa Samaj	0	0.	4	3.1	4	1.7
CAC	0	0.0	1	0.8	1	0.4
Others	0	0.0	1	0.8	1	0.4
Total	101	*	128	*	229	*
Number of Visits to the DIC in the last 12 months						
Once	8	7.9	15	11.7	23	10.0
2-3 times	27	26.7	65	50.8	92	40.2
4-6 times	29	28.7	27	21.1	56	24.5
7-12 times	17	16.8	13	10.2	30	13.1
More than 12 times	20	19.8	8	6.3	28	12.2
Total	101	100.0	128	100.0	229	100.0

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

3.13.3 STI Clinic

Prompt detection and treatment of STIs may prevent many health hazards and HIV infection as well. Several STI clinics are being run by different organizations including FHI to facilitate such treatment. The sex workers were also asked if they had visited any STI clinic in the past one year. As shown in Table 26, only 31.3 percent of them had visited a STI clinic in the past one year. Such respondents consisted of 35.5 percent from 16 districts and 23 percent from 6 districts. During their visits to STI clinics in the past one year, the respondents had undergone blood test for STI detection (73.9%), were advised to use a condom during each sexual intercourse (71.3%), had been provided physical examination for STI identification (63.3%), and to take regularly all the prescribed medicines (61.2%). Approximately 70 percent respondents from 6 districts had visited STI clinic run by N-SARC. Almost 65 percent from 16 districts had been to STI clinic run by AMDA. Other STI clinics visited by them are shown in Table 26. Overall, 55.3 percent of the respondents had visited such clinics just once in the last 12 months (Table 26).

Table 26: STI Clinic Visiting Practices of Female Sex Workers

STI Clinic Visiting Practices of Female Sex Workers	2006					
	6 Districts		16 Districts		Total (22 Districts)	
	N	%	N	%	N	%
Visited any STI Clinic in the Last 12 months						
Yes	46	23.0	142	35.5	188	31.3
No	154	77.0	258	64.5	412	68.7
Total	200	100.0	400	100.0	600	100.0
Activities involved in at STI Clinic						
Blood tested for STI	30	65.2	109	76.8	139	73.9
Was advised to use condom in each sexual intercourse	27	58.7	107	75.4	134	71.3
Physical examination conducted for STI identification	28	60.9	91	64.1	119	63.3
Was advised to take complete and regular medicine	21	45.7	94	66.2	115	61.2
Was suggested to reduce number of sexual partners	5	10.9	25	17.6	30	16.0
Took friend with me	8	17.4	10	7.0	18	9.6
Total	46	*	142	*	188	*
Name of Organization that Run STI Clinic Visited						
AMDA	0	0.0	92	64.8	92	48.9
WATCH	0	0.0	40	28.2	40	21.3
N-SARC	32	69.6	0	0.0	32	17.0
GWP	1	2.2	18	12.7	19	10.1
Private Clinic	9	19.6	8	5.6	17	9.0
Trinetra	0	0.0	16	11.3	16	8.5
Indreni Sewa Samaj	0	0.0	14	9.9	14	7.4
NRCS	2	4.3	0	0.0	2	1.1
Pharmacy	2	4.3	0	0.0	2	1.1
Hospital	1	2.2	1	0.7	2	1.1
CAC	0	0.0	1	0.7	1	0.5
Others	2	4.3	1	0.7	3	1.6
Don't know	0	0.0	1	0.7	1	0.5
Total	46	*	142	*	188	*
Number of Visits to STI Clinics in the last 12 months						
Once	25	54.3	79	55.6	104	55.3
2-3 times	16	34.8	55	38.7	71	37.8
4-6 times	4	8.7	4	2.8	8	4.3
7-12 times	1	2.2	3	2.1	4	2.1
More than 12 times	0	0.0	1	0.7	1	0.5
Total	46	100.0	142	100.0	188	100.0

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

3.13.4 VCT Centers

Among the 600 respondents approximately 36 percent had visited Voluntary Counseling and Testing (VCT) centers during the past year. This comprised of 40 percent respondents from 16 districts and 27.5 percent from 6 districts. Among them 93.5 percent had undergone HIV testing, 71.2 percent had received HIV test results and 61.4 percent each of them had received post HIV test and pre-HIV test counseling there. Other kinds of activities that they participated in at the VCT centers are shown in Table 27. The VCT centers run by N-SARC was visited by 89.1 percent respondents from 6 districts while in 16 districts they had mostly visited AMDA (65%). Overall, many sex workers (61.4%) had visited such VCT centers once in the last 12 months.

Table 27: VCT Visiting Practices of Female Sex Workers

VCT Visiting Practices of Female sex workers	2006					
	6 Districts		16 Districts		Total (22 Districts)	
	N	%	N	%	N	%
Visited VCT Center in the Last 12 months						
Yes	55	27.5	160	40.0	215	35.8
No	145	72.5	240	60.0	385	64.2
Total	200	100.0	400	100.0	600	100.0
Activities Involved in at VCT Center						
Blood sample taken for HIV test	45	81.8	156	97.5	201	93.5
Received HIV test result	31	56.4	122	76.3	153	71.2
Received post HIV test counseling	25	45.5	107	66.9	132	61.4
Received pre-HIV test counseling	20	36.4	112	70.0	132	61.4
Received counseling on using condom correctly in each sexual intercourse	26	47.3	93	58.1	119	55.3
Got information on HIV/AIDS window period	10	18.2	56	35.0	66	30.7
Took a friend with me	9	16.4	11	6.9	20	9.3
Others	4	7.3	1	0.6	5	2.3
Total	55	*	160	*	215	*
Name of the Organization that Run the VCT Visited by Them						
AMDA	0	0.0	104	65.0	104	48.4
WATCH	0	0.0	50	31.3	50	23.3
N-SARC	49	89.1	0	0.0	49	22.8
Trinetra	0	0.0	21	13.1	21	9.8
GWP	1	1.8	19	11.9	20	9.3
Indreni Sewa Samaj	0	0.0	16	10.0	16	7.4
NNSWA	5	9.1	0	0.0	5	2.3
SACTS	0	0.0	2	1.3	2	0.9
CAC	0	0.0	2	1.3	2	0.9
Others	0	0.0	3	1.9	3	1.4
Total	55	*	160	*	215	*
Number of Visit s to VCT in the last 12 months						
Once	27	49.1	105	65.6	132	61.4
2-3 times	22	40.0	48	30.0	70	32.6
4-6 times	5	9.1	3	1.9	8	3.7
7-12 times	1	1.8	3	1.9	4	1.9
More than 12 times	0	0.0	1	0.6	1	0.5
Total	55	100.0	160	100.0	215	100.0

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

3.13.5 Participation in HIV/AIDS Awareness Program

The reported participation of the sex workers in different HIV/AIDS awareness raising program was minimal with only 33.5 percent of them reporting their participation in activities in the 12 months preceding the survey. More respondents from 16 districts (39%) than from 6 districts (22.5%) reported so. The respondents had participated in condom use demonstration (58.7%), HIV/AIDS related training (53.2%), and group discussions (47.8%). GWP (82.2%) had conducted most of these activities in 6 districts while in 16 districts it was WATCH (55.8%) that had conducted most of the programs. Other organizations were also named by some sex workers (Table 28). Among them, 48.3 percent had participated in such programs 2-3 times and 27.9 percent had participated just once in the last 12 months.

Table 28: Participation of Female Sex Workers in STI/HIV/AIDS Awareness Program

Participations on HIV/AIDS Awareness Programs of Female Sex Workers	2006					
	6 Districts		16 Districts		Total (22 Districts)	
	N	%	N	%	N	%
Ever Participated in HIV/AIDS Awareness Raising Program or Community Events in the Last 12 Months						
Yes	45	22.5	156	39.0	201	33.5
No	155	77.5	244	61.0	399	66.5
Total	200	100.0	400	100.0	600	100.0
Activities Participated in						
Condom use demonstrations	15	33.3	103	66.0	118	58.7
HIV/AIDS related training	22	48.9	85	54.5	107	53.2
Group discussions	40	88.9	56	35.9	96	47.8
Street drama	6	13.3	40	25.6	46	22.9
Condom Day	15	33.3	30	19.2	45	22.4
AIDS Day	9	20.0	22	14.1	31	15.4
Video Shows	4	8.9	20	12.8	24	11.9
HIV/AIDS related Workshops	6	13.3	10	6.4	16	8.0
Talk programs	0	0.0	1	0.6	1	0.5
Total	45	*	156	*	201	*
Name of the Organizations that Organized Such Activities						
WATCH	0	0.0	87	55.8	87	43.3
GWP	37	82.2	9	5.8	46	22.9
AMDA	0	0.0	33	21.2	33	16.4
Trinetra	0	0.0	21	13.5	21	10.4
N-SARC	7	15.6	0	0.0	7	3.5
NRCS	6	13.3	0	0.0	6	3.0
Indreni SewaSamaj	0	0.0	5	3.2	5	2.5
Mahila Uddar Samuha	1	2.2	0	0.0	1	0.5
CAC	0	0.0	1	0.6	1	0.5
INF/Paluwa	0	0.0	1	0.6	1	0.5
Others	4	8.9	2	1.3	6	3.0
Total	45	*	156	*	201	*
Frequency of Such Participation in the last 12 months						
Once	4	8.9	52	33.3	56	27.9
2-3 times	21	46.7	76	48.7	97	48.3
4-6 times	16	35.6	20	12.8	36	17.9
7-12 times	1	2.2	5	3.2	6	3.0
More than 12 times	3	6.7	1	0.6	4	2.0
Not Participated During the Past Year	0	0.0	2	1.3	2	1.0
Total	45	100.0	156	100.0	201	100.0

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

3.14 Stigma and Discrimination

HIV/AIDS is stigmatized in Nepal, increasing the impact of HIV on PLHA (people living with HIV/AIDS) and those most at risk. Questions about the attitude of sex workers towards HIV positive people and their perception towards HIV/AIDS were included in the survey. More than 90 percent of the sex workers were willing to take care of any of their male or female relatives with HIV if the need arose. Moreover, 46.3 percent mentioned that if they had a HIV positive member in the family, they would not mind talking about it to others.

