Integrated Biological and Behavioral Surveillance Survey (IBBS) among Male Injecting Drug Users (IDUs) in the Eastern Terai of Nepal

Round IV – 2009

ASHA Project
Family Health International /Nepal
Baluwatar
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USAID | NEPAL
FROM THE AMERICAN PEOPLE

ASHA
Advancing Surveillance, Policies, Prevention, Care and Support to Fight HIV/AIDS

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~ Study Team New ERA ~

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ABBREVIATIONS

AMDA	-	Association of Medical Doctors of Asia
ARC	-	Addiction Recovering Center
AIDS	-	Acquired Immuno-Deficiency Syndrome
ASHA	-	Advancing Surveillance, Policies, Prevention, Care & Support to
BDS	-	Blue Diamond Society
BPKIHS	-	B.P. Koirala Institute of Health Science
CMs	-	Community Mobilizers
DIC	-	Drop-in-Centre
DYC	-	Dharan Youth Center
FHI	-	Family Health International
FPAN	-	Family Planning Association of Nepal
FSW	-	Female Sex Worker
GOs	-	Governmental Organizations
HIV	-	Human Immuno-Deficiency Virus
IBBS	-	Integrated Biological and Behavioral Surveillance Survey
ID	-	Identification Number
IDU	-	Injecting Drug User
IEC	-	Information, Education and Communication
KCC	-	Knight Chess Club
KYC	-	Kirat Yakthum Chumlung
LALS	-	Life giving and Life saving Society
MARPs	-	Most at Risk Populations
MRGM	-	Mountain Hill Resource Management Group
MSM	-	Men who have Sex with Men
NCASC	-	The National Center for AIDS and STD Control
NGO	-	Non-Governmental Organization
NHRC	-	Nepal Health Research Council
NIDS	-	Naxalbari Integrated Development Society
NPHL	-	National Public Health Laboratory
OE	-	Outreach Educator
PE	-	Peer Educator
PHSC	-	Protection of Human Subjects Committee
PPS	-	Probability Proportional to Size
RPR	-	Rapid Plasma Regain
SACTS	-	STD/AIDS Counseling and Training Services
SIDC	-	Social Integrated Development Center
SLC	-	School Leaving Certificate
SPSS	-	Statistical Package for the Social Sciences
STI	-	Sexually Transmitted Infection
TPHA	-	Treponema Pallidum Hemagglutination Assay
USAID	-	United States Agency for International Development
VCT	-	Voluntary Counseling and Testing
WHO	-	World Health Organization
YMS	-	Youth Mobilization Center

EXECUTIVE SUMMARY

This study presents the findings of the fourth round of the IBBS conducted among IDUs of the Eastern Terai region of Nepal. The study is based on a survey of 345 males aged 16 years and above who have been injecting illicit drugs for at least three months prior to the date of the survey. The IDUs were recruited from different areas of the Jhapa, Sunsari and Morang districts of the Eastern Terai. The objective of the study was to determine the prevalence of HIV/STIs and to assess HIV/STI-related risk behavior among the IDUs in the study areas. The study also collected information on IDUs' socio-demographic characteristics, awareness of HIV/STIs, sexual behavior, condom use and exposure to intervention programs in the study areas. The fieldwork started on 19 January and was completed on 23 February 2009.

Study Methodology

The sample size was determined by using a basic statistical formula which estimated a size of 345 samples. Two-stage cluster sampling was used to draw the sample. In the first stage, 30 clusters were selected using the probability proportional to the size (PPS) method and in the second stage 15 respondents were selected randomly from each selected clusters.

A quantitative research approach was adopted in the study. Structured questionnaires were used to collect behavioral data among the IDUs. In order to draw up a comparative analysis of the behavioral trends over the years, questions asked during the previous rounds were repeated. Strict confidentiality was maintained throughout the study process. The respondents were provided a unique ID number. The same ID number was used on the questionnaire, medical records, and blood specimens of the particular respondents.

All respondents participated voluntarily in the study. Those who did not meet the study criteria and those who were not willing to participate were not involved in the study. The study was conducted in compliance with both ethical and human rights standards. These standards included participants' anonymity as well as pre- and post-test counseling. 'Ethical' as well as 'technical' approval was obtained from Family Health International's ethical review body, the Protection of Human Subject Committee (PHSC), and the Nepal Health Research Council (NHRC) prior to the commencement of the fieldwork. Informed consent was obtained in the presence of a witness from all the participants prior to the interview and the collection of blood samples.

Laboratory Methods

Syphilis was tested for using the Rapid Plasma Regain (RPR) test card and confirmed by means of the Serodia Treponema Pallidium Particle Agglutination

(TPPA) test. Treponema Pallidum Particle Agglutination (TPPA)-positive and all samples with positive RPR were further tested for the titre of up to 64 times dilution. HIV was detected by using Determine HIV 1/2 (Abbott Japan Co. Ltd.) as a first test to detect antibodies against HIV. If the first test showed a negative result then no further test was conducted but if the first test was positive, the second test was performed using Uni-Gold (Trinity Biotech, Dublin, Ireland). In case of a tie between the first two tests, a third test was performed using SD Bioline HIV 1/2 (Standard Diagnostics, Inc., Kyonggi-do, South Korea) as a tie-breaker test.

Key Findings

Overall, 8.1 percent of IDUs tested HIV-positive. A history of syphilis was found among 1.7 percent of the IDUs, while 1.7 percent of the study participants currently had high-titre syphilis. The prevalence of HIV was significantly high ($p<0.05$) among IDUs aged 20 years and above, who were ever married, and who had been injecting drugs for more than five years.

One-third of IDUs had been injecting drugs for more than five years. The past week's injecting practice indicated that 17 percent had shared their needles/syringes with others at least once, 14.5 percent had injected with other's used needles/syringes, and 10.7 percent of respondents had used a needle/syringe kept in a public place.

About 92 percent of IDUs had had sexual contact before. Of these, 71.5 percent had been sexually active in the past year. Nearly 45 percent of respondents used condoms consistently with sex workers, 23.7 percent with non-regular partners, and 5.6 percent with regular sex partners. Consistent condom use with all sex partners had decreased compared to 2007.

Overall, 95.4 percent of IDUs were aware of all three main prevention measures namely, (A) abstinence from sex, (B) being faithful to one sex partner, and (C) regular condom use. Around 96 percent of IDUs knew that a confidential HIV testing facility was available in their communities. However, 38 percent of them had never taken up HIV testing before. Nearly 91 percent of IDUs had met PEs/OEs, 87.5 percent had visited a DIC and 33.6 percent had visited a VCT center at least once in the past year. However, very few (6.1%) had visited an STI clinic. About 86 percent of respondents had participated in HIV/AIDS awareness programs or similar community events before the survey.

CHAPTER – 1.0: INTRODUCTION

1.1 Background

The National Center for AIDS and STD Control (NCASC) has been compiling and publishing data on reported HIV cases in different population sub-groups since 1991. As of May 2009, a cumulative total of 13,885 HIV infections, including 2,384 cases of AIDS, have been reported in Nepal (NCASC, May 14, 2009). In 2007, NCASC estimated that about 70,000 people were infected by HIV in Nepal. There is a large gap between the estimated number of HIV infections and the number of people who have been tested and know their status.

The IBBS is conducted at regular intervals in Nepal. This is the fourth round of the study conducted among IDUs in the Eastern Terai. IDUs function as a core HIV risk group because of their high risk behavior of sharing needles/syringes between different injecting partners and also re-using needles kept in public places. Moreover, high-risk sexual behavior associated with drug use has also been found to be a major contributing factor to the spread of HIV among the non-injecting population (AIDS in Asia, MAP Report, 2004).

HIV prevalence among IDUs varies by location in Nepal. The first round of the IBBS conducted in 2002 indicated quite a high prevalence of HIV (68%) among IDUs in the Kathmandu Valley (New ERA/SACTS/FHI 2007). The third round of the IBBS conducted in 2007 indicated a 35 percent HIV prevalence rate among IDUs in Kathmandu. IDUs who lived in the Kathmandu Valley had a higher HIV prevalence compared to IDUs from other places. In Pokhara, 22 percent of IDUs were found to be HIV positive in 2003, while the figure was about 7 percent in the 2007 rounds of the IBBS (IBBS, New ERA/SACTS/FHI 2007). Similarly, in three districts (Morang, Sunsari, and Jhapa) of the Eastern Terai, HIV among IDUs was 35 percent in 2003 and 17 percent in the 2007 rounds of IBBS (IBBS, New ERA/SACTS/FHI 2007). Although significantly lower than the 2003 and 2005 IBBS result, the findings of the third round of study in the Eastern Terai was still rather alarming.

This report focuses on the findings of the fourth round of study in the Eastern Terai and compares the results from all four surveys where possible.

CHAPTER – 2.0: DESIGN AND METHODOLOGY

2.1 Objectives of the Study

In line with the objectives of the previous rounds of the IBBS, the fourth round of the study was also undertaken primarily to determine the prevalence of HIV/STIs and to assess HIV/STI-related risk behavior among IDUs in the Eastern Terai.

In addition, this study collected specific information on IDUs; their socio-demographic characteristics, the level of awareness about HIV/STIs, as well as their exposure to intervention programs in the Eastern Terai.

2.2 Study Population

The cross-sectional study was conducted among IDUs who are considered to be one of the 'core groups' for transmission of HIV/STI infection. Current IDUs from the three districts of Jhapa, Morang and Sunsari were included in the study. All participants were screened for eligibility criteria. For the purpose of this study the inclusion definition for IDUs was *'those current injectors aged 16 years and above who have been injecting illicit drugs for at least three months prior to the date of the survey'*.

2.3 Sample Size and Sampling Design

The sample size used in the previous rounds of IBBS in this site was used in this round also. Initially the sample size was determined by using a basic statistical formula which estimated a sample size of 345 IDUs (Annex 2).

This is the fourth round of the IBBS being conducted among IDUs of the Eastern Terai region of Nepal. Before the start of the study, a preliminary field survey was conducted to understand the actual field situation and to map out the IDUs' concentration sites in the study districts.

Before starting the actual fieldwork, concerned stakeholders at the district level, as well as local governmental organizations' (GOs) and non-governmental organizations' (NGOs) representatives were consulted to collect information on IDUs and their injecting practices. A rapid listing of the IDUs and their gathering/injecting locations was made. In addition to this, both maximum and minimum numbers of IDUs were listed in all the identified locations.

Based on the preliminary information collected during the mapping exercise, a list of locations and an estimated number of IDUs in each location was prepared.

Two-stage cluster sampling was used to draw the sample. A location with at least 30 IDUs was defined as a cluster in the first stage. Those sites with less than 30 estimated IDUs were combined with the neighboring site to make a cluster with a minimum size of 30 IDUs. In the first stage, 30 clusters were selected using the probability proportional to size (pps) method and in the second stage 11-12 respondents were chosen randomly from each of the selected clusters.

The fieldwork started on 19 January and was completed on 23 February 2009.

2.4 Study Process

A quantitative research approach was adopted by the study. Structured questionnaires were used to collect behavioral data relating to drug injecting, syringe/needle sharing and sexual behavior among the IDUs. Additionally, some demographic and social characteristics were collected. In order to draw up a comparative analysis of the behavioral trends over the years, questions asked during the first three rounds were repeated. The questionnaires (Annex 3) were developed based on the "Guidelines for Repeated Behavioral Surveys in Populations at Risk of HIV" (FHI, 2000).

Before initiating the actual interview, all those willing to participate were informally asked certain questions in order to ensure that they met the inclusive criteria set for the study. Injecting marks were also observed in order to confirm their injecting behavior.

Strict confidentiality was maintained throughout the study process. The names of the study participants or their full addresses were not recorded anywhere. Instead, they were provided a unique ID number written on a plastic-coated card. The same number was marked on the questionnaire, on the medical records, and on the blood specimen of each respondent. This card was also used for the distribution of the test results. Only those participants who produced the card were provided the HIV and syphilis test results verbally with pre- and post-test counseling.

2.4.1 Recruitment of Respondents in the Sample

Using the information on locations and the estimated number of IDUs in those locations, first-stage clusters were defined and 30 such clusters were elected using pps method. Then from each of the first-stage clusters selected, 11-12 IDUs were randomly selected in the sample. After careful observation of different sites within the clusters, selected IDUs were approached and informed about the study. In this process if some of the selected IDUs were not easily identified, key people were used for the identification of the selected IDUs in those localities.

Because of the social stigma and discrimination associated with intravenous drug behavior, some of the randomly-selected IDUs were not easily

accessible as they did not want to disclose their status. In such situations, community mobilizers and peer educators of on-going HIV/AIDS programs, ex-IDUs, social workers, IDUs who successfully participated in the study, or any other key people who could identify and approach the selected IDUs were mobilized. At least three attempts were made to contact and include the person randomly selected. If this was not successful after three attempts, that person was replaced by the next randomly selected IDU in the cluster.

2.4.2 Refusal

All respondents participated voluntarily in the study. Those who did not meet the study criteria and those who were not willing to participate were not involved in the study.

There were 53 such refusal cases at the study sites. Among them, 18 IDUs said they would have to wait a long time to get the test result, 17 said they were not interested, 11 had no time to take part in the study, three each said that they were afraid to give blood and had already tested for HIV, while one was not interested in having an HIV test.

All those who decided to quit the study because of unavailability of time were offered a second visit at a more suitable time. Those who did not take part in the study were provided with a health check-up at the study clinic.

2.4.3 Ethical Review

The research was conducted in compliance with both ethical and human rights standards. These standards included participants' anonymity as well as pre- and post-test counseling. As this study focused on individuals who are highly stigmatized and as injecting drugs is illegal in Nepal, 'ethical' as well as 'technical' approval was obtained from Family Health International's ethical review body, the Protection of Human Subjects Committee (PHSC), and the Nepal Health Research Council (NHRC) prior to the start of the fieldwork. The study protocols were carefully reviewed and approved by these organizations. Moreover, verbal informed consent was obtained from all the participants prior to the interview and collection of blood samples in the presence of a witness. The consent form was administered in a private setting. The verbal consent form used in the study is included in Annex 4. No personal identifiers were collected and the samples were labeled only with the ID number provided to the study participant.

2.4.4 Clinical and Laboratory Procedures

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

A blood sample of approximately 5 ml was collected from each study participant using a disposable syringe. The blood sample was placed in a centrifuge to separate the blood cells from the serum. Serum samples were stored in the refrigerator at the study site. Each sample was labeled with the ID number of the study participant. The specimens were transported by SACTS in Kathmandu in a cold box once every 10 days. The serum samples were stored at a temperature of minus 12°C to minus 20°C at the SACTS laboratory.

Laboratory Methods

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

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

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

Altogether, 61 IDUs were provided syndromic treatment for STIs as they went through the clinical procedure in the course of the study.

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

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

Quality Control of Laboratory Tests

Quality control was strictly maintained throughout the process of the collection of the specimen, as well as in the handling and testing stages. All the tests were performed using internal controls. These controls were recorded with all the laboratory data. For external quality assessment, a 10 percent sample of the total serum collected was submitted to National Public Health Laboratory (NPHL) to test HIV and syphilis. In case the prevalence of HIV or syphilis is less than 5 percent, the total 10 percent sample sent to NPHL was selected as follows: (a) all positive samples and (b) remaining number of samples to reach 10 percent in total selecting randomly from the negative samples. In case the prevalence is more than 10 percent, the sample sent to quality assurance was selected as follows: (a) Ten percent of all positive samples selecting randomly and (b) Ten percent of all negative samples selecting randomly.

The proposed testing protocol is based on the World Health Organization (WHO) guidelines (Strategy 3) and the National VCT Guidelines of Nepal developed by the NCASC, 2007

2.5 Study Management

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

The study was conducted by a team made up of a study director, a research coordinator, two research officer, two research assistants and field teams. The field teams formed for the survey included a research assistant, five supervisors/interviewers, a health assistant, a lab technician, a runner and a local motivator/s (as per the need).

Before data collection started, a one-week intensive training was organized for the study team. The training session familiarized the team with the study objectives, characteristics of the target groups, rapport-building techniques, the contents of the questionnaire and the study process. The training session also included theory and practical classes on pre-test counseling and questionnaire administration. Experienced doctors from FHI conducted a separate session on STI and HIV/AIDS. A person from Youth Vision, an organization that works with IDUs helped familiarize the study team with general behavior of IDUs and the skills required to deal with them. In addition to these, the training focused on providing a clear concept of informed consent to the research team.

Centrally-located study centers were established at Kakarvitta, Bhadrapur, Birtamod and Damak in Jhapa district. Similarly, in Morang district, study centers were set at Urlabari, Belbari and Biratnagar. In Sunsari district two study centers were set at Dharan and Itahari (Annex 6). Individual interviews, clinical examinations and blood collection were carried out in separate rooms in each of the study centers.

To ensure quality of data, New ERA and FHI officials supervised the fieldwork regularly. Field supervisors reviewed all the completed questionnaires and any inconsistencies in the responses were clarified through discussions with the concerned interviewer later that day. Cross-checking questions were also asked to the study participants to avoid duplication. Such questions included queries relating to their experience of having undergone any blood test, the part of the body from where the blood was taken, their experience of HIV testing or testing for other diseases, meeting with New ERA staff and peer educators, and possession of an ID card with the study number.

2.6 Constraints in the Field Work

The ongoing political instability in the country created challenges in conducting the field work. Likewise the 16 hours of load shedding in a day created difficulty in separating the serum from the sample in the lab. Besides, the low incentive for the IDUs was another fact for the intricacy for recruiting the sample. To overcome the problem arising from the load shedding, both auto and manual centrifuge machine were provided for the purpose of separating the serum. Likewise, bulks of icepacks were kept in fridge in the field as well as in the SACTS laboratory to store the serum during power cut-off.

2.7 Post-Test Counseling and Test Result Distribution

All the study participants who went to receive their test results with their ID card were provided the HIV and syphilis test results along with post-test counseling by a trained counselor at Kakarvitta, Bhadrapur, Birtamod and Damak VCT centers, which are run by Knight Chess Club (KCC). The Dharan and Itahari VCT centers are run by Punarjiwan Kendra (PJK/KYC); while the Urlabari, Belbari and Biratnagar VCT centers are run by Help Group. The study participants were informed about the location and operating hours of the VCT sites right after the collection of their blood samples for the test.

Post-test counseling and individual report dissemination was completed between 11 February and 8 March 2009 at the VCT centers in the study districts. Out of the 345 IDUs tested for HIV, only 89 (25.8%) turned up for the test results (Annex 7). This low turn-out might be because there was no provision for reimbursement of transportation costs, which would have otherwise prompted the IDUs to visit the VCT center and collect the report. In addition, the time gap between the actual interview and test result dissemination might have also diminished their concern for the test result. Trained counselors gave the test results to the participants in a private setting only after they had produced their ID cards. The counseling session focused on high-risk behavior and other aspects of STIs and HIV. Some participants were also referred to other health facilities for further services.

2.8 Data Management and Analysis

All the questionnaires were collected and transported to the New ERA, Kathmandu office after the fieldwork was completed. The questionnaires were thoroughly checked for any inconsistencies before the data was entered into a computer using FoxPro software. A double-entry approach was used to minimize errors during the data entry. Later, the data file was transferred to SPSS files for further analysis.

Simple statistical tools such as frequency distribution, percentages, range, proportion and mean and median were used to analyze the results of the survey. Chi-square test values were also calculated to measure the statistical significance of the relationship between cross-tabulated categorical variables. Odd ratios were calculated to measure the relative risk of HIV infection between the categories of the selected explanatory variables. Clinical and behavioral data were merged in order to examine the relationship between the participants' HIV status and background characteristics and injecting and sexual behaviors.

CHAPTER – 3.0: SOCIO-DEMOGRAPHIC CHARACTERISTICS OF IDUs

This chapter discusses the demographic and social characteristics of 345 male IDUs recruited from the different areas of Jhapa, Sunsari and Morang districts of the Eastern Terai for this study.

3.1 Demographic Characteristics

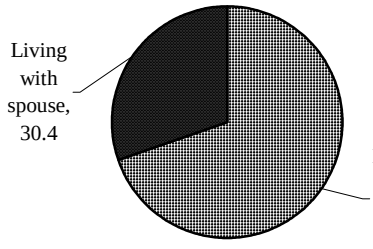
The IDUs were mostly young. The majority of respondents (80%) were younger than 30 years. Only a small proportion of respondents (1.7%) were 40 years or older. The median age was 24. Over sixty percent of IDUs (61.7%) were single and 5.8 percent were either divorced/separated from their wives or were widowers; while around 32 percent were married at the time of the survey. The majority of those who had ever been married (84.1%) had been married before they turned 25. The median age at respondents' first marriage was 20.5 years (Table 3.1).

Table 3.1: Demographic Characteristics

Demographic Characteristics	N	%
Age		
< = 19 Yrs	46	13.3
20-24	130	37.7
25-29	100	29.0
30-34	44	12.8
35-39	19	5.5
40 + (40 – 48)	6	1.7
Median age	**24.0**	**100.0**
Marital status		
Never married	213	61.7
Married	112	32.5
Divorced/Separated/Widower	20	5.8
Total	**345**	**100.0**
Age at first marriage		
< =14 years	2	1.5
15-19 years	49	37.1
20-24 years	60	45.5
25-29years	18	13.6
= > 30 years	3	2.3
Median age	**20.5**	**-**
Total	**132**	**100.0**

Seven in ten IDUs (69.6%) lived alone or without a sexual partner, while a third (30.4%) lived with their spouses (Figure 1).

Figure 1: Current Live-in Partner



3.2 Social Characteristics

IDUs in the Eastern Terai were mostly educated, with 75.9 percent of them having secondary or higher education. One in five (16%) had primary education, 5.2 percent were literate but had no formal education, and 2.9 percent of the IDUs were illiterate.

IDUs from various castes/ethnicities were represented in this study. Almost one-third (32.5%) came from the Gurung/Rai/Limbu ethnic community, 16.8 percent were from the Chhetri/Thakuri ethnic group, 11.6 percent were from the Newar ethnic group, while 11 percent were from the Lama/Tamang/Magar/Sherpa group (Table 3.2).

A large majority (82.6%) of the participants had been born and always resided in the districts under study, while the rest had migrated from other districts. Around thirteen percent had been living in the study districts for five years or more, while 4.3 percent had migrated more recently.

Table 3.2: Social Characteristics

Social Characteristics	N=345	%
Education		
Illiterate	10	2.9
Literate only	18	5.2
Primary	55	16.0
Secondary	165	47.8
SLC & above	97	28.1
Ethnicity		
Gurung/Rai/Limbu	112	32.5
Chhetri/Thakuri	58	16.8
Newar	40	11.6
Tamang/Lama/Magar/Sherpa	38	11.0
Terai caste	37	10.7
Occupational caste	21	6.1
Brahmin	12	3.5
Musalman	9	2.6
Rajbanshi	6	1.7
Majhi/Chepang	6	1.7
Others	6	1.7
Duration of stay in Eastern Region (Jhapa, Morang and Sunsari districts)		
Since birth	285	82.6
Since 5 years	15	4.3
More than 5 years	45	13.1

CHAPTER – 4.0: PREVALENCE OF HIV AND STIs

4.1 Prevalence of HIV and STI Infections

In the Eastern Terai, 8.1 percent of the study participants tested HIV-positive. Respondents from Morang district had the highest prevalence rate (12.6%) followed by Jhapa (5.3%) and Sunsari (5.2%) (Annex - 8).

Among the 345 study participants, a history of syphilis was found among ten (2.9%) of the IDUs, while six (1.7%) were currently infected with high-titre syphilis. This indicates that sexually transmitted infection is a relatively a minor problem among IDUs in the Eastern Terai.

Table 4.1: HIV and STI Prevalence

HIV and STI Prevalence	N=345	%
HIV	28	8.1
Active Syphilis	6	1.7
Syphilis History	10	2.9

4.2 Relationship between Socio-Demographic Characteristics and HIV Infection

As Table 4.2 indicates, HIV prevalence differs significantly with age ($p<0.05$). IDUs who were 20 years or older (9.4%) were more likely to be HIV-positive than others who were younger than them (0%). Similarly, the prevalence of HIV differed significantly ($p<0.01$) according to marital status. IDUs who were married/divorced/separated or widowed (13.6%) were nearly three times more likely to carry HIV than those IDUs who were never married (4.7%).

The level of education was another important variable for HIV prevalence. Illiterate IDUs were more likely to be HIV-positive (10%) than those IDUs who could read and write (8.1%). However, the difference is not large enough to be statistically significant (Table 4.2).

Table 4. 2: Relation between Socio-Demographic Characteristics and HIV Infection

Characteristics	N	HIV+	%	P Value
Age				
Below 20 years	46	0	0.0	< 0.05
20 years and Above	299	28	9.4	
Marital status				
Ever married	132	18	13.6	< 0.01
Never married	213	10	4.7	
Literacy				
Illiterate	10	1	10.0	> 0.05
Literate/formal school	335	27	8.1	
Total	**345**	**28**	**8.1**	

4.3 Relationship between Drug Injection Behavior and HIV

The relationship between HIV prevalence and drug injection, such as how long respondents had been injecting, frequency of injections during the past week, and the type of syringes used have been reviewed in this section.

By and large, intravenous drug use and certain practices followed by respondents put them at risk of HIV infection. A statistically significant relation was observed ($p < 0.01$) between duration of injecting drugs and HIV prevalence. In this survey, nearly a third of the participants (19.1%) who had been injecting drugs for five years or more were HIV-positive. Comparatively lower proportions of respondents carried HIV among those who had been injecting for two to five years (2.9%), while the prevalence level was 2.2 percent among those who had been injecting for less than two years (Table 4.3).

Although those IDUs who injected drugs twice a day (or more) in the past week had a higher rate of HIV infection (9.6%) than those who did not inject so frequently, the frequency of injections during the past week did not have a significant association with HIV prevalence ($p > 0.05$). Similarly, behaviors such as the use of needles/syringes previously used by others and the use of syringes/needles left in public places also did not show a strong association with HIV infection ($p>0.05$) (Table 4.3) in the Eastern Terai.