Table 29: Attitude of FSWs towards HIV Positive People

Stigma and Discrimination	2006					
	6 Districts		16 Districts		Total (22 Districts)	
	N=200	%	N=400	%	N=600	%
Willing to take care of HIV positive male relative in the household						
Yes	187	93.5	363	90.8	550	91.7
No	13	6.5	36	9.0	49	8.2
Don't Know	0	0.0	1	0.3	1	0.2
Willing to take care of HIV positive female relative in the household						
Yes	189	94.5	365	91.3	554	92.3
No	11	5.5	34	8.5	45	7.5
Don't Know	0	0.0	1	0.3	1	0.2
Willing to maintain confidentiality of a HIV positive family member						
Yes	115	57.5	204	51.0	319	53.2
No	85	42.5	193	48.3	278	46.3
Don't Know	0	0.0	3	0.8	3	0.5

3.15 HIV/STI Prevalence Among Female Sex Workers

Among the 600 FSWs who participated in the study by providing blood and endocervical swab samples, 1.5 percent (9/600) were found to be HIV positive. There is no difference in HIV prevalence among the FSWs of 16 districts and 6 districts. Nearly five percent (28/600 or 4.7%) of the FSWs were found to be currently infected with syphilis. There is also no statistical difference in the prevalence of current syphilis between the FSWs in 16 districts and the 6 districts samples. Altogether, 7.8 percent of the FSWs (47/600) had a history of syphilis. Similar ratio (7.7% or 46/600) of the FSWs were infected with gonorrhoea and a slightly higher percentages (14%) of them (84/600) were suffering from chlamydia. On the aggregate, the percentage of FSWs with any one of the STIs (syphilis, gonorrhoea, chlamydia or HIV) was 22.5 percent (135/600). Although HIV prevalence was same among the FSWs of 6 districts and 16 districts the prevalence of gonorrhoea and chlamydia among the FSWs in the 6 districts was low. The prevalence of gonorrhoea and chlamydia in 6 districts was 3.5 percent and 5.5 percent respectively whereas among 16 districts samples 9.8 percent had gonorrhoea and 18.3 percent had chlamydia. Table 30 provides a detailed picture of the prevalence of HIV and the STIs for which tests were done among the FSWs taking part in the study.

Table 30: HIV and STI Prevalence among Female Sex Workers

HIV/STI Prevalence	6 Districts		16 Districts		Total (22 Districts)	
	N=200	%	N=400	%	N=600	%
HIV	3	1.5	6	1.5	9	1.5
Current Syphilis	8	4.0	20	5.0	28	4.7
Syphilis History	10	5.0	37	9.3	47	7.8
Gonorrhoea *	7	3.5	39	9.8	46	7.7
Chlamydia *	11	5.5	73	18.3	84	14.0
Any of the above STI *	26	13.0	109	27.3	135	22.5

Note: Syphilis History is not included in any of the above STI

* denotes the significant difference ($p < .05$) between the values of the 6 districts and the 16 districts.

3.16 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 by the respondents per day. As can be seen in Table 31, HIV infection by the categories like age, educational level and marital status differ slightly but that is not statistically significant at least at 5 percent level of significance.

3.16.1 Sex Work in India and HIV

In 2003 IBBS study the FSWs who had been to India for the purpose of commercial sex work had a significantly higher prevalence of HIV than those who had not been there. But in 2006 study, although there was slightly higher prevalence of HIV among respondents who had worked as FSW in India than those who had not worked there, the difference was not statistically significant. Also no association was seen between HIV infection and variables such as condom use and the number of clients entertained in the past year (data not shown). The prevalence of HIV was significantly higher (3.3% or 2/60) at Mahendranagar site, which is one of the total seven sites included in the study. Although Table 31 shows that HIV was prevalent among the FSWs who reported having been coerced into working in India (one out of four FSWs who were coerced) than among those who reported going voluntarily, the difference is not statistically significant as there are very few cases for the analysis purpose. HIV prevalence was significantly higher (at $p < 0.5$ level) among the FSWs infected with current syphilis or with any one of the STIs.

Table 31: Relationship Between HIV and Demographic, Behavioral and STIs

Variables	Total (22 Districts)		
	N=600	HIV+	%
Age			
<20 years old	112	0	0.0
= or > 2 years	488	9	1.8
Educational Level			
Illiterate and literate with no schooling	404	7	1.7
Schooling (Grades 1 to 10 and above SLC)	196	2	1.0
Marital Status			
Married	521	8	1.5
Never married	79	1	1.3
Years of Sex Work			
<2 Years	263	3	1.1
= or > 2 years	337	6	1.8
Sex Work in India			
Yes	22	1	4.5
No	578	8	1.4
Sex Work in Mumbai (n=22)			
Worked in Mumbai	2	0	0.0
Worked in India, but not in Mumbai	20	1	5.0
Coerced into Working in India (n=22)			
Yes	4	1	25.0
No, went to India on one's own	18	0	0.0
Study Sites			
Itahari	105	2	1.9
Lahan	85	2	2.4
Narayanghat	75	1	1.3
Butwal	135	1	0.7
Nepalgunj	80	0	0.0
Dhangadhi	60	1	1.7
Mahendranagar	60	2	3.3

Table 31: Cont'd...

Syphilis *			
Current Syphilis	28	2	7.1
Not infected with Current syphilis	572	7	1.2
Gonorrhoea			
Yes	46	1	2.2
No	554	8	1.4
Chlamydia			
Yes	84	3	3.6
No	516	6	1.2
Any of the above STIs **			
Yes	131	5	3.8
No	469	4	0.9

Note: *p<.02 OR 6.2 (6.8, 35.2); **p<.02 OR 4.6 (1.1, 20.8)

3.17 Association of STIs with Socio-Demographic and Behavioral Variables

Table 32 shows that one of the measured STIs – current (or untreated) syphilis – is highly associated with the marital status and the age of the FSWs. The prevalence of current syphilis among ever married FSWs was 5.4 percent compared to zero percent among the never married FSWs. This difference is significant at 5 percent significance level. Current syphilis was also prevalent among 5.7 percent FSWs aged 20 years and above compared to zero percent among the FSWs who were less than 20 years old. Gonorrhoea and chlamydia are significantly associated with the FSWs who are in the sex trade for two or more years (Table 32). The prevalence of syphilis history is associated significantly with all of the demographic variables – age, marital status, education or years of sex work. But it is not related to sex work in India or Mumbai. Prevalence of current syphilis was highest (10.6% or 9/85) among the FSWs of Lahan site and zero among the FSWs of Mahendragar site.

Table 32: Association Between STIs and Demographic and Behavioral Variables

Variables	N=600	Current Syphilis	Gonorrhoea	Chlamydia	Syphilis History
		n (%)	n (%)	n (%)	n (%)
Age					
<20 years old	112	0 (0.0)	13 (11.6)	17 (15.2)	1 (0.9)
= or > 20 years old	488	28 (5.7) *	33 (6.8)	67 (13.7)	46 (9.4)
Education Level					
Illiterate/No Schooling	404	23 (5.7)*	30 (7.4)	49 (12.1)	38 (9.4)
Grades 1 to 10 and above SLC	196	5 (2.6)	16 (8.2)	35 (17.9)	9 (4.6)
Marital Status					
Ever married	521	28 (5.4)	42 (8.1)	70 (13.4)	45 (8.6)
Never married	79	0 (0.0)	4 (5.1)	14 (17.7)	2 (2.5)
Years Worked as Sex Worker					
<2 years	263	9 (3.4)	30 (11.4) **	48 (18.3) +	9 (3.4)
= or > 2 years	337	19 (5.6) *	16 (4.7)	36 (10.7)	38 (11.3) ++
Sex Work in India					
Yes	22	1 (4.5)	4 (18.2)	2 (9.1)	4 (18.2)
No	578	27 (4.7)	42 (7.3)	82 (14.2)	43 (7.4)
Sex Work in Mumbai (n=22)					
Worked in Mumbai	2	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Worked in India, but not in Mumbai	20	1 (5.0)	4 (20.0)	2 (10.0)	4 (20.0)
Coerced into Working in India (n=22)					
Yes	4	1 (25.0)	0 (0.0)	0 (0.0)	1 (25.0)
No, went to India on one's own	18	0 (0.0)	4 (22.2)	2 (11.1)	3 (16.7)
Study Sites					

Table 32: Cont'd...

Itahari	105	5 (4.8)	9 (8.6)	22 (21.0)	5 (4.8)
Lahan	85	9 (10.6)	10 (11.8)	11 (12.9)	11 (12.9)
Narayanghat	75	5 (6.7)	3 (4.0)	15 (20.0)	10 (13.3)
Butwal	135	1 (0.7)	17 (12.6)	25 (18.5)	11 (8.1)
Nepalgunj	80	7 (8.8)	6 (7.5)	6 (7.5)	5 (6.3)
Dhangadhi	60	1 (1.7)	0 (0.0)	4 (6.7)	2 (3.3)
Mahendranagar	60	0 (0.0)	1 (1.7)	1 (1.7)	3 (5.0)
All	600	28 (4.7)	46 (7.7)	84 (14.0)	47 (7.8)

Note: * denotes significant difference at $p < .05$

** $p < .01$ OR 2.6 (1.3, 5.1); $^{\dagger}p < .01$ OR 1.9 (1.1, 3.1); $^{++}p < .01$ OR 3.6 (1.6, 8.1)

The following factors have no significant association/correlation on HIV or other STIs.