Table 4.3: Relation between Drug Injecting Behavior and HIV Infection

Drug injecting Behavior	N	HIV+	%	P value
Injecting drugs since				
Less than 2 years	92	2	2.2	< 0.01
2-5 Years	138	4	2.9	
More than 5 years	115	22	19.1	
Frequency of injecting drugs in the past week				
Not Injected	19	1	5.3	> 0.05
1-6 times a week	84	5	6.0	
Everyday	75	6	8.0	
2 or more times a day	167	16	9.6	
Used another's previously used needle/syringe during the past week				
Never/not injected	295	24	8.1	> 0.05
Ever injected	50	4	8.0	
Used a needle/syringe kept in public place during the past week				
Never /Not injected	308	25	8.1	> 0.05
Ever injected	37	3	8.1	
Total	**345**	**28**	**8.1**	

4.4 Relationship between Sexual Behavior and HIV

This section examines sexual behavior and its relationship to HIV among IDUs in the Eastern Terai. It is important to interpret the findings in this section with caution, as some IDUs may have changed their past sexual behavior since being diagnosed with HIV.

The HIV infection rate is 11.1 percent among those IDUs with a regular female sex partner, 7.1 percent among those who do not have regular partners, and 3.8 percent among those who have never had a sexual

partner. This finding itself further underscores the discovery that the current sexual behavior of the IDUs is not necessarily associated with HIV status.

Table 4.4: Relation between Sexual Behavior and HIV

Sex with Different Partners in the Past 12 Months	N	HIV+	%	P value
With regular female sex partner				
Yes	108	12	11.1	> 0.05
No	211	15	7.1	
Never had sexual experience	26	1	3.8	
With Non-regular female sex partners				
Yes	97	3	3.1	> 0.05
No	222	24	10.8	
Never had sexual experience	26	1	3.8	
With female sex worker				
Yes	90	6	6.7	> 0.05
No	229	21	9.2	
Never had sexual experience	26	1	3.8	
Number of female partners in the past 12 months				
Number of Regular female sex partner in the past 12 months				
0 Partner	237	16	6.8	> 0.05
1 partner	106	12	11.3	
2 partners	2	0	0.0	
Number of non-regular female sex partner in the past 12 months				
0 Partner	248	25	10.1	> 0.05
1 partner	60	3	5.0	
2 or more partners	37	0	0.0	
Number of female sex workers in the past 12 months				
0 Partners	255	22	8.6	> 0.05
1 sex worker	28	0	0.0	
2 or more sex workers	62	6	9.7	
Total	**345**	**28**	**8.1**	

With regard to IDUs' non-regular and commercial sex partners, a higher rate of infection was observed among those who did not have sex with such partners in the past year than among those who did. Likewise, among the IDUs in the Eastern Terai, HIV prevalence was not significantly associated with intercourse with female sex workers in the past year.

Neither was the number of sex partners during the past year related to HIV infection. IDUs with two regular sexual partners had zero HIV prevalence, compared to 11.3 percent among those with one regular partner and 6.8 percent among those who did not have sex with a regular partner in the past year. Likewise, HIV prevalence among IDUs who had not had sex with non-regular sex partners was high (10.1%) compared to others with one or more non-regular sex partner in the past year. Moreover, sexual relations with one or more sex workers in the past year did not show a significant association with HIV infection among IDUs in the Eastern Terai.

To analyze the risk associated with infection, unadjusted odd ratios of HIV risk were calculated for selected characteristics of the IDUs. The odds ratio of HIV infection by marital status shows that IDUs who were, or had been, married were at a greater risk of HIV infection compared to their counterparts who had never been married. For example, the odds ratio is about 3.21 times higher among IDUs who were married or had been in the past, than those who were single, and the association is also statistically significant.

Other selected variables as presented in Table 4.5 did not have a statistically significant association with HIV infection.

Table 4.5: Odds Ratios of HIV Infection by Selected Characteristics of IDUs

Characteristics	Odd Ratio	HIV +	# cases (n)	95% Confidence Interval (cornfield)
Marital Status				(1.35, 7.75)
Never married	-	10	213	
Ever married	3.21	18	132	
Injected with another's previously used syringe during past week				(0.32, 3.64)
Yes	-	4	50	
No	1.02	24	295	
Injected with a syringe kept in public place				(0.23, 3.75)
Yes	1.00	3	37	
No	-	25	308	
Injected with a pre-filled syringe				(0.28, 4.69)
Yes	1.24	3	31	
No	-	25	314	
Injected in another part of the country or in another country				(0.33, 3.82)
Yes	1.07	24	293	
No	-	4	52	

CHAPTER – 5.0: DRUG USE, NEEDLE SHARING AND TREATMENT

The needle/syringe- and drug-sharing behavior of IDUs need to be carefully explored to design and implement preventive strategies for the target population. This chapter deals with the drug-using behavior of the IDUs. This chapter relates specifically to the alcohol intake, oral and injecting drug use and needle sharing behavior among IDUs and any kind of treatment sought by the respondents in order to quit drugs.

5.1 Alcohol Consumption and Oral Drug Use among IDUs

Seventy-one percent of respondents had consumed alcohol at least once in the past month. Almost 12 percent had consumed alcohol every day.

About 61 percent of IDUs had been using drugs orally for over five years and 34.8 percent had been doing so for the last 2-5 years (Fig 2). The average duration of oral drug use among the respondents was 7.4 years, while the median duration was 6.3 years.

Table 5.1: Alcohol Intake and Oral Drug Use

Alcohol and Oral Drug Use	N=345	%
Alcohol Intake during the past month		
Everyday	41	11.9
More than once a week	78	22.6
Less than once a week	126	36.5
Never	100	29.0

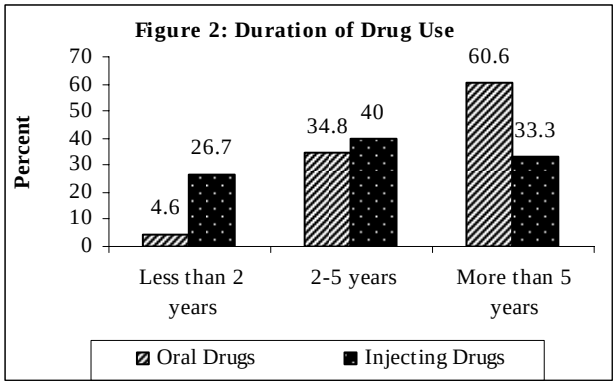
Among the oral drugs used, marijuana, locally called *ganja* was the most popular, with 71.6 percent reporting to have used it in the previous week, followed by Nitrosun which was used by 44.3 percent of respondents. Other oral drugs used by at least 5 percent IDUs are Phensydel (21.2%), brown sugar (7.0%) and Nitrovate (5.8%) which are listed in Table 5.2.

Table 5.2: Types of Drugs Used Orally in Past Week

Types of Drugs Used Orally	N=345	%
Ganja	247	71.6
Nitrosun	153	44.3
Phensydyl	73	21.2
Brown Sugar	24	7.0
Nitrovate	20	5.8
Proxygin	14	4.1
Diazepam	8	2.3
Chares	7	2.0
Codeine	4	1.2
Calmpose	4	1.2
Velium 10	3	0.9
Others	73	21.2

Note: Because of multiple answers percentage may add up to more than 100.

5.2 Drug Injecting Practice of IDUs



Most of the respondents had been injecting drugs for a fairly long time, with an average of 4.6 years. One-third of IDUs had been injecting drugs for more than five years, while two- fifths had been injecting for the past two to five years (Fig.2). The median age of the IDUs the first time they used drugs intravenously was 20 years. About 56 percent of respondents were below 21 when they injected for the first time.

Only a small proportion of respondents (5.5%) had not injected in the week preceding the survey. About a quarter (24.4%) respondents were not injecting daily, while about 70 percent had injected once a day or more. As for the frequency of injections on the last day respondents injected drugs , about a quarter (24.6%) of IDUs had three or more shots, 30.2 percent had injected twice, while 45.2 percent had injected once on the last day. The mean number of times that the IDUs had injected drugs on the last day was two (Table 5.3).

Table 5.3: Drug Injecting Practice

Drug Injecting Practice	N=345	%
Duration of drug injection		
Less than 2 years	92	26.7
2-5 years	138	40.0
More than 5 years	115	33.3
Average duration in years	**4.6**	**-**
Age at first drug injection		
Up to 20 years	193	55.9
21+ years	152	44.1
Median age	**20.0**	**-**
Frequency of drug injections within the past week		
Not injected	19	5.5
Once a week	3	0.9
2-3 times a week	28	8.1
4-6 times a week	53	15.4
Once a day	75	21.7
2-3 times a day	139	40.3
4 or more times a day	28	8.1
Frequency of drug injections on the last injected day		
1 time	156	45.2
2 times	104	30.2
3 or more times	85	24.6
Mean	**2.0**	**-**

About 23 percent of IDUs had not injected on the day preceding the interview. For one-third of the IDUs the main reason was lack of money, while for about 31 percent the reason was unavailability or lack of drugs. Other reasons cited were desire to quit slowly, because the IDUs were busy with household work, illness, as well as other various reasons (Annex - 9).

Respondents inject drugs into different parts of the body depending on where they were able to locate their veins. Two-fifths of the respondents (40%) mentioned that

they injected into their calves, while 27.5 percent injected into their forearm, 14.8 percent injected into their wrists and 10.2 percent injected into their upper arms (Annex - 10).

The respondents gathered at different sites to inject drugs; 41.7 percent gathered and injected in the forest/bush and 25.5 percent crossed the border to inject at the nearby Indian town of Jogbani. Others gathered and injected in their own or their friends' rooms (13.6%) or at a riverbank/slum area (9.6%) (Annex 11).

Table 5.4 lists the types of drugs used by the IDUs during the past week. Ninety-two percent of them had used a combination of various drugs. In this regard, the most common combination of drugs were Norphin, Avil and Diazepam (See Annex 12 for other types of combinations). Around one percent each had also injected brown sugar (1.4%), Dipezam (1.4%) Phenergan (0.9%) and Calmpose (0.6%) in the last week.

Table 5.4: Types of Drugs Injected by IDUs in the Last Week

Types of Drugs Injected in the Last Week	N=345	%
Combination	319	92.5
Tidigesic	11	3.2
Brown Sugar	5	1.4
Diazepam	5	1.4
Phenergan	3	0.9
Calmpose	2	0.6
Others	11	3.2

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

There were a few IDUs (3.5%) who had switched from one drug to another in the past month. The unavailability of drugs in the market, lack of money and desire to reduce drug injection/quit slowly were mentioned as reasons for switching (Annex 13).

5.3 Syringe Use and Sharing Behavior

The drug injecting/sharing habits of the respondents were assessed in terms of their last three injections. Respondents were asked how they had obtained the needle/syringe used for the last three injections. Answers provided by the IDUs have been categorized as low or high risk injecting behavior in Table 5.5. Low risk was defined as using a new needle. High risk was using one's own previously-used syringe, use of needles and syringes given by friends or relatives, and the use of needles and syringes kept in public places by IDUs or by others (Table 5.5).

Table 5.5: Syringe Use and Sharing Behavior among IDUs during the Last Three Injections

Needle Syringe Use During Recent Drug Injections	Drug Injecting Acts					
	Most Recent		Second Most Recent		Third Most Recent	
	N	%	N	%	N	%
Low risk injection behavior						
Used a purchased new needle/syringe	160	46.4	151	43.8	152	44.1
Used new needle/syringe given by NGO staff/volunteers/friends	160	46.4	172	49.9	170	49.3
Low risk behavior total	**320**	**92.8**	**323**	**93.6**	**322**	**93.3**
High risk injection behavior						
Used own previously used needle/syringe	22	6.4	17	4.9	18	5.2
Used needle/syringe given by friend/relative after their use	1	0.3	5	1.4	3	0.9

Used needle/syringe that had been kept in public place by himself	2	0.6	0	0.0	1	0.3
Others	0	0.0	0	0.0	1	0.3
High risk behavior total	**25**	**7.2**	**22**	**6.4**	**23**	**6.7**
Persons in the group using the same needle/syringe						
2 persons	8	2.3	10	2.9	6	1.7
3 or more persons	2	0.6	1	0.3	1	0.3
None/Alone	335	97.1	334	96.8	338	98.0

As reflected in Table 5.5, many of the IDUs avoided high-risk behavior in their last three injections. Overall, 92.8 percent in the most recent injections, 93.6 percent in the second most recent injections and 93.3 percent in third most recent injections had used a new syringe/needle either self-purchased or given to them by NGO staff or friends. Among them, more than half had used a self-purchased needle/syringe in all the three injections.

On the other hand, some IDUs reported engaging in high-risk behavior in the last three injections (7.2% in the most recent, 6.4 percent in second most recent and 6.7% in the third most recent injections). They had injected with a previously used needle/syringe used by them selves, given by friends, or left in a public place.

The respondents were also asked if they had shared their needles/syringes with others in the group. Two percent (2.3%) had shared the needle/syringe with at least one injecting partner in the most recent injection, 2.9 percent in the second most recent injection, and 1.7 percent had done so in the third most recent injection (Table 5.5).

Data on needle/syringe using behavior in the last week as well as in the last three most recent injections, points towards an increasing consciousness among current IDUs regarding the risks associated with needle/syringe sharing. Many IDUs had avoided high-risk behavior in the week preceding the survey.

Nevertheless, there is still room for improvement as 17.1 percent of IDUs (Fig.3) had also shared a syringe with two or more injecting partners in the week preceding the survey. Among them, 94.9 percent had shared their needle/syringe with their friends (Table 5.6). Similarly, 14.5 percent of IDUs had used a needle/syringe used by others, 10.7 percent had injected with a syringe left at a public place, and 10.1 percent had given their used needle/syringe to others at least once in the past week (Fig.3).

Figure 3: Injecting Practice in the Past Week

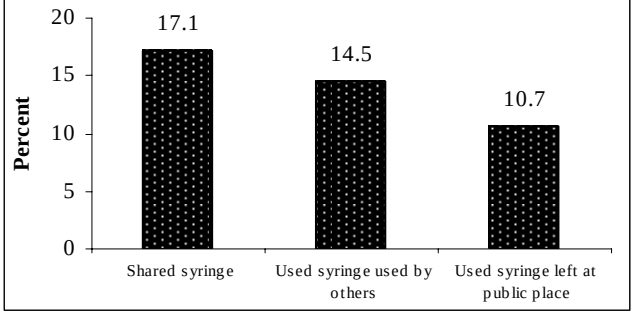


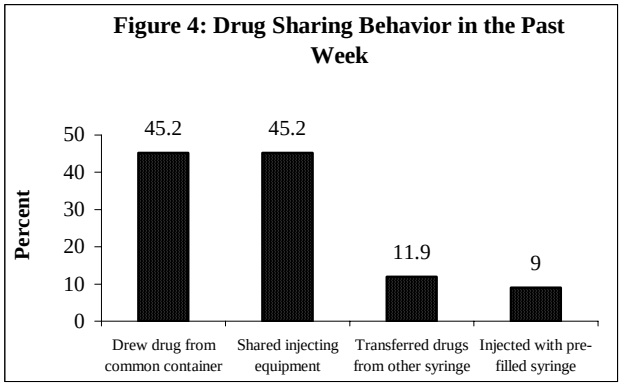
Table 5.6: Past Week's Syringe Use and Sharing Behavior among IDUs

Needle/Syringe Use Throughout the Past Week	2009	
	N=345	%
Number of needle/syringe shared partners		
None	286	82.9
Two partners	42	12.2
Three or more partners	17	4.9

Type of needle/syringe shared partner*	n=59	%
Friend	56	94.9
Unknown person	1	1.7
Drug seller	1	1.7
Others	3	5.1

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

5.4 Drug Sharing Behavior



The injecting practice of the IDUs in the past week, as shown in Fig 4, shows that some IDUs had followed unsafe drug sharing practices in the past week. Around 45 percent of IDUs had shared some type of injecting equipment such as bottles, spoons, cookers, vials/containers, cotton/filters or water with others and forty-five percent had shared a container for drawing solution at least once in the previous week. Moreover, about 12 percent had injected with a syringe that was filled by others' syringes, while nine percent had injected with a pre-filled syringe.

Relatively high percentage of IDUs had practiced high risk injecting behavior in the month preceding the survey. All the IDUs had injected drug in the past week. Twenty-seven percent had used non-sterile needle/syringe and 50.4 percent had used non-sterile injecting equipment in the month prior to the survey (Table 5.7).

Table 5.7: Past Month's Needle/syringe and Injecting Equipment Sharing Behavior

Injecting Equipment Sharing Practice Past Month	N = 345	%
Used previously used non-sterile needle/syringe		
Yes	93	27.0
No	252	73.0
Used non-sterile injecting equipment at any time		
Yes	174	50.4
No	171	49.0

Information on the internal and external mobility and injecting practices of the respondents at the place or places they visited was also collected during this survey. Out of the total 345 respondents in the Eastern Terai, 84.9 percent of IDUs had injected drugs elsewhere in Nepal or in other countries they had visited. It is important to remember that the study districts are close to the Indian border and movement across the border is not very difficult.

Although about 92 percent of IDUs had never injected with a pre-used syringe at the place or places of their visit; eight percent of IDUs had done so at least once. Fourteen percent of respondents had also given their used syringes to someone else at the place/s visited in the past year (Table 5.8).

Table 5.8: Injecting Behavior of IDUs in Other Parts of Country and Out of Country in the Past 12 Months

Injecting Practice other Parts of the Country and Out of the Country	N	%
Injected in other parts of country / out of country		
Yes	293	84.9
No	52	15.1
Total	**345**	**100.0**
Used a needle/syringe that had been used by others		
Yes	23	7.8
No	270	92.2
Gave a needle/syringe to someone else after use		
Sometimes (including all the time)	41	14.0
Never	252	86.0
Total	**293**	**100.0**

5.5 Needle/Syringe Cleaning Practice

Previous studies have shown that some IDUs inject with previously used syringes/needles after washing them. Improper cleaning of shared and used needles/syringes increases the risk of HIV infection. Overall, 34 percent of respondents had cleaned a pre-used syringe/needle in the past week. Among them 12 percent used bleach; the rest cleaned them improperly with substances like saliva, water, distilled water, paper and urine (Table 5.9).

Table 5.9: Needle/Syringe Cleaning Practice of IDUs

Needle/Syringe Cleaning Practice	N	%
Cleaned a pre-used needle/syringe in the past week		
Yes	116	33.6
No	229	66.4
Total	**345**	**100.0**
Ways of cleaning needle/syringe		
Bleach	14	12.1
Without Bleach	102	87.9
Total	**116**	**100.0**

5.6 Knowledge of and Access to New Needles/Syringes

Almost all respondents (99.7%) said that they could obtain a new syringe whenever necessary. Needle exchange programs run by different NGOs and the drugstore were named as the main places for obtaining syringes by 98 percent and 89.6 percent of IDUs respectively. A little over one-third of respondents (35.4%) said that they could get a new syringe from drug sellers, and about one fourth (25.8%) said they could get a new syringe from the hospital. Moreover, 89 percent IDUs had received new needle/syringe from out reach worker/peer educator or from staff of needle exchange program in the last 12 months (Table 5.10).

Table 5.10: Knowledge of Sources of New Syringes

Descriptions	N=345	%
Can obtain new syringe		
Yes	344	99.7
No	1	0.3
Can obtain syringe from *		
Drugstore	338	98.0
Needle exchange program	309	89.6
Drug seller	122	35.4
Hospital	89	25.8
Drug wholesaler	57	16.5
Friends	35	10.2
Other drug users	35	10.2
Health worker	28	8.1
Other shop	4	1.2
Others	5	1.5
Received new needle/syringe from out reach worker/peer educator or staff of needle exchange program in the last 12 months		
Yes	307	89.0
No	38	11.0

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

5.7 Treatment Practice

Table 5.12 shows the status of treatment received by IDUs in the study districts. Around 61 percent of respondents had not received any such treatment so far. Among IDUs who had received treatment before, more than half (54.8%) had received treatment less than a year ago while 8.9 percent had received their last treatment more than three years ago.

Table 5.11: Treatment Received and Types of such treatment

Treatment for De-addiction	N	%
Treatment status		
Ever treated	135	39.1
Never treated	210	60.9
Total	**345**	**100.0**
Last treatment received		
Less than 6 months	36	26.7
6-11 months before	38	28.1
12-23 months before	33	24.4
24-35 months before	15	11.1
36-47 months before	7	5.2
48 or more months before	5	3.7
No response	1	0.7
Total	**135**	**100.0**
Types of treatment received		
Residential rehabilitation	121	89.6
Detoxification with/without drugs	7	5.2
Out patient counseling	4	3.0
Others	3	2.2
Forced for cold turkey	2	1.5
Total	**135**	*****

* Because of multiple answers, the percentages may add up to more than 100.

Overall, 89.6 percent of the IDUs who had undergone treatment were kept at residential rehabilitation centers run by different NGOs, while around 10 percent had been provided different types of detoxification treatment (for types of treatment and list of NGOs see Annex 14).

CHATPER – 6.0: SEXUAL BEHAVIOR AND CONDOM USE

HIV transmission among drug users is most often correlated with their needle/ syringe-sharing behavior. This, combined with the risky sexual behavior of the study population often associated with drug use, contributes greatly towards making IDUs more vulnerable to HIV transmission. HIV infected IDUs further transmit the virus to their spouses or sex partners through unsafe sexual contact. In this chapter the sexual behavior of the respondents and their sex partners has been reviewed. This chapter also deals with the sexual history of the IDUs and condom use among them.

6.1 Sexual Behavior of IDUs

The majority of IDUs (92.5%) in the study districts reported to be sexually active and had engaged in sexual intercourse before. Among them, 84.3 percent had their first sexual contact before they turned 20 years. The median age of the respondents at their first sexual encounter was 17 years.

Out of those respondents who had sex before, 71.5 percent had been sexually active in the last year too. More than half (55.3%) had one female sex partner; the others (54.7%) had two or more sex partners during the same period (Table 6.1).

Table 6.1: Sexual Behavior

Sexual Behavior	N	%
Had sexual intercourse	319	92.5
Never had sexual intercourse	26	7.5
Total	**345**	**100.0**
Age at first sexual intercourse		
Below 20 years	269	84.3
20 years of age and above	50	15.7
Median Age	**17.0**	**-**
Sexual intercourse in the past 12 months		
Yes	228	71.5
No	91	28.5
Total	**319**	**100.0**
Numbers of different sexual partners in the past 12 months		
1 partner	126	55.3
2 or more partners	102	54.7
Total	**228**	**100.0**

The sex partners of the study population were categorized under regular partners, non- regular partners and female sex workers. A 'regular female sex partner' is defined as spouse or any sexual partner living together with the respondent. Among those respondents who had maintained sexual contact, 33.9 percent had sex with a regular female sex partner during the past year. Nearly all of them (98.1%) had one regular sex partner and 82.4 percent had sex with their regular female sex partner in the month preceding the survey. About seven in ten respondents (71.9%) who had sex with their regular partners in the last month, had five or more sexual contacts with their last regular partner during this period.

Table 6.2: Sexual Intercourse of IDUs with Regular Female Sex Partners

Sexual Practice	N	%
Sex with a regular partner during the past 12 months		
Yes	108	33.9
No	211	66.1
Total	**319**	**100.0**
Number of Regular partner		
1 partner	106	98.1
2 partners	2	1.9
Sex with a regular female sex partner during the last month		
Yes	89	82.4
No	19	17.6
Total	**108**	**100.0**
Frequency of sex with a last regular partner during the last month		
1-4	25	28.1
5+	64	71.9
Total	**89**	**100.0**

The IDUs with sexual experience were also asked whether they ever had sex with non-regular female partners in the past year. 'Non-regular female sex partners' were defined as those with whom the participants were not married or living together. However, non-regular female sex
partners were also defined as being distinct and separate from female sex workers. Table 6.3 shows that 30.4 percent of IDUs had sex with non-regular female sex partners in the past year. Of them, almost two-fifths (38.1%) had two or more non-regular female sex partners. About 42 percent had sexual contact with their non-regular female sex partners in the previous month. Among them, 22 percent had five sexual contacts or more.

Table 6.3: Sexual Intercourse of IDUs with Non-Regular Female Sex Partner

Sexual Practice	N	%
Sex with non-regular partner in the past 12 months		
Yes	97	30.4
No	222	69.6
Total	**319**	**100.0**
Number of Non-Regular partner		
1 partner	60	61.9
2 or more partners	37	38.1
Sex with non-regular partner during last one month		
Yes	41	42.3
No	56	57.7
Total	**97**	**100.0**
Frequency of sex with last non-regular partners during last one month		
1- 4	32	78.0
5+	9	22.0
Total	**41**	**100.0**

Some of the IDUs also had had sex with female sex workers during the past year. 'Female sex workers' were defined as those who sell sex in exchange for cash, kind, or drugs. Around 28 percent of those IDUs who had sexual relations had sex with a female sex worker in the past year. Among them, the majority (68.9%) had sex with two or more female sex workers, while 42 percent had sexual encounters in the month preceding the survey. Among those who had sex with an FSW in the past month, 10.5 percent had five or more sexual contacts during the same period (Table 6.4).

Table 6.4: Sexual Intercourse of IDUs with Female Sex Worker

Sexual Practice	N	%
Sex with female sex worker in the past 12 months		
Yes	90	28.2
No	229	71.8
Total	**319**	**100.0**
Number of female sex workers in the past 12 months		
1 FSW	28	31.1
2 or more FSWs	62	68.9
Sex with female sex worker during last one month		
Yes	38	42.2
No	52	57.8
Total	**90**	**100.0**
Frequency of sex with a last female sex worker during the last month		
1- 4	34	89.5
5+	4	10.5
Total	**38**	**100.0**

6.2 Knowledge and Use of Condoms

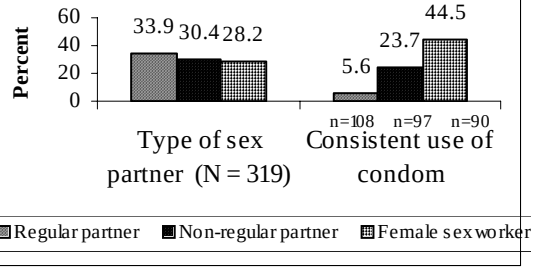
Condom promotion has been one of the important components of HIV/AIDS awareness campaigns. All the IDUs in this survey, had heard of condoms before but not all had used one the last time they had sex. As seen in Table 6.5, condom use was higher in the last sexual contact with female sex worker (73.3%) than with non-regular partners (32%) or regular partners (20.4%). In other words, 79.6 percent of IDUs had not used a condom the last time they had sex with a regular female partner, 68 percent had not used one with a non-regular female partner and 26.7 percent had not used a condom with sex workers during their last sexual contact (Table 6.5).