- Ever use of condoms
- Consistent use of condoms
- Number of clients entertained
- Demographic characteristics such as marital status and educational level

3.18 Treatment and Care Seeking Behavior of FSWs

The percentages of the FSWs who had sought treatment in the past year for problems like genital warts, and vaginal bleeding were 82.4 percent (14/17) and 80 percent (12/15) respectively. A total of 70.5 percent of the FSWs (43/61) who had genital ulcer/sore also had sought treatment. Other reported symptoms for which more than half of the FSWs had sought treatment were vaginal discharge, vaginal itching, vaginal odor, abdominal pain and painful sex (Table 33).

Table 33: STI Symptoms and Treatment Seeking Behavior of Sex Workers

Reported STI Symptoms and Treatment Seeking Behavior	22 Districts					
	Current STI Symptoms		STI Symptoms in the Past Year		Treated in the Past Year	
	N=600	%	N=600	%	n	%
Lower Abdominal Pain	195	32.5	185	30.8	105	56.8
Vaginal Itching	169	28.2	159	26.5	92	57.9
Vaginal Odor	146	24.3	117	19.5	71	60.7
Vaginal Discharge	144	24.0	143	23.8	85	59.4
Painful Sex	129	21.5	89	14.8	47	52.8
Dysuria	85	14.2	76	12.7	36	47.4
Polyuria	58	9.7	32	5.3	17	53.1
Genital Ulcer or Sore	38	6.3	61	10.2	43	70.5
Unusual Vaginal Bleeding (Discharge)	14	2.3	15	2.5	12	80.0
Genital Warts	12	2.0	17	2.8	14	82.4
Other	2	0.3	2	0.3	2	100.0

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

3.19 Comparison of selected behavioral of HIV and STI Prevalence indicators with the 1999 and 2003 IBBS Results

This section compares the prevalence rates of HIV and syphilis in the 1999, 2003 and 2006 surveys. As 1999 survey had covered only 16 districts comparison has been drawn for 16 districts data only. It should be noted here that to make such comparison possible the same sampling design and procedures used for recruiting the study participants in the previous studies were replicated in 2006 survey. There has been a significant decrease in HIV prevalence in 2006 (1.5% or 6/400) than in the 1999 survey (3.9% or 16/410) (Table 34). The percentage of FSWs with current syphilis

has also significantly decreased from 11.7 percent in 1999 to 5.0 percent in 2006. However, the prevalence rate of gonorrhoea (9.0% in 1999) has not changed significantly in 2006 (9.8%). But prevalence of chlamydia has increased progressively from 9.3 percent in 1999, to 12.3 percent in 2003 and 18.3 percent in 2006 which is significant. (Table 34)

Table 34: HIV and STI Prevalence Rates in 1999, 2003 and 2006

HIV/STI	1999		2003		2006	
	16 Districts		16 Districts		16 Districts	
	N=410	%	N=400	%	N=400	%
HIV *	16	3.9	12	3.0	6	1.5
Active Syphilis *	48	11.7	17	4.3	20	5.0
Syphilis History *	57	13.9	44	11.0	37	9.3
Gonorrhoea	37	9.0	72	18.0	39	9.8
Chlamydia *	38	9.3	49	12.3	73	18.3

Note: * Significant difference between 1999 and 2006 at $p < .05$

Table 35 compares the prevalence rates of HIV and syphilis between 2003 and 2006. There is no significant change in HIV prevalence in 2006 (1.5% or 9/600) since the 2003 survey (2.0% or 12/600) (Table 35). Although the prevalence of current syphilis has also slightly increased from 3.8 percent in 2003 to 4.7 percent in 2006, the change is not significantly different. Prevalence rate of gonorrhoea has decreased significantly from 13.5 percent in 2003 to 7.7 percent in 2006, while the prevalence rate of chlamydia has increased significantly from 10.2 percent in 2003 to 14.0 percent in 2006.

Table 35: HIV and STI Prevalence Rates in 2003 and 2006

STI Infection	2003		2006	
	Total (22 Districts)		Total (22 Districts)	
	N=600	%	N=600	%
HIV	12	2.0	9	1.5
Current Syphilis	23	3.8	28	4.7
Syphilis History	60	10.0	47	7.8
Gonorrhoea *	81	13.5	46	7.7
Chlamydia *	61	10.2	84	14.0

Note: * Significant difference at $p < .05$

Table 36 below shows the comparison of the prevalence rates of HIV among the study years 1999, 2003 and 2006 by the selected variables. There is no significant difference in the prevalence of HIV by most of the variables (Table 36). However, HIV prevalence among married FSWs in 2003 (2.5%) was significantly lower than in 1999 (4.2%). HIV prevalence among FSWs who were in sex work for more than two years was also significantly lower in 2003 (3.2%) than in 1999 (6.3%) In both cases prevalence rate have gradually decreased from 1999 to 2006. The prevalence rate among the FSWs who had been to India and Mumbai to work as sex workers was also low in the latest survey.

Table 36: Comparison of HIV Prevalence among Selected Variables

Variables	1999			2003			2006		
	N	HIV+	%	N	HIV+	%	N	HIV+	%
Age									
<20 years old	103	4	3.9	88	3	3.4	83	0	0.0
>20 years old	307	12	3.9	312	9	2.9	317	6	1.9
Total	410	16	3.9	400	12	3.0	400	6	1.5
Educational Level									
Illiterate and literate with no schooling	318	13	4.1	302	10	3.3	263	4	1.5
Schooling (Grades 1 to 10 and above SLC)	92	3	3.3	98	2	2.0	137	2	1.5
Total	410	16	3.9	400	12	3.0	400	6	1.5
Marital Status									
Ever married *	357	15	4.2	358	9	2.5	338	5	1.5
Never married	53	1	1.9	42	3	7.1	62	1	1.6
Total	410	16	3.9	400	12	3.0	400	6	1.5
Years of Sex Work									
<2 years	189	2	1.1	148	4	2.7	184	2	1.1
>2 years *	221	14	6.3	252	8	3.2	216	4	1.9
Total	410	16	3.9	400	12	3.0	400	6	1.5
Sex Work in India									
Yes	70	12	17.1	35	6	17.1	19	1	5.3
No	340	4	1.2	365	6	1.6	381	5	1.3
Total	410	16	3.9	400	12	3.0	400	6	1.5
Sex Work in Mumbai									
Worked in Mumbai	16	8	50.0	8	4	50.0	2	0	0.0
Worked in India but not in Mumbai	54	4	7.4	27	2	7.4	17	1	5.9
Total	70	12	17.1	35	6	17.1	19	1	5.3

Note: * Significant difference at $p < .05$

3.20 Change in Condom Use between 2003 and 2006

This section describes the change in condom use pattern from 2003 to 2006 as a result of the intervention programs of FHI/Nepal. The data in Table 37 indicates that condom use with the client have increased significantly. It shows that condom uses with last client have increased from 53.3 percent (2003) to 66.3 percent in 2006 and with last regular client it has increased from 56.5 percent to 72.3 percent. It is encouraging to note that more FSWs have been consistently using condom with their clients as the consistent use of condom with the client have increased significantly from 22.7 percent (2003) to 43 percent (2006). With the regular clients nearly 50 percent of the FSWs have used condom consistently in 2006 in comparison to 27.3 percent in 2003. Consistent use of condoms with 'occasional' partners (other than client, husband and male friend) has also increased significantly from 11.9 percent (2003) to 45.1 percent (2006).

Table 37: Comparison of Condom Use between 2003 and 2006

Number of Clients and Condom Use by Female Sex Workers	2003		2006	
	Total (22 Districts)		Total (22 Districts)	
	N	%	N	%
Use of Condom with Last Client *				
Yes	320	53.3	398	66.3
No	280	46.7	202	33.7
Total	600	100.0	600	100.0
Consistent Use of Condom with the Client in the Past Year *				
Yes	136	22.7	258	43.0
No	464	77.3	342	57.0
Total	600	100.0	600	100.0
Have Regular Client in the Past Year *				
Yes	414	69.0	505	84.2
No	186	31.0	95	15.8
Total	600	100.0	600	100.0
Use of Condom with Regular Client in the Last Sex *				
Yes	234	56.5	365	72.3
No	180	43.5	140	27.7
Total	414	100.0	505	100.0
Consistent Use of Condom with Regular Clients in the Past Year *				
Yes	113	27.3	251	49.7
No	301	72.7	254	50.3
Total	414	100.0	505	100.0
Have Sex with Partners Other than Client, Husband, Male Friend in the Past Year				
Yes	135	22.5	133	22.2
No	465	77.5	467	77.8
Total	600	100.0	600	100.0
Consistent Use of Condom with Partners other than Client, Husband, Male Friend in the Past Year *				
Yes	16	11.9	60	45.1
No	119	88.1	73	54.9
Total	135	100.0	133	100.0
Number of Clients on the Day of Last Sexual Contact				
One	388	64.7	482	80.3
Two	152	25.3	76	12.7
Three	49	8.2	35	5.8
Four and More	11	1.8	7	1.2
Mean Number of Clients on that Day:	-	1.5	-	1.3
Total	600	100.0	600	100.0

Note: * Significant Difference at $p < .05$

Chapter 4: CONCLUSIONS AND RECOMMENDATIONS

4.1 Conclusions

This study was conducted among 600 female sex workers (FSWs), from 22 districts of east to the west Terai highway. The objectives of the study were to determine the prevalence of HIV, *Neisseria gonorrhoeae* (GC), chlamydia trachomatis (CT) and syphilis among FSWs working at various sites in 22 districts and to assess their HIV/STI related knowledge, risk behaviors.

The study found that 1.5 percent (9/600) respondents were HIV positive. Nearly five percent (28/600 or 4.7%) of the FSWs had current syphilis. Overall, 7.7 percent (46/600) and 14 percent (84/600) respondents had gonorrhea and chlamydia respectively. Other conclusions drawn from the study are as follows:

- The median age of the FSWs was 27 years and 18.7 percent of the respondents were less than 20 years of age.
- Two-third (67.3%) of the respondents were illiterate or had no formal schooling.
- Approximately 25 percent of the respondents were either divorced or separated from their husbands.
- Out of 600 respondents, 29.2 percent had joined the sex trade less than a year ago.
- The respondents entertained both paying and non-paying partners. The mean number of their sex partners in the previous week was 4.4.
- Overall the 43.0 percent of the sex workers had used condom with their clients in every commercial sex act in the past year.
- Consistent use of condoms with non-paying partners was very low. Approximately six percent of the sex workers only had used condoms consistently in the past year with their non-paying partners.
- A total of 44.7 percent of the sex workers reported that they obtained free condoms all the time. Free condoms were mostly obtained from NGO/health workers/ volunteers and the clients.
- Pharmacies were the most common place where the sex workers preferred to purchase condoms.
- The two most popular brands of condoms among the sex workers were Number One and *Dhaal*.

- Almost 98 percent of the sex workers had heard about HIV/AIDS. The radio was reported major sources of the information of HIV/AIDS as reported by 92.5 percent of the sex workers.
- Overall 60 of the respondents correctly identified all A, B and C as HIV preventive measures. However, 41.8 percent only rejected the common local misconception that mosquito bite transmitted HIV virus. In total, only 31.3 percent of the respondents were aware of all the five major indicators of HIV transmission
- More than one-half of the respondents (54.7%) had been experiencing at least one STI symptom during the survey.
- A majority of 97.3 percent respondents had not sought treatment for the STI symptom/s that they had been experiencing.
- In total, 79.2 percent of the sex workers had at least once met or interacted with OEs/PEs from the HIV/AIDS related programs and 38.2 percent had visited DICs (Drop-in-centers). The proportion of the respondents paying their visit to STI clinic and VCT centers during the past year was 31.3 percent and 35.8 percent respectively.
- The participation of the sex workers in different HIV/AIDS awareness raising program was minimal with only 33.5 percent of them reporting to have participated in such activities in the 12 months preceding the survey. GWP had conducted most of these activities in 6 districts while in 16 districts it was WATCH that had conducted most of the programs.
- Overall 1.5 percent (9/600) respondents were found to be HIV positive. There was no difference in HIV prevalence among the FSWs of 16 districts and 6 districts. However, prevalence of gonorrhea and chlamydia among the FSWs in the 6 districts (3.5% gonorrhea and 5.5% chlamydia) was low compared with prevalence among FSWs in 16 districts (gonorrhea 9.8% and chlamydia 18.3%).
- Nearly five percent (28/600 or 4.7%) of the FSWs had current syphilis. There was no statistical difference in the prevalence of current syphilis between the FSWs in 16 districts and 6 districts.
- The prevalence of HIV was significantly higher (3.3% or 2/60) at Mahendranagar site, one of the total seven sites included in the study.
- There has been significant decrease in HIV prevalence in 2006 (1.5% or 6/400) than in the 1999 survey (3.9% or 16/410). Prevalence of current syphilis has also significantly decreased from 11.7 percent in 1999 to 5.0 percent in 2006
- Although the prevalence rate of gonorrhea did not change significantly (9.0% in 1999 and 9.8 % in 2006), prevalence of chlamydia has increased

progressively from 9.3 percent in 1999, 12.3 percent in 2003 to 18.3 percent in 2006.

4.2 Recommendations

Young girls are entering the sex trade every year. So the HIV/AIDS awareness campaigns should target youth and adolescent groups. Programs might include visits by peer educators and outreach workers for raising awareness about HIV and STI and for the promotion of condom use. Sex education at school level would also help in creating general awareness.

The sex workers do not use condoms consistently. Condom use with non-paying partners such as husbands/wives and other boy/girl friends was very low. Therefore, prevention programs should focus more on the need for consistent condom use for HIV/STI infection prevention purposes with all kinds of partners.

Free condom distribution programs through NGO/health workers/volunteers should be continued and expanded to cover a larger group of the target population as the sex workers find it convenient to receive condoms from these sources.

The mobilization of peer and outreach educators for educating the target groups has been quite successful in meeting its objectives. It should be continued at a larger scale to cover more sex workers. Comparatively however, fewer sex workers had ever visited the existing DICs, STI clinics and VCT centers. Such facilities should be extended further to facilitate convenient access to the sex workers.

References

- NCASC. 2006. Cumulative Data on HIV/AIDS.
- New ERA/SACTS/FHI. 2005a. *Integrated Bio-Behavioral Survey Among IDUs in Kathmandu Valley*. A Report submitted to Family Health International/Nepal. Kathmandu.
- New ERA/SACTS/FHI. 2005b. *Integrated Bio-Behavioral Survey Among IDUs in Pokhara Valley*. A Report submitted to Family Health International/Nepal.
- New ERA/SACTS/FHI. 2005c. *Behavioral and Sero Prevalence Survey Among IDUs in Eastern Terai*. A Report submitted to Family Health International/Nepal. Kathmandu.
- New ERA/SACTS/FHI. 2005d. *Behavioral and Sero Prevalence Survey Among IDUs in Western to Far Western Terai*. A Report submitted to Family Health International/Nepal. Kathmandu.
- New ERA/SACTS/FHI. 2000. *STD and HIV Prevalence Survey Among Female Sex Workers and Truckers on Highway Routes in the Terai, Nepal*; New ERA/SACTS, Kathmandu. A Report submitted to Family Health International/Nepal.
- New ERA. 2003c. *Behavioral Surveillance Survey in the Highway Route of Nepal: Round No. 5*, A Report submitted to Family Health International/Nepal. Kathmandu. New ERA.
- 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/SACTS/FHI. 2002a. *Integrated Bio-Behavioral Survey Among IDUs in Kathmandu Valley*. A report submitted to Family Health International/Nepal. Kathmandu.
- 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.
- SACTS. 2001. *Kathmandu FSW Sero-Prevalence Study*. A Report submitted to Family Health International/Nepal. Kathmandu.

ANNEXES

ANNEX - 1

Distribution of Sample Size by Location in 22 Terai Highway Districts

S.N.	Lab Set up Locations in Kathmandu Valley	No. of FSWs Recruited
1	Itahari	105
2	Lahan	85
3	Narayanghat	75
4	Butwal	135
5	Nepalgunj	80
6	Dhangadi	60
7	Mahendranagar	60
	Total	600

ANNEX - 2

Basic equation used in sample design

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

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

ANNEX - 3

CONFIDENTIAL

**INTEGRATED BIO- BEHAVIORAL SURVEY (IBSS)
AMONG FEMALE SEX WORKERS IN 22 TERAI HIGHWAY DISTRICTS
FHI/NEW ERA/SACTS – 2006**

FSW Questionnaire

Namaste! My name is, I am here from New ERA to collect data for a research study. 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 and cervical swab samples for laboratory testing. If it is determined that you have any STI symptoms, we will provide treatment free of charge.

All collected information 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 and cervical swab samples. Study results will be used only for program designing, monitoring and evaluation. This interview 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: 2062/___/___

Name of interviewer: _____ Code No. of Interviewer:

Date of Interview: 2062/_____/_____

Checked by the supervisor: Signature: _____ Date: 2062/_____/_____

Data Entry # 1: Clerk's name: _____ Date: 2062/_____/_____

Data Entry # 2: Clerk's name: _____ Date: 2062/_____/_____

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

- 1. Yes 2. No (Continue Interview)

↓
When?

_____ Days ago (STOP INTERVIEW)

1.0 GENERAL INFORMATION

Q. N.	Questions and Filters	Coding Categories	Skip to
101	Respondent ID No.	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	
101.1	Write down how you made contact?	_____ _____ _____	
102	Type of Sex Work Establishment SWs were based	Disco..... 1 Dance Restaurant..... 2 Cabin Restaurant 3 Call Girl..... 4 Massage Parlor 5 Bhatti Pasal..... 6 House Settlement..... 7 Street..... 8 Garment/Carpet Factory 9 Squatter..... 10 Other (Specify)_____ 96	
103	Interview Starting Time Interview Completion Time	_____ _____	
104	Where were you born?	District _____ VDC/Municipality _____ Ward No. <input type="text"/> <input type="text"/> Village/Tole _____	
105	Where do you live now? (Name of Current Place of Residence)	District: _____ VDC/Municipality: _____ Ward No. <input type="text"/> <input type="text"/> Village/Tole: _____	
106	How long have you been living continuously at this location?	Month <input type="text"/> <input type="text"/> <input type="text"/> Always (since birth) 0	201
107	Before you moved here, where did you live?	Districts: _____ VDC/Municipality: _____ Ward No. <input type="text"/> <input type="text"/> Village/Tole: _____	

2.0 PERSONAL INFORMATION

Q. N.	Questions and Filters	Coding Categories	Skip to
201	How old are you?	Age <input type="text"/> <input type="text"/> (write the completed years)	
202	What is your caste? (Specify Ethnic Group/Caste)	Ethnicity/Caste _____ (Specify) Code No..... <input type="text"/> <input type="text"/>	