Table 6.5: Use of Condoms in the last Sex with Different Partners

Use of Condom in the Last Sex	N	%
Condom use with regular partner during last sexual intercourse		
Yes	22	20.4
No	86	79.6
Total	**108**	**100.0**
Condom use with non-regular partner during last sexual intercourse		
Yes	31	32.0
No	66	68.0
Total	**97**	**100.0**
Condom use with female sex worker during last sexual intercourse		
Yes	66	73.3
No	24	26.7
Total	**90**	**100.0**

HIV/AIDS awareness campaigns focus on educating the target groups on the need to use condoms for every sexual act. In this context, Figure 5 presents information relating to the consistent use of condoms by IDUs with different female sexual partners during the year preceding the survey. Partner-wise, consistent condom use was found to be the lowest with regular partners (5.6%) followed by non-regular partners (23.7%). It was the highest with female sex

Figure 5: Type of Sex Partner and Consistent Use of Condom in the Past Year



workers (44.5%).

Respondents who reported not using a condom the last time they had sex were asked their reasons for not doing so. Data obtained from the study participants (Annex 14) indicates that the IDUs in the study districts avoided using condoms with their regular partners simply because they did not like them (38.4%); some also perceived condoms to be merely a contraceptive device, as 24.4 percent said that they had been using other contraceptive methods so did not use condoms consistently with their regular partners.

As for the reasons provided by IDUs for not using condoms with non-regular partners, 54.2 percent said that condoms were not available at the time of need, while half of them said that they did not like using condoms. About 35 percent of IDUs who had sex with FSWs said they could not use a condom because condoms were not available. Little more than a quarter (27.3%) said they did not like condoms and so did not use them the last time they had sex with a sex worker (Annex - 15).

6.3 Source of Condoms

The IDUs were also asked if they knew about the places from where they could obtain condoms. All the respondents knew at least one place from where they could obtain condoms; 95.9 percent said that they could get condoms from a pharmacy. Other sources of condoms as mentioned were peer/outreach educators (54.2%), *paan* shops (51%), hospitals (46.1%), shops (38.3%), clinics (24.1%), and Kirat Yakthum Chumlung (KYC) (21.4%). However, two third respondents had received condoms free of cost in the past year. Almost all (99.7%) of respondents said that they could get condoms in less than 30 minutes if necessary. Only one respondent said that it would take more than 30 minutes to get condoms from the nearest source (Table 6.6).

Table 6.6: Known Sources of Condom and Time Needed to Obtain It

Sources of Condom and Time to Obtain it	N = 345	%
Place/person from where condom can be obtained *		
Pharmacy	331	95.9
Peer Educator/Outreach Educator	187	54.2
Paan shop	176	51.0
Hospital	159	46.1
Shop	132	38.3
Clinic	83	24.1
KYC	74	21.4
Health worker/Health Post	61	17.7
Richmond	56	16.2
Night Chess Club	47	13.6
DYC	37	10.7
Family Planning Center	34	9.9
Samudayik Rehabilitation Center	32	9.3
Friends	18	5.2
Bar/Guesthouse/Hotel	16	4.6
Sahara Nepal	9	2.6
Safe the life	9	2.6
BDS	8	2.3
Belbari Plus	5	1.4
MRMG	5	1.4
YMS	5	1.4
New Hope	4	1.2
Others	29	8.4
Received condoms (free of cost) from organization in the past 12 months		

Yes	230	66.7
No	115	33.3
Time taken to obtain condom		
Less than 30 minutes	344	99.7
More than 30 minutes	1	0.3

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

6.4 Sources of Information about Condoms

The respondents had heard about condoms from different sources. The most common sources of information for more than 90 percent of respondents were radio (96.5%), television (95.7%), newspapers/posters (94.2%), NGO workers (93.3%), billboards/signboards (93%) and the pharmacy (92.2%). A considerable proportion of respondents had also heard about condoms from friends/neighbors (84.3%) and hospitals (82.6%). Other information sources as mentioned by the respondents are listed in Table 6.7.

Table 6.7: Sources of Information about Condoms

Sources of Knowledge of Condom	N = 345	%
Radio	333	96.5
Television	330	95.7
Newspapers/posters	325	94.2
NGO workers	322	93.3
Bill board/sign board	321	93.0
Pharmacy	318	92.2
Friends/neighbors	291	84.3
Hospital	285	82.6
Health workers/volunteers	273	79.1
Health Post	250	72.5
Health Center	226	65.5
Community event/training	215	62.3
Street drama	211	61.2
Community worker	188	54.5
Cinema hall	133	38.6
Comic books	112	32.5
Video van	31	9.0

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

In order to further analyze the exposure of IDUs to the ongoing initiatives to educate the target groups about condoms, the study participants were also asked if they were aware of any of the messages being publicized with the help of IEC materials such as posters, pamphlets, billboards or aired on radio/television. The survey asked the respondents about certain specific messages on condoms and HIV/STI prevention.

A considerable proportion of IDUs were aware of messages such as, '*Condom bata surakchhya youn swastha ko rakchhya'* (84.3%); *'Youn rog ra AIDS bata bhachnalai'* (84.3%); *'Ramro sanga prayog gare jokhim huna dinna'* (82%); '*HIV/AIDS bare aajai dekhi kura garau'* (81.7%), *'Jhilke dai chha chhaina condom'* (79.4%); and, *'Condom kinna ma bhaya hunna ra'* (77.7%).

Table 6.8: Exposure to Specific Condom Messages in the Past Year

Heard/Seen/Read Messages/Characters in Past One Year	N=345	%
Condom Bata Surakchhya Youn Swastha ko Rakchhya	291	84.3
Youn Rog Ra AIDS Bata Bachnalai Rakhnu Parchha Sarbatra Paine Condom Lai	291	84.3
Ramro Sanga Prayog Gare Jokhim Huna DinnaBharpardo Chhu Santosh Dinchhu Jhanjhat Manna Hunna	283	82.0
HIV/AIDS Bare Aaji Dekhi Kura Garaun	282	81.7
Jhilke Dai Chha Chhaina Condom	274	79.4
Condom Kina Ma Bhaya Hunna Ra	268	77.7

Maya Garaun Sadbhav Badaun	195	56.5
Ek Apas Ka Kura	117	33.9
Manis Sanga Manis Mile Hara Jeet Kasko Hunchha	100	29.0
Des Pardes	94	27.2
Others	11	3.2

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

CHAPTER – 7.0: KNOWLEDGE ABOUT STIs AND HIV/AIDS

This chapter deals with the level of knowledge about STIs and HIV/AIDS among IDUs in the Eastern Terai as well as respondents' awareness levels regarding the ways in which HIV is transmitted. Their knowledge about the availability of HIV testing facilities and perceptions of HIV testing are also covered in this chapter.

7.1 Knowledge about STIs

Table 7.1 shows that the majority of respondents (96.5%) had heard about STIs before. However there were 3.5 percent who had never heard about STIs before the survey.

Table 7.1: Awareness of STI

Heard of STIs	N=345	%
Yes	333	96.5
No	12	3.5

IDUs reporting to have heard about STIs had a general understanding of male and female STI symptoms. The most common symptoms cited by the respondents were genital ulcers/sores/ blisters (72.1% in female and 84.8% in male); genital discharge (68.2% in female and 79.3% in male); and a burning sensation while urinating (44.4% in male and 61% in female). Symptoms such as foul smelling discharge (54.7%) and abdominal pain (15.9%) were specifically mentioned as female STI symptoms (Table 7.2).

Table 7.2: Known Symptoms of Male and Female STI

STI Symptoms as Mentioned by IDUs	Among Females		Among Males	
	n=333	%	n=333	%
Genital ulcer/sore blisters	240	72.1	281	84.8
Genital discharge	227	68.2	264	79.3
Foul-smelling discharge	182	54.7		
Burning/pain during urination	148	44.4	203	61.0
Itching	101	30.3	85	25.5
Abdominal pain	53	15.9		
Swelling in groin area	26	7.8	34	10.2
Becoming thinner	9	2.7	11	3.3
Fever	8	2.4	11	3.3
Weakness	4	1.2	0	0.0
Irregular Menstruation	3	0.9		
Bleeding	3	0.9	0	0.0
Swelling Private Part	2	0.6	4	1.2
Ulcer in the body	2	0.6	3	0.9
Pain at sexual intercourse	1	0.3	2	0.6
Pain in testicle	0	0.0	4	1.2
Low appetite	0	0.0	3	0.9
Genital pain	0	0.0	4	1.2
Others	10	3.0	11	3.3
Don't know	42	12.6	29	8.7

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

After assessing their awareness regarding STI symptoms, the respondents were asked if they ever had experienced symptoms such as genital discharge, genital ulcers/sores in the past year. In response, 7.8 percent of IDUs said that they had

genital discharge, while 6.4 percent mentioned that they had genital ulcers/sores in the past year.

Among those IDUs who have had genital discharge in the past year, 18.5 percent had been experiencing genital discharge at the time of the study too. Similarly, 40.9 percent of those IDUs who have had genital ulcers/sores in the past year had been experiencing the symptom during the survey (Fig.6).

Overall, 13 percent of IDUs reportedly had experienced at least one STI symptom so far. Little more than half (52.5%) of them had not sought any medical aid to treat the symptoms. Some had been to a private doctor (23.3%) or to a hospital/health post (7.9%). Relatively large proportion of IDUs with STI symptoms had gone to other persons/places than private doctors and hospitals/health posts for the treatment (Table 7.3).

Figure 6:STI Symptoms Expereienced by IDUs

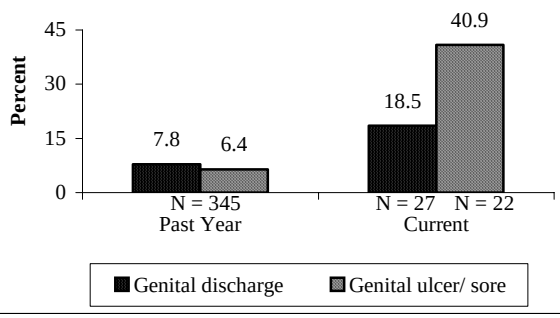


Table 7.3: STI Symptom Experienced and Treatment Sought

STI Symptoms and Treatment	N	%
STI Experience		
Never had STI symptoms	302	87.5
Ever had some symptoms	43	12.5
Total	**345**	**100.0**
Source of treatment		
Private Doctor	10	23.3
Hospital/Health Post	3	7.9
Others	7	16.3
Did not seek treatment	23	52.5
Total	**43**	**100.0**

7.2 Knowledge about HIV/AIDS

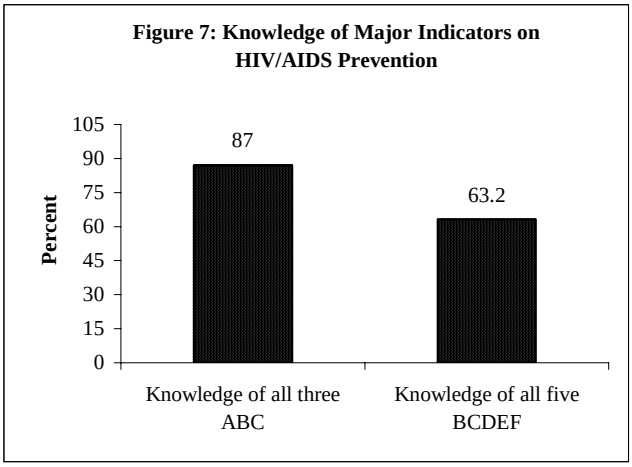
All the respondents had heard of HIV/AIDS before. More than three-quarters (77.4%) knew people who had HIV/AIDS or had died from the disease. When asked about the kind of relationship they shared with those people, 46.1 percent said they were their close friends and 15 percent said they were their relatives. Another 36 percent shared no relationship with the people who they knew had HIV/AIDS or had died because of the disease (Table 7.4).

Table 7.4: Awareness of HIV/AIDS

Knowledge of HIV/AIDS	N	%
Know anyone living with HIV/AIDS or died due to AIDS		
Yes	267	77.4
No	78	22.6
Total	**345**	**100.0**
Nature of relationship with the deceased		
Close friend	123	46.1
Close relative	40	15.0
Both - Close relative and close friend	8	3.0
No relation	96	36.0
Total	**267**	**100.0**

The respondents' knowledge regarding ways in which HIV is transmitted was also analyzed with the help of some questions regarding HIV/AIDS prevention measures. In this regard, their understanding of the three main HIV/AIDS prevention measures including abstinence from sex (A), being faithful to one sex partner (B), and consistent condom use (C) was assessed.

The majority of the IDUs were aware that abstinence from sex (A); being faithful to one sexual partner (B), and using a condom every time during sex (C) prevented them from contracting HIV (89%, 97.4% and 99.7% respectively). Overall, 87 percent of IDUs were aware of all the three major measures of preventing HIV/AIDS transmission A, B and C (Fig. 7).



Additionally, 97.1 percent were aware that a healthy-looking person can be infected with HIV (D) and 91.6 percent knew that sharing a meal with an HIV infected person did not transmit HIV (F). However, comparatively fewer IDUs (67.8%) agreed that a person could not get HIV virus from a mosquito bite (E) (Table 7.5). In total, 63.2 percent of IDUs were aware of all five major indicators, 'BCDEF' (Fig 7).

Table 7.5: Knowledge about Major Ways of Avoiding HIV/AIDS

Knowledge of Six Major Indicators on HIV/AIDS	N=345	%
HIV transmission can be avoided through:		
A Abstinence from sexual contact	307	89.0
B Being faithful to one partner	336	97.4
C Condom use during each sexual contact	344	99.7
Perception regarding HIV/AIDS:		
D A healthy-looking person can be infected with HIV	335	97.1
E A person can not get the HIV virus from mosquito bite	234	67.8
F Sharing a meal with an HIV infected person does not transmit HIV virus	316	91.6

The IDUs' understanding of HIV/AIDS and its different modes of transmission were further tested with the help of certain probing questions. All respondents said that HIV can be transmitted through the transfusion of blood from an infected person to another; that a person can get HIV by using a previously used needle/syringe (98.8%); that a person cannot get HIV just by holding an HIV infected person's hand (98.3%); that an intravenous drug user can protect himself from HIV by switching to non-injecting drugs (91.9%); and that a pregnant woman infected with HIV/AIDS can transmit the virus to her unborn child (84.6%). A relatively lower percentage of respondents (62%) said that women with HIV can transmit the virus to their newborn child through breastfeeding.

When asked if they were aware of any way in which a pregnant woman can reduce the risk of transmission of HIV to her unborn child, 53.4 percent said that they were not aware of any such measures, while the rest suggested that they should take medicine (32.2%) and follow a doctor's advice (7.9%) (Table 7.6).

Table 7.6: IDUs' Knowledge on Ways of HIV/AIDS Transmission

Statements Related to HIV/AIDS	N=345	%
Blood transfusion from an infected person to the other transmit HIV	345	100.0
A person can get HIV by using previously used needle by others	341	98.8
A person can not get HIV by holding an HIV infected person's hand	339	98.3
An IDU can protect themselves from HIV/AIDS by switching to non-injecting drugs	317	91.9
A pregnant woman infected with HIV/AIDS can transmit the virus to her unborn child	292	84.6
A woman with HIV/AIDS can transmit the virus to her new-born child through breastfeeding	214	62.0
Ways by which a pregnant woman can reduce the risk of transmission of HIV to her unborn child n=292		
Take medicine	94	32.2
Treatment/ consultation with doctor	23	7.9
Nothing	9	3.1
Others	10	3.4
Don't Know	156	53.4

7.3 Knowledge about HIV Testing Facilities

The availability of confidential HIV testing facilities allows people to have an HIV test promptly and without the fear of being exposed. Although a good proportion of the IDUs (96.5%) were aware of the existence of HIV testing facility in their communities, around three percent of them said they did not know of any provision for HIV tests.

Thirty-eight percent of respondents had never tested themselves for HIV, while the rest (62%) had tested for HIV before. Among them, 92.1 percent had taken up the test voluntarily and 89.3 percent had received the test result. Although 55.6 percent of IDUs had taken up the test within the past year, others (44.4%) had got themselves tested more than a year ago (Table 7.7).

Table 7.7: Knowledge about HIV Testing Facilities and History of HIV Test

Description of HIV Testing	N	%
A confidential HIV testing facility is available in the community		
Yes	333	96.5
No	12	3.5
Don't know	0	0.0
Ever had an HIV test		
Yes	214	62.0
No	131	38.0
Total	**345**	**100.0**
Type of test taken		
Required HIV test	17	7.9
Voluntary HIV test	197	92.1
Test result received		
Yes	191	89.3
No	23	10.7
Timing of last HIV test		
Within the past year	119	55.6
1-2 years ago	57	26.6
2-4 years ago	30	14.0
More than 4 years ago	8	3.7
Total	**214**	**100.0**

7.4 Source of Knowledge about HIV/AIDS

Radio (98%), pamphlets/posters (97.1%), television (96.5%), NGO workers (95.7%), billboard/signboard (95.7%), and friends/relatives (93%), were the most often cited sources of information regarding HIV/AIDS. A considerable proportion of the respondents had also received some information relating to HIV/AIDS from newspapers/magazines (87.5%), health workers/volunteers (86.4%), street drama (76.8%) and community events or training (73.9%). Other sources of information as mentioned by the IDUs are shown in Table 7.8, below.

Table 7.8: Sources of Knowledge Regarding HIV/AIDS

Sources of Knowledge of HIV/AIDS	N=345	%
Radio	338	98.0
Pamphlets/Posters	335	97.1
Television	333	96.5
NGO workers	330	95.7
Billboard/signboard	330	95.7
Friends/Relatives	321	93.0
Newspapers/Magazines	302	87.5
Health workers/Volunteers	298	86.4
Street drama	265	76.8
Community events or training	255	73.9
Community workers	223	64.6
School/Teachers	208	60.3
Workplace	184	53.3
Cinema halls	167	48.4
Comic books	140	40.6
Video van	62	18.0

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

In the past year, the study participants had also received HIV/AIDS-related IEC materials from different sources. A large proportion of respondents (98.6%) had received information on HIV/AIDS. IEC materials such as brochures/booklet/pamphlets on HIV/AIDS had reached 89.3 percent of IDUs while 69.3 percent had received condoms/information relating to condoms (Table 7.9).

Table 7.9: Information/Materials Received During the Past Year

Informative Materials Received	N=345	%
Condom/information on condom		
Yes	239	69.3
No	106	30.7
Brochure/booklets/pamphlets on HIV/AIDS		
Yes	308	89.3
No	37	10.7
Information on HIV/AIDS		
Yes	340	98.6
No	5	1.4
Other IEC materials		
Yes	7	2.0
No	338	98.0

7.5 Perceptions about HIV/AIDS

The stigma associated with HIV/AIDS increases the impact of HIV on the patients as well as on MARPs. The perception of the IDUs regarding HIV-infected people and the stigma associated with the disease was examined with the help of a series of questions.

The majority of the respondents were ready to take care of an HIV-positive male relative or an HIV-positive female relative (98.6%, each) in their home if need be. More than half (55.9%), however, said that if a family member had HIV they would rather keep it confidential and not talk about it with others.

Nearly all respondents (98%) said that they would readily buy food from an HIV-infected vendor. The majority (97.4%) also agreed unless very sick, people with HIV/AIDS should be allowed to continue with their job.

When asked about the health care needs of HIV-infected persons, 56.2 percent of IDUs maintained that they should be provided with the same care and treatment deemed necessary for patients with other chronic diseases, while 39.1 percent believed that the health care needs of an HIV-infected person are much higher than for people suffering from other chronic diseases (Table 7.10).

Table 7.10: Attitude towards HIV/AIDS

Individual Perception	N=345	%
Would readily take care of HIV positive male relative in the household		
Yes	340	98.6
No	5	1.4
Would readily take care of HIV positive female relative in the household		
Yes	340	98.6
No	5	1.4
Would prefer not to talk about a family member being HIV positive		
Yes	193	55.9
No	152	44.1
Would readily buy food from HIV infected shopkeeper		
Yes	338	98.0
No	7	2.0
Believe that the health care needs of a HIV infected person is the same, more or less than those required by someone with other chronic disease		
Same	194	56.2
More	135	39.1
Less	14	4.1
Don't know	2	0.6
Believe that HIV infected person should be allowed to continue working unless very sick		
Yes	336	97.4
No	9	2.6

CHATPER – 8.0: EXPOSURE TO HIV/AIDS AWARENESS PROGRAMS

The exposure of the IDUs to the ongoing HIV/AIDS awareness programs and their participation in these activities has been examined. Respondents were asked several questions relating to different components of the current HIV/AID- related programs being run by different organizations.

8.1 Peer/Outreach Education

The peer/outreach education component consists of activities that involve the mobilization of peer educators (PEs) and community mobilizers (CMs) and outreach educators (OEs) who conduct awareness-raising activities at community sites. They meet the target groups and hold discussions with them regarding HIV/AIDS and safe injecting practices, safe sex and other related topics. They also distribute IEC materials, condoms, and refer the target group to drop-in centers and STI treatment services. Some also carry new needles/syringes for distribution among the IDUs.

The majority (90.7%) of the respondents had met PEs/OEs representing various organizations at least once. In such meetings, 91.7 percent had discussed safe injecting behavior while 87.5 percent had been told how HIV is transmitted from one person to the other. The study participants had also been informed about STIs and how they are transmitted (45.4%) and had discussed the use of condoms (22.7%).

Nearly two-fifths of IDUs had met PEs/OEs from Kirat Yakthum Chumlung (KYC) (38%). Some had also met PEs/OEs representing Richmond (33.2%); Knight Chess Club (KCC) (24.3%); and the Community Rehabilitation Center (18.2%). It is further evident from Table 8.1 that the IDUs meet PEs/OEs quite often, as in addition to the 7 percent of IDUs who had met them two or three times, all the others had met them more than four times in the past year. Over two-thirds of IDUs (65.8%) had met PEs/OEs more than once a month.

Table 8.1: IDUs' Meeting with Peer Educators/Outreach Educators in the Past Year

Meeting with Peer Educators (PE) or Outreach Educators (OE)	N	%
Met or discussed or interacted with PE or OE in the last 12 months		
Yes	313	90.7
No	32	9.3
Total	**345**	**100.0**
Activities carried out with OE/PEs		
Discussion on safe injecting behavior	287	91.7
Discussion on how HIV/AIDS is/isn't transmitted	274	87.5
Discussion on how STI is/isn't transmitted	142	45.4
Told about regular/non-regular use of condom	71	22.7
Provided condom use demonstration	68	21.7
Exchanged Syringe	53	16.9
Suggested to stay at rehabilitation center	24	7.7
Discussion of quitting drugs	17	5.4
Given Distilled Water	7	2.2
Given Condom	6	1.9
Given Alcohol Pad	5	1.6
Given Bleach	4	1.3
Discussion on how hepatitis B and C transmission	2	0.6
Others	4	1.3
Total	**313**	*
Organizations represented by OE/PEs		
KYC	119	38.0
RICHMOND	104	33.2
KCC	76	24.3
Community Rehabilitation Centre	57	18.2
DYC	42	13.4
YMS	19	6.1
Safe the Life	15	4.8
Dharan Positive Group	12	3.8
New Hope Foundation	10	3.2
SAHARA Nepal	10	3.2
ARC	8	2.6
Belbari plus	6	1.9
Nav Kiran	5	1.6
Wisdom	5	1.6
Gurukul	5	1.6
BDS	4	1.3
Life Line	3	1.0
LALS	1	0.3
Aastha	1	0.3
Others	9	2.9
Total	**313**	*
Number of meeting with PE or OE		
Once	3	1.0
2-3 times	23	7.3
4-6 times	45	14.4
7-12 times	36	11.5
More than 12 times	206	65.8
Total	**313**	**100.0**

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

8.2 Drop-in-Centers

Drop-in-centers (DICs) are another important component of HIV prevention programs. The DICs not only provide a safe space for the target communities to socialize, but are also the site for educational and counseling activities. DICs offer a number of services to the target groups, including counseling, group classes, group discussions, individual counseling, and video shows on STIs/HIV/AIDS. Certain NGOs also run needle exchange programs through their DICs. The IDUs are also provided with IEC materials and condoms at the DICs.

About eighty-seven percent of the respondents had visited a DIC in the past year. The majority of them (97.7%) had been to a DIC to get a new syringe. The respondents had been informed about safe injecting behavior at the DIC (57.9%) and had collected condoms from the center (31.5%). Three in ten had also participated in discussions on HIV transmission (31.1%) at a DIC.

DICs visited by the respondents were run by various organizations implementing HIV/AIDS awareness and prevention programs in the region, such as KYC and Richmond (34.8%, each); KCC (24.5%); and Community Rehabilitation Center (20.5%). Most of the IDUs had been to a DIC more than once in the past year (98.7%). Around 81 percent of IDUs had visited DICs more than 12 times in the past year (Table 8.2).