Q. N.	Questions and Filters	Coding Categories	Skip to
203	What is your educational status? (Circle '0' if illiterate, '19' for the literate without attending the school, and write exact number of the passed grade)	Illiterate0 Literate..... 19 Grade <input type="text"/> <input type="text"/> (write the completed grade)	
204	What is your present marital status?	Married 1 Divorced/Permanently separated 2 Widow 3 Never married..... 4	204.2 204.3
204.1	How old were you when you got divorced/separated/widowed?	Age <input type="text"/> <input type="text"/> (write the completed years)	204.3
204.2	Are you presently living with your husband?	Yes..... 1 No 2	205
204.3	Who are you living with now? (Multiple Responses)	Male friend 1 Relatives 2 Other females 3 Children 4 Alone 5 Others (Specify)..... 96	
	[Note: If answer in Q. 204 is 'never married' Go to Q. 207]		
205	At what age were you married for the first time?	Years old <input type="text"/> <input type="text"/> (Write Complete Years)	
	[Note: If answer in Q. 204 is ' Divorced/Permanently Separated ' or ' Widow ' Go to Q. 207]		
206	Does your husband have co-wife now?	Yes..... 1 No 2	
207	Are there people who are dependent on your income?	Yes..... 1 No 2	208
207.1	How many are dependent on your income?	Adults <input type="text"/> <input type="text"/> Children <input type="text"/> <input type="text"/>	
208	How long have you been exchanging sexual intercourse for money or other things? (if answer is less than 6 months stop interview)	Months <input type="text"/> <input type="text"/> <input type="text"/> Don't know 98	
208.1	Did you have any sexual intercourse during past 12 months?	Yes..... 1 No 2	STOP INTERVIEW
209	How many months have you been working here as a sex worker at this place?	Months <input type="text"/> <input type="text"/> <input type="text"/>	
210	Where else have you worked as a sex worker? (For example: <i>Bhatti shop, Cabin Restaurant, Discotheques etc.</i>)	Type of establishment Location _____ _____ _____ _____	

Q. N.	Questions and Filters	Coding Categories	Skip to
211	Have you ever been engaged in this profession in other locations?	Yes.....1 No2	213
211.1	Where did you work? (List all the places mentioned by the respondent)	District VDC/Municipalité Village/Tole _____ _____ _____ _____	
212	In the past one-year have you followed this profession in other locations also?	Yes.....1 No2	213
212.1	Where did you follow such profession? (List all the places)	District VDC/Municipality Village/Tole _____ _____ _____ _____	
213	Have you ever worked in India in this profession?	Yes.....1 No2	216
213.1	Where did you work in India? (List all the locations worked in India).	Name of Places Name of Nearby City _____ _____ _____ _____	
214	In total, for how many months did you work as a sex worker in India?	Months <input type="text"/> <input type="text"/> <input type="text"/>	
215	Were you coerced to go there or you went there on your free will?	Coerced.....1 On my own2	
216	What is your average weekly income from commercial sex? [Note: If there is '0' in both cash and gift equivalent, probe for the reasons]	Cash _____ Rs. Gift equivalent to _____ Rs. Total _____ Rs. Others (Specify) _____ 96	
217	Do you have any other work besides sex work?	Yes.....1 No2	218
217.1	What do you do?	_____ _____ _____	
217.2	What is your average weekly income from the above-mentioned sources?	_____ Rupees	
218	Have you ever encountered any client who refuses to give money after having sex?	Yes.....1 No2	301
218.1	How many such incidents have occurred in the past six months?	Times <input type="text"/> <input type="text"/>	

3.0 INFORMATION ON SEXUAL INTERCOURSE

Q. N.	Questions and Filters	Coding Categories	Skip to
301	How old were you at your first sexual intercourse?	Year's old <input type="text"/> <input type="text"/> Don't know/Can't recall98	
302	Among all of your partners, how many of them had sex with you in exchange for money in the past week?	Number <input type="text"/> <input type="text"/> Don't know98	
303	Among all of your partners, how many of them had sex with you without paying any money in the past week? (Include sexual contacts with spouse and live-in sexual partners)	Number <input type="text"/> <input type="text"/> Don't know98	
304	With how many different sexual partners in total have you had sex during the past week? (Note: Check total number of partners in Q. 302 + Q. 303 to match with Q 304).	Number <input type="text"/> <input type="text"/> Don't know98	
305	Usually, how many clients visit you in a day?	Number <input type="text"/>	
305.1	With how many clients did you have sexual intercourse yesterday?	Number <input type="text"/>	
305.2	With how many clients did you have sexual intercourse in the past week?	Number <input type="text"/> <input type="text"/>	
306	In the past month, with which profession's client did you mostly have sex? (Encircle three most reported types of client. DO NOT READ the possible answers)	Bus, truck or tanker worker1 Taxi, jeep, microbus or minibus worker.....2 Industrial/wage worker.....3 Police4 Soldier/Army.....5 Student6 Rickshawala7 Service holder.....8 Businessmen..... 9 Mobile Businessmen.....10 Others (Specify)96 Don't know98	
306.1	With which profession's client did you have your last sexual intercourse?	Bus, truck or tanker worker1 Taxi, jeep, microbus or minibus worker.....2 Industrial/wage worker.....3 Police4 Soldier/Army.....5 Student6 Rickshawala7 Service holder.....8 Businessmen..... 9 Mobile Businessmen.....10 Others (Specify)96 Don't know98	
307	How many days in a week (on an average) do you work as a sex worker?	Days <input type="text"/>	

Q. N.	Questions and Filters	Coding Categories	Skip to
308	When did you have the last sexual intercourse with a client? (Write '00' if Today)	Days before <input type="text"/> <input type="text"/>	
309	How many people did you have sexual intercourse with on that day?	Number <input type="text"/>	
310	How much rupees or other items did the last client pay you? (Note: If there is "00" in both cash and gift equivalent, mention the reasons)	Cash _____ Rs. Gift equivalent to _____ Rs. Total _____ Rs. Reason _____	

4.0 USE OF CONDOM AND INFORMATION ON SEX PARTNERS

Condom use with Clients

Q. N.	Questions and Filters	Coding Categories	Skip to
401	The last time you had sex with your client, did he use a condom?	Yes.....1 No.....2	401.2
401.1	Who suggested condom use at that time?	Myself.....1 My Partner.....2 Don't know98	402 402 402
401.2	Why didn't your client use a condom at that time? (Multiple answers. DO NOT READ the possible answers)	Not available1 Too expensive2 Partner objected3 I didn't like to use it4 Used other contraceptive5 Didn't think it was necessary6 Didn't think of it7 Client offered more money8 Other (Specify) _____96 Don't know98	
402	How often did your clients use condom over the past 12 months?	All of the time1 Most of the time2 Some of the time3 Rarely.....4 Never5	403
402.1	Why didn't your client use condom always? Multiple answers. DO NOT READ the possible answers)	Not available1 Too expensive2 Partner objected3 I didn't like to use it4 Used other contraceptive5 Didn't think it was necessary6 Didn't think of it7 Client offered more money8 Other (Specify) _____96 Don't know98	

Condom use with Regular Client

Q. N.	Questions and Filters	Coding Categories	Skip to
403	Do you have any client who visits you on regular basis?	Yes.....1 No2	406
404	Did your regular client use condom in the last sexual contact with you?	Yes.....1 No2	404.2
404.1	Who suggested condom use at that time?	Myself.....1 My Partner23 Don't know98	405 405 405
404.2	Why didn't your regular client use a condom at that time?	Not available1 Too expensive2 Partner objected3 I didn't like to use it4 Used other contraceptive5 Didn't think it was necessary6 Didn't think of it7 Client offered more money8 Other (Specify) _____96 Don't know98	
405	How often did your regular clients use condom with you over the past 12 months?	All of the time1 Most of the time2 Some of the time3 Rarely.....4 Never5	406
405.1	Why didn't they use condom always? (Multiple answers. DO NOT READ the possible answers)	Not available1 Too expensive2 Partner objected3 I didn't like to use it4 Used other contraceptive5 Didn't think it was necessary6 Didn't think of it7 Client offered more money8 Other (Specify) _____96 Don't know98	

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

Q. N.	Questions and Filters	Coding Categories	Skip to
406	Did you have sexual intercourse with your husband or a male friend in past six months?	Yes.....1 No2	409
407	Think about your most recent sexual intercourse with your husband or male partner. How many times did you have sexual intercourse with this person over the last 30 days? (Write "00" for none intercourse in past one month)	Number of times <input type="text"/> <input type="text"/> Don't know98	
408	• The last time you had sex with your husband or male friend staying together, did your sex partner use a condom?	Yes.....1 No2	408.2

Q. N.	Questions and Filters	Coding Categories	Skip to
408.1	Who suggested condom use that time?	Myself.....1 My Partner.....2 Don't know98	409 409 409
408.2	Why didn't your partner use a condom that time?	Not available1 Too expensive2 Partner objected3 I didn't like to use it4 Used other contraceptive5 Didn't think it was necessary6 Didn't think of it7 Other (Specify)96 Don't know98	
409	How often did all of your non-paying partners use condoms over the last 12 months?	All of the time1 Most of the time2 Some of the time3 Rarely.....4 Never5 Did not have sexual intercourse in the last 12 months6	410 410
409.1	Why didn't they use condom always? (Multiple answers. DO NOT READ the possible answers)	Not available1 Too expensive2 Partner objected3 I didn't like to use it4 Used other contraceptive5 Didn't think it was necessary6 Didn't think of it7 Other (Specify)96 Don't know98	