Table 8.2: DIC Visiting Practices in the Past Year

DIC Visiting Practices	N	%
DIC visit in the last 12 months		
Yes	302	87.5
No	43	12.5
Total	**345**	**100.0**
Participated activities at DIC		
Got new syringe	295	97.7
Learnt about safe injecting behavior	175	57.9
Collected condoms	95	31.5
Participated in discussion on HIV transmission	94	31.1
Watched film on HIV/AIDS	53	17.6
Learnt the correct way of using condom	47	15.6
Got Distilled Water	21	7.0
Got alcohol pad	18	6.0
Got Bleach	14	4.6
Got medicine	8	2.6
Provided treatment	8	2.6
Gave old syringe back	7	2.3
Participated in discussion on reducing drug taking	3	1.0
Had wound dressing	3	1.0
Others	5	1.7
Total	**302**	*****
Name of organizations that run DIC visited by them		
KYC	105	34.8
RICHMOND	105	34.8
KCC	74	24.5
Community Rehabilitation Center	62	20.5
DYC	37	12.3
YMS	18	6.0
Safe the Life	11	3.6
New Hope Foundation	7	2.3
Belbari Plus	6	2.0
Sahara Nepal	5	1.7
NIDS	3	1.0
Others	11	3.6
Total	**302**	*****
Number of visits to the DICs		
Once	4	1.3
2-3 times	9	3.0
4-6 times	19	6.3
7-12 times	24	7.9
More than 12 times	246	81.5
Total	**302**	**100.0**

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

8.3 STI Clinics

The IDUs who engage in unsafe sexual encounters are at risk of contracting certain sexually transmitted infections (STIs). Timely detection of STIs may prevent serious health hazards. There are different clinics being run by different government as well as non-government organizations to provide STI testing and treatment facilities. Nevertheless, the majority of the respondents (93.9%) had not been to an STI clinic in the past year.

Among the few (6.1%) who had visited an STI clinic, most had been accompanied by a friend (47.6%). About 43 percent had received a physical examination for STI detection, had discussed how STIs are/are not transmitted and had tested blood for STIs (28.6%, each). They were also informed about use of condoms and safe injecting behavior at the clinic (Table 8.3).

STI clinics that respondents visited about a quarter (28.6%) were run by Mountain Hill Resource Management Group (MRMG). About 52 percent of respondents had paid one visit to the STI clinic while the remaining 43 percent had been there two or three times in the past year.

Table 8.3: STI Clinic Visiting Practices in the Past Year

STI Clinic Visiting Practices	N	%
Visited any STI clinic in the last 12 months		
Yes	21	6.1
No	324	93.9
Total	**345**	**100.0**
Participated activities at STI clinic		
Accompanied a friend	10	47.6
Physical examination conducted for STI identification	9	42.9
Participated in discussion how STI is/isn't transmitted	6	28.6
Blood tested for STI detection	6	28.6
Participated in discussion on regular/non-regular use of condom	2	9.5
Participated in discussion on safe injecting behavior	1	4.8
Total	**21**	*****
Name of organizations that run STI clinic visited by them		
MRMG	6	28.6
Private clinic	5	23.8
AMDA	2	9.5
FPAN	2	9.5
Others	8	38.1
Total	**21**	*****
Number of visits to STI clinics		
Once	11	52.4
2-3 times	9	42.9
More than 3 times	1	4.8
Total	**21**	**100.0**

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

8.4 VCT Centers

VCT centers form an integral part of the HIV/AIDS prevention program. VCT centers not only provide HIV/STI testing facilities but also offer pre- and post-test counseling. In addition to other necessary information related to safe injecting practices, HIV/AIDS/STI transmission, treatment facilities are also provided for visitors at these centers.

About one third of IDUs (33.6%) had been to a VCT center in the past year. Nearly all of them had given their blood for HIV testing at the center (95.7%); while 89.7% had received test results; 86.2% had received pre-HIV test counseling; 75.9 % had received post-HIV test counseling; and 50.9% had got information on safe injecting behavior.

Almost 32 percent of IDUs had visited the VCT center run by the Association of Medical Doctors of Asia (AMDA). Additionally 24.1 percent of IDUs had visited each of the VCT centers run by Kirat Yakthum Chumlung (KYC) and Mountain Hill Resource Management Group (MMRG). About 38 percent had been to a VCT center once, while around 53 percent had visited a VCT two or three times in the past year (Table 8.4).

Table 8.4: VCT Visiting Practices in the Past Year

VCT Visiting	N	%
Visited VCT center in the last 12 months		
Yes	116	33.6
No	229	66.4
Total	**345**	**100.0**
Participated activities at VCT		
Blood sample taken for HIV test	111	95.7
Received HIV test result	104	89.7
Received pre HIV test counseling	100	86.2
Received post HIV test counseling	88	75.9
Received information on safe injecting behavior	59	50.9
Got information on HIV/AIDS window period	55	47.4
Received counseling on using condom correctly in each sexual intercourse	42	36.2
Accompanied a friend	5	4.3
Others	2	1.7
Total	**116**	*
Name of the organization that run the VCTs visited by them		
AMDA	37	31.9
KYC	28	24.1
MRMG	28	24.1
NIDS	6	5.2
KCC	5	4.3
BPKISH	4	3.4
SIDS	3	2.6
FPAN	2	1.7
Youth Vision	1	0.9
Others	5	4.3
Don't Know	1	0.9
Total	**116**	*
Number of Visits to VCTs		
Once	44	37.9
2-3 times	61	52.6
4-6 times	9	7.8
More than 6 times	2	1.7
Total	**116**	**100.0**

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

8.5 Participation in HIV/AIDS Awareness Programs

Various government agencies as well as non-government organizations have been involved in implementing HIV/AIDS awareness activities. Their programs include workshops, group discussions, talk programs, training sessions, radio programs, Condom Day/AIDS Day celebrations and street

dramas. Some of these programs specifically target the most at-risk population, while some include the general population.
About half of the respondents (49%) in the study districts had never participated in any HIV/AIDS awareness-raising program or similar community event so far. Among others (51%) who had participated in such activities at least once, 75 percent had taken part in street drama and around 66 percent in AIDS Day celebrations. About 44 percent of IDUs had participated in Condom Day celebrations and 16 percent had taken part in HIV/AIDS-related group discussions. The activities respondents mentioned were conducted by KYC (40.9%), KCC (19.3%) and other organizations as listed in Table 8.5.

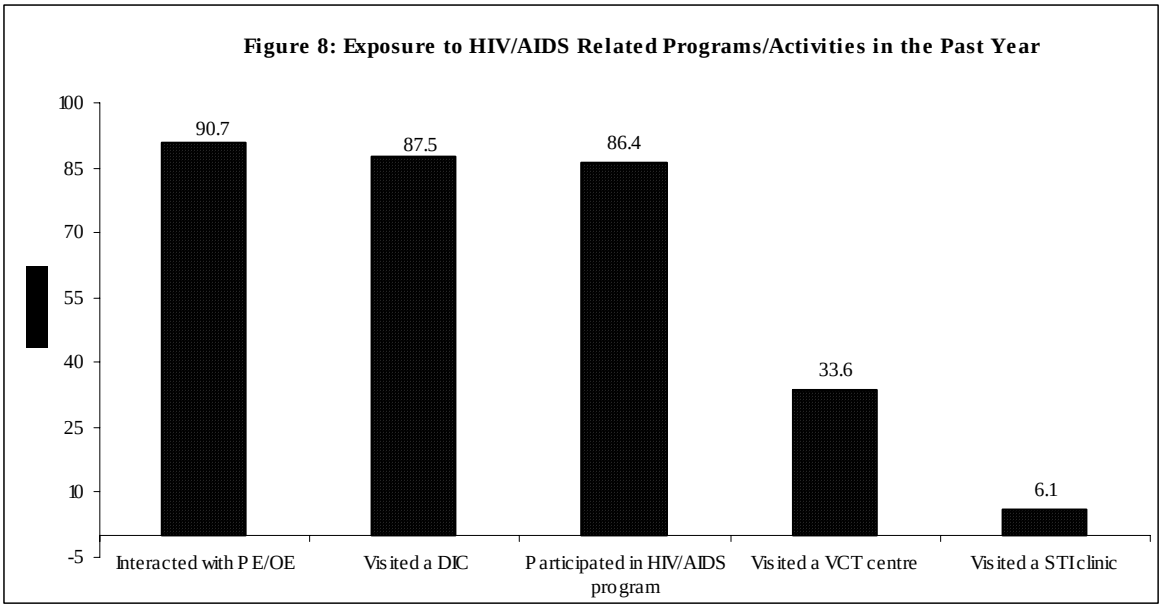
Among those who had taken part in an HIV/AIDS awareness program, 28.4 percent had participated in one activity in the past year, while 58 percent had participated in two or more events (Table 8.5).

Table 8.5: Participation in HIV/AIDS Awareness Programs

Participations in HIV/AIDS Awareness Programs	N	%
Ever Participated in HIV/AIDS awareness raising program or community events		
Yes	176	51.0
No	169	49.0
Total	**345**	**100.0**
Participated activities		
Street drama	132	75.0
AIDS Day	116	65.9
Condom Day	78	44.3
Group discussions	29	16.5
HIV/AIDS related training	18	10.2
Condom demonstration	11	6.3
Video Show	9	5.1
HIV/AIDS related Workshops	2	1.1
Others	4	2.3
Total	**176**	*****
Name of the organizations that organized such activities		
KYC	72	40.9
KCC	34	19.3
AMDA	24	13.6
DYC	14	8.0
Recovery Nepal	12	6.8
Richmond	10	5.7
BDS	9	5.1
Sahara Nepal	9	5.1
DPG	8	4.5
Life Line	7	4.0
New Hope Foundation	6	3.4
ARC	4	2.3
Anam Natya Samuha	3	1.7
ADAC	3	1.7
YMS	2	1.1
Community Rehabilitation Center	1	0.6
LALS	1	0.6
Namuna	1	0.6
Others	34	19.3
Don't Know	11	6.3
Total	**176**	*****
Frequency of such participation in past 12 months		
Once	50	28.4
2-3 times	73	41.5
4-6 times	25	14.2
More than 6 times	4	2.3
Not participated during the past year	24	13.6
Total	**176**	**100.0**

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

If we compare the exposure of the IDUs to different HIV/AIDS-related program/ activities in the past year, it can be seen that they have more interaction with OEs/PEs, and more DIC visits and participation in HIV/AIDS programs (Figure 7) than visits to STI clinics and VCT centers.



CHATPER – 9.0: A COMPARATIVE ANALYSIS OF SELECTED CHARACTERISTICS

This chapter seeks to analyze the trend in the selected indicators using the data from the first, the second, the third and the fourth rounds of IBBS conducted in 2009 in Eastern Terai highway districts of Nepal. It specifically examines socio-demographic characteristics, drug injecting habits, needle/syringe using, and condom use behavior among IDUs. It should be noted here that these comparisons are only possible because the same sampling design and procedures were used in all of the four rounds.

9.1 Socio-demographic Characteristics

The socio-demographic characteristics of the study participants present a similar pattern in all four rounds. This is to a certain extent, a consequence of adopting the same sampling methodology for all four rounds (Table 9.1).

IDUs were young in all four surveys, the median age decreased to 24 in 2009 compared to 25 in 2003, 2005 and 2007. The proportion of respondents younger than 25 years increased from 45.5 percent in the first two rounds and 49 percent in the third round to 51 percent in the fourth round of the survey. However, the increase is not statistically significant.

Table 9.1: Socio-Demographic Characteristics

Socio-demographic characteristics	First round (2003)		Second round (2005)		Third round (2007)		Fourth round (2009)	
	N=345	%	N=345	%	N=345	%	N=345	%
Age								
< 25 Yrs	157	45.5	157	45.5	169	49.0	176	51.0
>25 Yrs	188	54.5	188	54.5	176	51.0	169	49.0
Median age	**25**	**-**	**25**	**-**	**25**	**-**	**24**	**-**
Education								
Illiterate	15	4.3	18	5.2	8	2.3	10	2.9
Literate only	5	1.4	5	1.4	10	2.9	18	5.2
Primary	48	13.9	76	22.0	59	17.1	55	16.0
Secondary	200	58.0	177	51.3	195	56.5	165	47.8
SLC & above	77	22.3	69	20.0	73	21.2	97	28.1
Ethnicity								
Gurung/Rai/Limbu	120	34.8	62	18.0	119	34.5	112	32.5
Chhetri/Thakuri	56	16.2	59	17.1	55	15.9	58	16.8
Tamang/Lama/Magar/Sherpa	41	11.9	81	23.5	45	13.0	38	11.0
Newar	27	7.8	48	13.9	26	7.5	40	11.6
Brahmin	26	7.5	13	3.8	18	5.2	12	3.5
Terai caste	16	4.6	23	6.7	19	5.5	37	10.7
Occupational caste	13	3.8	21	6.1	15	4.3	21	6.1
Musalman	12	3.5	7	2.0	6	1.7	9	2.6
Rajbanshi	8	2.3	6	1.7	9	2.6	6	1.7
Chaudhary/Tharu	6	1.7	8	2.3	11	3.2	2	0.6
Giri/Puri/Sanyasi	5	1.4	6	1.7	4	1.2	1	0.3
Mandal	5	1.4	3	0.9	3	0.9	0	0.0
Teli/Shah	4	1.2	3	0.9	1	0.3	3	0.9
Majhi/Chepang	0	0.0	0	0.0	9	2.6	6	1.7
Bhujel	0	0.0	0	0.0	4	1.2	0	0.0
Others (Other Hill Caste)	6	1.7	5	1.4	1	0.3	0	0.0

The education status of the respondents has changed significantly with regard to those who were literate only and those who had completed secondary level schooling across the four rounds. The proportion of literate respondents increased from 1.4 percent in the first two rounds as well as 2.9 percent in the third round to 5.2 percent in the fourth round of the survey. Similarly, the percentage of IDUs with SLC and above education has increased to 28.1 percent in 2009 from 22.3 percent in 2003.