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

Q. N.	Questions and Filters	Coding Categories	Skip to
410	During the past one year, did you have sexual intercourse with a person other than your client, husband/ male friend?	Yes.....1 No2	413
411	Did he use condom when he had last sexual contact with you?	Yes.....1 No2	411.2
411.1	Who suggested condom use at that time?	Myself.....1 My Partner.....2 Don't know98	412 412 412
411.2	Why didn't he use condom at that time?	Not available1 Too expensive2 Partner objected3 I didn't like to use4 Used other contraceptive5 Didn't think it was necessary6 Didn't think of it7 Other (Specify)96 Don't know98	

Q. N.	Questions and Filters	Coding Categories	Skip to
412	How often did your other partners use condom with you over the past 12 months?	All of the time1 Most of the time2 Some of the time3 Rarely.....4 Never5	413
412.1	Why did you not use condom regularly with them? (Multiple answers. DO NOT READ the possible answers)	Not available1 Too expensive2 Partner objected3 I didn't like to use4 Used other contraceptive5 Didn't think it was necessary6 Didn't think of it7 Other (Specify) _____96 Don't know98	
413	With whom did you have your last sexual intercourse?	Client..... 1 Husband/male friend..... 2 Other male.....3 Others (Specify)_____....96	

Condom Accessibility

Q. N.	Questions and Filters	Coding Categories	Skip to
414	Do you usually carry condoms with you?	Yes.....1 No2	415
414.1	At this moment, how many condoms do you have at-hand with you? (Observe and write)	Number <input type="text"/> <input type="text"/>	
415	Which places or persons do you know from where/whom you can obtain condoms? (Multiple answers. DO NOT READ the possible answers)	Health Post/ Health Center1 Pharmacy2 General retail store (Kirana Pasal).....3 Private Clinic.....4 Paan shop5 Hospital.....6 FPAN Clinic.....7 Peer/Friends8 NGO/Health Workers/ Volunteers9 Guest House/Hotel 10 Other (specify)_____ 96 Don't know98	
415.1	How long does it take for you to obtain a condom from your house or from your working place?	Minutes <input type="text"/> <input type="text"/>	
416	How do you usually obtain condoms? (Buy, obtain free of cost or both ways)	Always free of cost.....1 Purchase.....2 Obtain both ways.....3 Condom never used.....4	417 418

Q. N.	Questions and Filters	Coding Categories	Skip to
416.1	From where do you often obtain free condoms? (Multiple answers. DO NOT READ the possible answers)	Health Post/Health Center... ..1 Hospital.....2 FPAN clinics.....3 Peers/friends.....4 Community events.....5 NGO/Health workers/ Volunteers.....6 Others (Specify)_____96	
416.2	Which would be the most convenient place/s for you to obtain free condoms? (Multiple answers. DO NOT READ the possible answers)	Health Post/Health Center... ..1 Hospital.....2 FPAN clinics.....3 Peers/friends.....4 Community events.....5 NGO/Health workers/ Volunteers.....6 Others (Specify)_____96	
[Note: If response is "1" in Q416 Go to Q418			
417	From where do you often purchase condoms? (Multiple answers. DO NOT READ the possible answers)	Pharmacy.....1 General retail store (Kirana Pasal).....2 Private clinic.....3 Pan Shop.....4 Others (Specify)_____96	
417.1	Which would be the most convenient place/s for you to purchase condoms? (Multiple answers. DO NOT READ the possible answers)	Pharmacy.....1 General retail store (Kirana Pasal).....2 Private clinic.....3 Pan Shop.....4 Others (Specify)_____96	

Type of Sex Practices

Q. N.	Questions and Filters	Coding Categories	Skip to
418	During the past one-year, did any of your sexual partners force you to have sex with them against your wish?	Yes.....1 No2	
419	Did any person physically assault you (for any reason) in the past year?	Yes.....1 No2	
420	In the past year, did any of your clients perform such act/s that you did not like?	Yes.....1 No2	422
421	If yes, what were they?	_____ _____ _____	
422	In the past year, did you have other type of sexual intercourse other than vaginal? (INSTRUCTION TO INTERVIEWER: Explain the other types of sexual intercourse besides vaginal (such as oral, anal)	Yes.....1 No2	501

Q. N.	Questions and Filters	Coding Categories	Skip to
422.1	If yes, what type of sexual act/s were they? (Multiple answers. DO NOT READ the possible answers)	Oral.....1 Anal2 Hand Sex3 Other (Specify) _____96	
422.2	What type of sexual contact did you have with your last client? (Multiple answers. DO NOT READ the possible answers)	Oral.....1 Anal2 Hand Sex3 Vaginal4 Other (Specify) _____96	

5.0 AWARENESS OF HIV/AIDS

Q. N.	Questions and Filters	Coding Categories		Skip to
501	Have you ever heard of HIV/AIDS?	Yes.....1 No2		601
502	Of the following sources of information, from which sources have you collected information on HIV/AIDS within the past one-year?			
	Source of Information	Yes	No	
	1. Radio	1	2	
	2. Television	1	2	
	3. Newspapers/Magazines	1	2	
	4. Pamphlets/Posters	1	2	
	5. Health Workers	1	2	
	6. School/Teachers	1	2	
	7. Friends/Relatives	1	2	
	8. Work Place	1	2	
	9. People from NGO	1	2	
	10. Video Van	1	2	
	11. Street Drama	1	2	
	12. Cinema Hall	1	2	
	13. Community Event/Training	1	2	
	14. Bill Board/Sign Board	1	2	
15. Comic Book	1	2		
16. Community Workers	1	2		
96. Others (Specify) _____	1	2		

Knowledge, Opinion and Misconception about HIV/AIDS

Q. N.	Questions and Filters	Coding Categories	Skip to
503	Do you know anyone who is infected with HIV or who has died of AIDS?	Yes.....1 No2	505
504	Do you have a close relative or close friend who is infected with HIV or has died of AIDS?	Yes, a close relative.....1 Yes, a close friend2 No3	
505	Can people protect themselves from HIV by keeping sexual contact with only one uninfected faithful sex partner?	Yes.....1 No2 Don't know98	

Q. N.	Questions and Filters	Coding Categories	Skip to
506	Can people protect themselves from HIV, virus-causing AIDS, by using condom correctly in each sexual contact?	Yes..... 1 No2 Don't know98	
507	Do you think a healthy-looking person can be infected with HIV?	Yes..... 1 No2 Don't know98	
508	Can a person get the HIV virus from mosquito bite?	Yes..... 1 No2 Don't know98	
509	Can a person get HIV by sharing a meal with an HIV infected person?	Yes..... 1 No2 Don't know98	
510	Can a pregnant woman infected with HIV/AIDS transmit the virus to her unborn child?	Yes..... 1 No2 Don't know98	512 512
511	What can a pregnant woman do to reduce the risk of transmission of HIV to her unborn child?	Take Medication..... 1 Other (Specify).....96 Don't know98	
512	Can a woman with HIV/AIDS transmit the virus to her new-born child through breastfeeding?	Yes..... 1 No2 Don't know98	
513	Can people protect themselves from HIV virus by abstaining from sexual intercourse?	Yes..... 1 No2 Don't know98	
514	Can a person get HIV by holding an HIV infected person's hand?	Yes..... 1 No2 Don't know98	
515	Can a person get HIV, by using previously used needle/syringe?	Yes..... 1 No2 Don't know98	
516	Can blood transfusion from an infected person to the other transmit HIV?	Yes..... 1 No2 Don't know98	
517	Is it possible in your community for someone to have a confidential HIV test?	Yes..... 1 No2 Don't know98	
518	I don't want to know the result, but have you ever had an HIV test?	Yes..... 1 No2	601
519	Did you voluntarily undergo the HIV test or because it was required?	Voluntarily..... 1 Required2	
520	Please do not tell me the result, but did you find out the result of your test?	Yes..... 1 No2	522
521	Why did you not receive the test result?	Sure of not being infected..... 1 Afraid of result2 Felt unnecessary3 Forgot it4 Other (Specify).....96	

Q. N.	Questions and Filters	Coding Categories	Skip to
522	When did you have your most recent HIV test?	Within last 12 months 1 Between 1-2 years 2 Between 2-4 years 3 More than 4 years ago..... 4	

6.0 PROMOTION OF CONDOM

Q. N.	Questions and Filters	Coding Categories		Skip to
601	In the past one-year have you seen, read or heard any advertisements about condoms from the following sources? (READ THE FOLLOWING LIST)			
	Sources of Information	Yes	No	
	1. Radio	1	2	
	2. TV	1	2	
	3. Pharmacy	1	2	
	4. Health Post/ Health Center	1	2	
	5. Hospital	1	2	
	6. Health Workers/Volunteers	1	2	
	7. Friends/Neighbors	1	2	
	8. NGOs	1	2	
	9. Newspapers/Posters	1	2	
	10. Video Van	1	2	
	11. Street Drama	1	2	
	12. Cinema Hall	1	2	
	13. Community Event/Training	1	2	
	14. Bill Board/Sign Board	1	2	
	15. Comic Book	1	2	
16. Community Workers	1	2		
96. Others (Specify) _____	1	2		
602	What message did you get from the advertisement? (Multiple answers. DO NOT READ the possible answers)	Condoms should be used to avoid HIV/AIDS 1 Condoms should be used to avoid STI..... 2 Condoms should be used for family planning, other family planning messages 3 Other (Specify) _____... 96		

Q. N.	Questions and Filters	Coding Categories		Skip to
603	In the past one-year, have you ever seen, heard or read following messages?			
	Messages/Characters	Yes	No	
	1. Jhilke Dai Chha Chhaina Condom	1	2	
	2. Condom Kina Ma Bhaya Hunna Ra	1	2	
	3. Youn Rog Ra AIDS Bata Bachnalai Rakhnu Parchha Sarbatra Paine Condom Lai	1	2	
	4. Ramro Sanga Prayog Gare Jokhim Huna Dinna Bharpardo Chhu Santosh Dinchhu Jhanjhat Manna Hunna	1	2	
	5. Condom Bata Surakchhya, Youn Swasthya Ko Rakchhya AIDS Ra Younrog Bata Bachna Sadhai Condom Ko Prayog Garau	1	2	
	6. HIV/AIDS Bare Aajai Dekhee Kura Garau	1	2	
	7. Ek Apas Ka Kura	1	2	
	8. Maya Garaun Sadbhav Badaun	1	2	
9. Des Pardes	1	2		
96. Others (Specify) _____	1	2		
603.1	Besides above messages have you seen, heard or read any other messages relating to STI/HIV/AIDS Prevention or Condom Uses?	Yes.....1 No2	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		

Knowledge and Participation in STI and HIV/AIDS Programs

Q. N.	Questions and Filters	Coding Categories	Skip to
605	Have you met or discussed or interacted with Peer Educators (PE) or Outreach Educators (OE) in the last 12 months?	Yes.....1 No2 No response99	609
606	When you met/discussed/interacted with PE or OE in what kind of activities were you involved? (Multiple answers. DO NOT READ the possible answers)	Discussion on how HIV/AIDS is/isn't transmitted..1 Discussion on how STI is/isn't transmitted.....2 Regular/non-regular use of condom.....3 Demonstration on using condom correctly4 STI treatment/cure after treatment.....5 Counseling on reducing number of sex partner...6 Training on HIV and STI, Condom day, AIDS day, participation in discussions and interaction programs.....7 Others (Specify) _____96	

Q. N.	Questions and Filters	Coding Categories	Skip to
607	Do you know from which organization were they? (Multiple answers. DO NOT READ the possible answers)	AMDA 1 GWP 2 Trinetra 3 WATCH..... 4 ICH 5 NSARC 6 NRCS 7 INF/Paluwa 8 Siddhartha Club 9 CAC 10 SACTS 11 NFCC 12 NAPN 13 SPARSHA 14 Others (Specify) 96 Don't know 98	
608	How many times have you been visited by PE and/or OE in the last 12 months?	Once..... 1 2-3 times 2 4-6 times 3 7-12 times 4 More than 12 times 5	
609	Have you visited or been to any drop in center (DIC) in the last 12 months?	Yes..... 1 No 2	613
610	When you went to the DIC, in which activities did you take part? (Multiple answers. DO NOT READ the possible answers)	Went to collect condoms..... 1 Went to learn the correct way of using condom. 2 Went to watch film on HIV/AIDS.. 3 Participated in discussion on HIV transmission... .. 4 Participated in discussion on STI transmission... .. 5 Participated in training, interaction and discussion programs on HIV/AIDS and STI..... 6 Went to collect IEC materials7 Went for STI treatment.....8 Took friend with me..... 9 Other (Specify)..... 96	
611	Do you know which organizations run those DICs? (Multiple answers. DO NOT READ the possible answers)	AMDA 1 GWP 2 Trinetra 3 WATCH..... 4 ICH 5 NSARC 6 NRCS 7 INF/Paluwa 8 Siddhartha Club 9 CAC 10 SACTS 11 NFCC 12 NAPN 13 SPARSHA 14 Others (Specify) 96 Don't know 98	

Q. N.	Questions and Filters	Coding Categories	Skip to
612	How many times have you visited DICs in the last 12 months?	Once1 2-3 times2 4-6 times3 7-12 times4 More than 12 times5	
613	Have you visited any STI clinic in the last 12 months?	Yes1 No2	617
614	When you visited such STI clinic in what activities were you involved? (Multiple answers. DO NOT READ the possible answers)	Blood tested for STI..... 1 Physical examination conducted for STI identification..... 2 Was advised to use condom in each sexual intercourse..... 3 Was advised to take complete and regular medicine..... 4 Was suggested to reduce number of sexual partners.....5 Took friend with me 6 Other (Specify)..... 96	
615	Do you know which organizations run those STI clinics? (Multiple answers. DO NOT READ the possible answers)	AMDA /STI..... 1 NSARC2 NRCS3 INF/Paluwa4 Siddhartha Club.....5 SACTS6 NFCC7 WATCH.....8 Others (Specify).....96 Don't know98	
616	How many times have you visited STI clinic in the last 12 months?	Once1 2-3 times2 4-6 times3 7-12 times4 More than 12 times5	
617	Have you visited any Voluntary Counseling and Testing (VCT) centers in the last 12 months?	Yes1 No2	621
618	When you visited such VCT center in what activity were you involved? (Multiple answers. DO NOT READ the possible answers)	Received pre-HIV/AIDS test counseling.....1 Blood sample taken for HIV/AIDS test.....2 Received post HIV/AIDS test counseling.....3 Got information on HIV/AIDS window period.....4 Received HIV/AIDS test result...5 Received counseling on using condom correctly in each sexual intercourse.....6 Took a friend with me..... 7 Other (Specify).....96	

Q. N.	Questions and Filters	Coding Categories	Skip to
619	Do you know which organizations run those VCTI centers? (Multiple answers. DO NOT READ the possible answers)	AMDA.....1 NSARC2 NRCS3 INF/Paluwa4 Siddhartha Club.....5 SACTS6 NFCC7 WATCH.....8 Others (Specify)96 Don't know98	
620	For how many times have you visited VCT center in the last 12 months?	Once1 2-3 times.....2 4-6 times3 7-12 times4 More than 12 times.....5	
621	Have you ever participated in HIV/AIDS awareness raising program or community events in the last 12 months?	Yes.....1 No2	701
622	When you participated in such events in what activities were you involved? (Multiple answers. DO NOT READ the possible answers)	Street drama.....1 AIDS Day2 Condom Day3 Video Shows.....4 Group discussions5 Talk programs6 HIV/AIDS related training7 HIV/AIDS related Workshops ..8 Condom use demonstrations.....9 Others (Specify)96	
623	Do you know which organizations organized those activities? (Multiple answers. DO NOT READ the possible answers given below)	AMDA1 GWP.....2 TRINETRA3 WATCH.....4 ICH.....5 NSARC.....6 NRCS7 INF/Paluwa8 Siddhartha Club.....9 CAC.....10 SACTS11 NFCC12 NAPN.....13 Sparsa.....14 Others (Specify)96 Don't know98	
624	How many times have you participated in such activities in the last 12 months?	Once1 2-3 times.....2 4-6 times3 7-12 times4 More than 12 times.....5	

7.0 STI (SEXUALLY TRANSMITTED INFECTION)

Q. N.	Questions and Filters	Coding Categories	Skip to
701	Which diseases do you understand by STI? (Multiple answers. DO NOT READ the possible answers)	White Discharge/Discharge of Pus/Dhatu flow1 Itching around Vagina2 Lower Abdominal Pain3 Syphilis (Bhiringi)/Gonorrhea...4 HIV/AIDS5 Burning Sensation while Urinating.....6 Swelling of Vagina.....7 Pain in Vagina8 Unusual Bleeding from Vagina.9 Ulcer or sore around Vagina.....10 Don't know..... 98 Other (Specify) _____...96	
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, foul smelling vaginal discharge	1	2
	10. Genital Warts	1	2
	96.Others (Specify) _____	1	2
	(If answer is "No" to all in the Q. No. 702 Go to Q. 710)		
703	Have you gone through medical treatment for any of these symptoms?	Yes.....1 No2	710
703.1	If yes, for how long did you wait to go for the treatment? (Write '00' if less than a week)	Week <input type="text"/> <input type="text"/>	
704	Where did you go for the treatment? (Multiple answers. DO NOT READ the possible answers)	Private Clinic1 AMDA Clinic2 NFCC3 SACTS.....4 FPAN Clinic.....5 Health Post/ Health Center6 Hospital.....7 Pharmacy8 Self Treatment (Specify).....9 Others (specify) _____..96	

Q. N.	Questions and Filters	Coding Categories	Skip to
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, foul smelling vaginal discharge		
	10. Genital Warts		
96. Others (Specify) _____			
706	Did you receive a prescription for medicine?	Yes 1 No 2	709
707	Did you obtain all the medicine prescribed?	Yes I obtained all of it 1 I obtained some but not all 2 I obtained none 3	709 709
708	Did you take all of the medicine prescribed?	Yes 1 No 2	709
708.1	If not, why did you not take all of the medicine prescribed?	Forgot to take 1 Felt cured 2 Medicine did not work properly 3 Others (Specify) _____ 96	
709	How much did you pay for the medicine that you took? [If not paid mention the reasons]	Rs. _____ Reason _____	
710	Did you have any of the following symptoms in the past year?		
	Symptoms	Yes	No
	1. Pain in the lower abdomen	1	2
	2. Pain during urination	1	2
	3. Frequent urination	1	2
	4. Pain during sex	1	2
	5. Ulcer or sore in the genital area	1	2
	6. Itching in or around the vagina	1	2
	7. Vaginal odor or smell	1	2
	8. Vaginal bleeding (unusual)	1	2
	9. Unusual heavy, foul smelling vaginal discharge	1	2
	10. Genital Warts	1	2
	96. Others (Specify) _____	1	2
(If answer is "No" to all in Q. No. 710, Go to Q. No. 801)			

Q. N.	Questions and Filters	Coding Categories	Skip to
711	Have you gone through medical treatment for any of these symptoms in the past year?		
	Symptoms	Yes	No
	1. Pain in the lower abdomen	1	2
	2. Pain during urination	1	2
	3. Frequent urination	1	2
	4. Pain during sex	1	2
	5. Ulcer or sore in the genital area	1	2
	6. Itching in or around the vagina	1	2
	7. Vaginal odor or smell	1	2
	8. Vaginal bleeding (unusual)	1	2
	9. Unusual heavy vaginal discharge and foul vaginal discharge	1	2
	10. Genital Warts	1	2
	96. Others (Specify) _____	1	2
(If answer is "No" to all in Q. No. 711, Go to Q. No. 801)			
712	Where did you go for the treatment? (Multiple answers. Do not read the possible answers).	Private Clinic 1 AMDA Clinic 2 NFCC 3 SACTS 4 FPAN Clinic 5 Health Post/ Health Center 6 Hospital 7 Pharmacy 8 Self Treatment (Specify) _____ 9 Others (Specify) _____ .96	801
713	Did anyone from the place where you went for treatment counsel you about how to avoid the problem?	Yes 1 No 2	801
713.1	What did he/she tell you? (Multiple answers, DONOT READ the possible answers)	Told me to use condom 1 Told me to reduce number of sexual partners 2 Others (Specify) _____ ...96	

8.0 USE OF DRUGS AND INJECTION

Q. N.	Questions and Filters	Coding Categories	Skip to
801	During the last 30 days how often did you have drinks containing alcohol?	Everyday 1 2-3 times a week 2 At least once a week 3 Less than once in a week 4 Never 5 Don't know 98	
802	Some people take different types of drugs. Have you also tried any of those drugs in the past 30 days?	Yes 1 No 2 Don't know 98	

Q. N.	Questions and Filters	Coding Categories	Skip to
	(Ganja, Bhang, Nitroson, Nitrovet E.)		
803	Some people inject drugs using a syringe. Have you ever-injected drugs? (Do not count drugs injected for medical purpose or treatment of an illness)	Yes1 No2 Don't know98	809 809
804	Have you injected drugs in last 12 months? (Do not count drugs injected for medical purposes or treatment of an illness)	Yes1 No2 Don't know98	809 809
805	Are you currently injecting drugs?	Yes1 No2	809
806	Think about the last time you injected drugs. Did you use a needle or syringe that had previously been used by someone else?	Yes1 No2 Don't know98	
807	Think about the time you injected drugs during the past one month. How often was it with a needle or syringe that had previously been used by someone else?	Every Time1 Almost Every Time2 Sometimes.....3 Never4 Don't Know98	
808	Usually how do you obtain a syringe/needle?	My friend/relative give it to me after use1 Unknown person give it to me...2 I pick it up from a public place used and left by others3 I pick it up from a public place where I leave my syringes4 I use a new needle/syringe given by NGO/volunteer5 I purchase a new needle/syringe6 Others (Specify)96	
809	Have you ever exchanged sex for drugs?	Yes.....1 No2	
810	Have you ever exchanged sex for money so that you can buy drug?	Yes.....1 No2	
811	To your knowledge, have any of your sex partners injected drugs?	Yes.....1 No2	812
811.1	(For Married SW only) Does your husband inject drug? (Check with Q. 204)	Yes.....1 No2 Don't know.....98	
811.2	(For female having regular client) Did your regular client inject drug? (Check with Q. 403)	Yes.....1 No2 Don't know.....98	
811.3	(For all) Do you know any of your client ever injecting drugs?	Yes.....1 No2 Don't know.....98	
812	Do you know anyone who injects drugs?	Yes.....1 No2	901

Q. N.	Questions and Filters	Coding Categories	Skip to
812.1	If yes, how are you related to her/him?	Client.....1 Friend.....2 Family.....3 Relative.....4 Other (Specify).....96	

9.0 STIGMAS AND DISCRIMINATION

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

☞ Thank You. ☞

ANNEX - 4

CONFIDENTIAL

**INTEGRATED BIO-BEHAVIORAL SURVEY (IBBS)
AMONG FEMALE SEX WORKERS IN 22 TERAI HIGHWAY DISTRICTS
FHI/NEW ERA/SACTS – 2006**

Female Clinical/Lab Checklist

Respondent ID Number:

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

 Date: 2062/___/___

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 HIV & Syphilis	1	2
Pulse : _____	Date & place for post-test results given	1	2
Temperature : _____ ° F	Condom given	1	2
	Vitamins given	1	2
	Gift given	1	2
	IEC materials given	1	2

1.0 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. 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 - 5

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

Title: Integrated Bio-behavioral survey (IBBS) among female sex workers in 22 Terai Highway Districts

Sponsor : Family Health International, Nepal and USAID, Nepal
Principal Investigator : Asha Basnyat, Country Director
Address : Family Health International/Nepal, GPO BOX 8803,
Gairidhara
Kathmandu, Nepal, Email: asha@fhi.org.np

Introduction to Research

We are asking you to take part in research to collect information on knowledge of HIV/STIs, HIV/STI related risk behaviors, STI treatment practices and to measure the prevalence of HIV, syphilis and gonorrhea and chlamydia infections among the populations like you. We want to be sure you understand the purpose and your responsibilities in the research before you decide if you want to be in it. If you decide to be in this research, we will ask you to sign this paper (or make your mark in front of a witness). If you want to keep a copy of this paper, we will give it to you. Please ask us to explain any words or information that you may not understand.

General Information about the Research

Study participants will be selected randomly. In total 600 women like you are selected for interview. We will ask you some questions and then ask you to provide blood and cervical swab samples. This will require taking a swab sample from you placing a cotton swab in the vagina with the help of Dacron. We will draw 7-10 ml blood by 10 ml disposable syringe from your vein. 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.

You are free to decide if you want to be in this research. If you decide not to participate, your decision will not affect the health care you would normally receive at this place.

Your Part in the Research

If you agree to be 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.

We will explain you what the laboratory test are performed and what treatment and care is available to you. Then we will collect your blood and cervical swab samples.

Your name will neither be recorded on blood and cervical swab samples nor in the questionnaire. All the questionnaire and samples will be labeled with a code number. Gonorrhea and chlamydia trachomatis test will be done from your cervical swab sample and syphilis and HIV will be examined from your blood sample. Syphilis and HIV test will be done in Kathmandu by SACTS but Gonorrhea and chlamydia test will be performed in National Reference Laboratory (NRL) in Kathmandu. If you wish we could provide you syphilis and HIV test results about a month after the completion of the fieldwork. Your part in the research will last approximately one hour.

Possible Risks

The risk of participating in this study is the minor discomfort due to bleeding bruising during blood drawing. Providing cervical swab sample do not put you at any risk. 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 pre and post test counseling on HIV and STI through a qualified counselor.

Possible Benefits

You will be provided with free treatment, if currently you have any STI symptoms. You will be given lab test results and made aware of how STI/HIV is transmitted and how it can be prevented and controlled. 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 Decide Not to Be in the Research

You are free to decide if you want to be in this research. Your decision will not affect in any way in the health services you have been seeking now and you would normally receive.

Confidentiality

We will protect information collected about you and you taking part in this research to the best of our ability. We will not use your name in any reports. Someone from FHI might want to ask you questions about being in the research, but you do not have to answer them. A court of law could order medical records shown to other people, but that is unlikely.

Payment

We will not pay you for your participation but 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. Moreover, we will provide you local transportation or reimburse local transportation cost when you come to the study center for interview and for providing biological sample.

Leaving the Research

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

If You Have a Questions about the Study

If you have any questions about the research, call

Asha Basnyat, Family Health International (FHI), Gairidhara, Kathmandu, Phone Number: 01-4427540.

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

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

Research Related Injuries

If you are sick or have a health problem due to your participation in this research, you will not have to pay for visits to see the research clinic staff. If you need more help, we will refer you to other clinics, where you may have to pay.

Your rights as a Participant

This research has been reviewed and approved by the Institutional Review Board of Family Health International and Nepal Health Research Council (NHRC). If you have any questions about how you are being treated by the study or your rights as a participant you may contact

Asha Basnyat, Family Health International (FHI), Gairidhara, Kathmandu, Nepal, Phone Number: 01- 4427540 OR Mr. David Borasky, Protection of Human Subjects Committee, PO Box 13950, Research Triangle Park, NC 27709, USA, phone number: [International Access Code]-1-919-405-1445, e-mail: dborasky@fhi.org.

ANNEX - 6

Dates and Places of Counseling Performed to FSWs in 22 Terai Highway Districts

Name of sites	Field Work		Post-test Counseling		
	Date	No of Participants	Date	No of Participants	
				No.	%
Itahari	March 29, 2006 to May 29, 2006	105	June 03, 2006 to June 17, 2006	31	29.5
Lahan	March 29, 2006 to May 29, 2006	85	May 31, 2006 to June 14, 2006	21	24.7
Narayanghat	May 13, 2006 to June 04, 2006	75	June 17, 2006 to July 19, 2006	13	17.3
Butwal	March 29, 2006 to June 04, 2006	135	June 03, 2006 to June 18, 2006	9	6.7
Nepalgunj	March 29, 2006 to May 12, 2006	80	June 01, 2006 to June 24, 2006	9	11.3
Dhangadi	May 13, 2006 to June 04, 2006	60	June 18, 2006 to July 03, 2006	21	35.0
Mahendranagar	March 29, 2006 to May 12, 2006	60	June 01, 2006 to June 16, 2006	20	33.3
Total		600			

Family Health International
Nepal Country Office
PO Box 8803, Gopal Bhawan, Anamika Galli, Baluwatar Kathmandu, Nepal
Tel: 977-1-4437173, Fax: 977-1-4417475
E-mail: fhinepal@fhi.org.np, Web: www.fhi.org