The ethnic/caste composition of the IDUs has not shown a significant difference since the first round. The Gurung/Rai/Limbu, Chhetri/Thakuri and Tamang/Lama/Magar/ Sherpa ethnic groups were the main ethnic groups represented in the sample in all four surveys.

9.2 Drug Injecting Practices

Most of the study participants had been injecting drugs for more than a year in all four rounds, with the average duration of 4.1 years in 2003, five years in 2005, 4.8 years in 2007 and 4.6 years in 2009. Those respondents who had been injecting for less than two years made up 29 percent of the total respondents in 2003, 20 percent each in 2005 and in 2007, and 26.7 percent in 2009.

The median age of the respondents at their first injection was 21 years in 2003, while it came down to twenty and remained the same in 2005, 2007 and 2009. The proportion of IDUs having their first injecting experience before they were 20 years increased steadily from 45.8 percent in 2003, to 51 percent in 2005 to 58.6 percent in 2007, before coming down to 55.9 percent in 2009.

Table 9.2: Drug Injecting Practices

Drug Injecting Practice	First round (2003)		Second round (2005)		Third round (2007)		Fourth round (2009)	
	N=345	%	N=345	%	N=345	%	N=345	%
Duration of drug Injection habit								
Up to 11 months	44	12.8	31	9.0	33	9.6	40	11.6
12–23 months	56	16.2	38	11.0	36	10.4	52	15.1
24-59 months	113	32.8	124	35.9	117	33.9	117	33.9
More than 60 months	132	38.3	152	44.1	159	46.1	136	39.4
Average duration years	**4.1**	**-**	**5.0**	**-**	**4.8**	**-**	**4.6**	**-**
Age at first drug injection								
Up to 20 years	158	45.8	176	51.0	202	58.6	193	55.9
21+ years	187	54.2	169	49.0	143	41.4	152	44.1
Median age	**21**	**-**	**20**	**-**	**20**	**-**	**20**	**-**

9.3 Needle/Syringe Usage in the Past Week

Data relating to the injecting practices of the study population in the past week in the four rounds showed that the IDUs were increasingly more cautious and were avoiding risky behavior. The proportion of respondent who had consistently avoided injecting with others' previously used needles/syringes has increased significantly since the first round (66.4 % in 2003, 69.6 % in 2005, 86.1 % in 2007, and 85.5% in

2009). Although the fourth round of data has shown a slight increase in the proportion of IDUs who had used a needle/syringe kept in a public place at least once in the week preceding the survey compared to the third round, there has been a significant decrease in the proportion of such IDUs since the first round (23.5% in 2003, 24.3% in 2005, 6.7% in 2007 and 10.7 percent in 2009).

The proportion of IDUs who did not share their needles/syringes with anyone else in the past week also increased significantly from 49.9 percent in 2003 to 60 percent in 2005, 80 percent in 2007 and finally 82.9 percent in 2009. In the same way, fewer IDUs in the fourth round than in the first and second rounds had injected with a previously-used needle/syringe in the past week, compared to 64.9 percent in 2003, which went down to 56.8 percent in 2005 and 33.6 percent in 2009 (Table 9.3). This is a statistically significant decline in the percentages. Compared to the 2007 result, there has been a slight increase in the proportion of IDUs reporting that they had not shared their needles/syringes with anyone else in the past week in 2009 (80% and 82.9 %), however the increase is statistically insignificant.

Table 9.3: Syringe Using and Sharing Practice in Past Week

Needle/syringe Use throughout the Past Week	First round (2003)		Second round (2005)		Third round (2007)		Fourth round (2009)	
			N=345	%	N=345	%	N=345	%
Used a needle/syringe that had been used by another								
Never Used	229	66.4	240	69.6	297	86.1	295	85.5
Ever Used	116	33.6	105	30.4	48	13.9	50	14.5
Used a needle/syringe that had been kept in public place								
Never Used	264	76.5	261	75.7	322	93.3	308	89.3
Ever Used	81	23.5	84	24.3	23	6.7	37	10.7
Number of needle/syringe shared partners								
None	172	49.9	207	60.0	276	80.0	286	82.9
Two partners	85	24.6	76	22.0	49	14.2	42	12.2
Three or more partners	88	25.5	62	18.0	20	5.8	17	4.9
Reused needle/syringe in the past week								
Yes	224	64.9	196	56.8	108	31.3	116	33.6
No	121	35.1	149	43.2	237	68.7	229	66.4

9.4 Condom Use with Different Partners

In the past year, relatively fewer IDUs used condoms consistently in sexual contact with regular female sex partners than with sex workers and non-regular female sex partners in all the four rounds. Partner-wise, consistent condom use with regular partners in the year preceding the survey was the lowest in the fourth round (5.6%) compared with the third, second and first rounds (9.2%, 11.3% and 12.2% respectively).

A change was observed in condom using practices with non-regular partners. Consistent condom use with non-regular partners had decreased to 23.7 percent in 2009 compared to 28 percent in 2003 and 24.1 in 2005; however in 2007, 33 percent had used condoms consistently with their non-regular partners.

The consistent use of condoms with sex workers also decreased slightly to 44.5 percent in 2009 from 50 percent of IDUs in 2005; and 57.3 percent in 2007. However

in 2003, 41.4 percent of IDUs only had used condom consistently when they had sexual contact with FSWs.

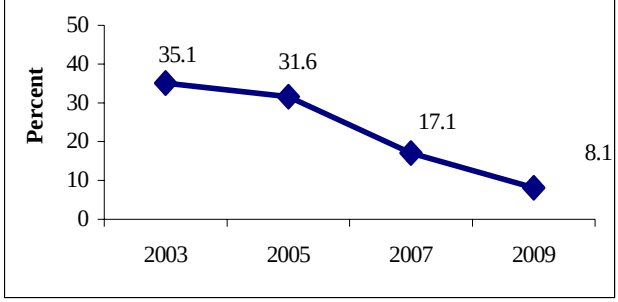
Table 9.4: Consistent Use of Condom with Different Sex Partners in the Past Year

Consistent use of condom	First round (2003)		Second round (2005)		Third round (2007)		Fourth round (2009)	
			N	%	N	%	N	%
Use of condom with regular female sex partners during past 12 months								
Every time	15	12.2	14	11.3	12	9.2	6	5.6
Sometimes - Never	108	87.8	110	88.7	119	90.8	102	94.4
Total	**123**	**100.0**	**124**	**100.0**	**131**	**100.0**	**108**	**100.0**
Use of condom with non-regular female sex partners during past 12 months								
Every time	14	28.0	19	24.1	30	33.0	23	23.7
Sometimes – Never	36	72.0	60	75.9	61	67.0	74	76.3
Total	**50**	**100.0**	**79**	**100.0**	**91**	**100.0**	**97**	**100.0**
Use of condom with female sex workers during past 12 months								
Every time	29	41.4	42	50.0	51	57.3	40	44.5
Sometimes – Never	41	58.6	42	50.0	38	42.7	50	55.5
Total	**70**	**100.0**	**84**	**100.0**	**89**	**100.0**	**90**	**100.0**

9.5 HIV Prevalence among IDUs

HIV prevalence among the IDUs has decreased since the first round of the survey in 2003 (Fig. 9). The decrease in the HIV prevalence is statistically significant. The first round of the IBBS showed that the rate of infection was 35.1 percent among IDUs in the Eastern Terai, which decreased by a few percentage points in the second round (31.6%), falling further by 17.1 percent in the third round and to 8.1 percent in the fourth round. The study findings indicate that various factors are responsible for the drop in the HIV prevalence rate since the first round. It is important to note that the sample composition may be one of the contributing factors.

Figure 9: HIV Prevalence among IDUs in Three Rounds of IBBS



From the other findings of the study, it is evident that the IDUs in the Eastern Terai have been increasingly conscious of HIV/AIDS risk factors. Their behavioral trend also points towards a considerable improvement with regards to injecting and sexual behavior.

In the week preceding the survey, 66.4 percent of IDUs had avoided injecting with a previously-used needle in the first round, this figure reached to 85.5 percent in fourth round. Likewise, the proportion of respondents who had injected with a syringe that had been kept in a public place decreased from 24 percent in 2003 to about 11 percent in 2009. In the same way, 50 percent of respondents had not shared a syringe with anyone in the past week in 2003, while 83 percent of IDUs reported doing so in 2009 (Table 9.5).

It is further evident from the study findings that a considerable proportion of IDUs have been practicing safe sex with their sex partners, especially with female sex workers. While in 2003, 41.4 percent had used condoms consistently when having sex with female sex workers in the year preceding the survey, 44.5 percent reported doing so in 2009.

Table 9.5: District wise HIV Prevalence among IDUs

District	First round (2003)			Second round (2005)			Third round (2007)			Fourth round (2009)		
	Total sample	HIV+	%	Total sample	HIV+	%	Total sample	HIV+	%	Total sample	HIV+	%
Interviewed Districts												
Morang	135	70	51.8	135	56	41.5	135	29	21.5	135	17	12.6
Sunsari	135	45	33.3	135	45	33.3	135	20	14.8	135	7	5.2
Jhapa	75	6	8.0	75	8	10.7	75	10	13.3	75	4	5.3
Total	**345**	**121**	**35.1**	**345**	**109**	**31.6**	**345**	**59**	**17.1**	**345**	**28**	**8.1**

In Morang, the prevalence rate dropped significantly from 51.8 percent in 2003, 41.5 percent in 2005 and 21.5 percent in 2007, to 12.6 percent in 2009. Similarly, in Sunsari, the HIV infection rate has decreased significantly from 33.3 percent in 2003 and 2005, to14.8 percent in 2007, and now to 5.2 in 2009.

The HIV infection rate was, however, lower (5.3%) in Jhapa in 2009 compared to the third round (13.3% in 2007), the second rounds (10.7% in 2005) and the first round (8% in 2003); although the difference is not statistically significant.

Despite the changes in the prevalence rate in the study districts, data shows that the rate of infection is still the highest among IDUs in Morang district (12.6%), compared with Sunsari (5.2%) and Jhapa districts (5.3%).

CHAPTER - 10: SUMMARY OF MAJOR FINDINGS AND RECOMMENDATIONS

10.1 Summary of Major Findings

- Overall, 8.1 percent of IDUs tested HIV positive. A history of syphilis was found among 1.7 percent of IDUs, while 1.7 percent of the study participants currently had high-titre syphilis.

- The prevalence of HIV was significantly higher ($p<0.05$) among those IDUs aged 20 years and above who were married and who had been injecting drugs for more than five years.

- The IDUs consisted predominantly of a young population with 80 percent being below the age of 30 years.

- One third of IDUs had been injecting drugs for more than five years.

- The past week's injecting practice indicated that 17 percent of respondents had shared their needles/syringes with others at least once, 14.5 percent respondents had injected with others' used needles/syringes, and 10.7 percent had used a needle/syringe kept in a public place.

- About 92 percent of IDUs have had sexual contact before. Among them 71.5 percent had been sexually active in the past year.

- A total of 44.5 percent of IDUs used condoms consistently with sex workers, 23.7 percent with non-regular partners and 5.6 percent with regular sex partners. The pattern of consistent condom use has decreased with all sex partners compared to 2007.

- Very few IDUs (3.5%) had not heard of STIs before.

- Thirteen percent of IDUs had ever had at least one STI symptom. Among them, 51.1 percent had not sought any treatment.

- In total, 95.4 percent of IDUs were aware of all three main prevention measures, namely, (A) abstinence from sex, (B) being faithful to one sex partner and (C) and regular condom use.

- Around 96 percent of IDUs knew that a confidential HIV testing facility was available in their community.. However only 38 percent of them had never taken up HIV testing before.

- Overall, 90.7 percent of IDUs had met PEs/OEs, 87.5 percent had visited a DIC and 33.6 percent had visited a VCT center at least once in the past year. However, very few (6.1%) had visited an STI clinic.

- About 86 percent of respondents had participated in an HIV/AIDS awareness program or similar community event before the survey.

10.2 Recommendations

Based on the findings of this study, a few specific recommendations have been made. They are as follows:

- Data from the study indicate that basically youths and adolescents become intravenous drug user (51% of respondents were below 25 years of age, while 55.9% had their first injection at the age of less than 21 years). Specific program activities that target school children, college students, youths, and adolescents should be designed to impart HIV/AIDS awareness and sex education

- The past week's injecting practices showed that around 14 percent of IDUs had injected with a used needle/syringe, almost 11 percent had injected with a needle/syringe left in a public place and 17 percent had shared their needles/syringes with two or more partners. Advocacy, behavioral change activities and health promotion interventions should be further scaled up to cover more IDUs. Harm reduction initiatives such as wider dissemination of information on safe injecting behavior and needle exchange programs should also be continued and expanded further.

- Consistent use of condoms was reported by only 5.6 percent of IDUs with regular partners, 23.7 percent with non-regular partners and 44.5 percent with commercial sex workers in the past year. Barriers to inconsistent condom use should be explored, and intervention targeting not just IDUs but also female sex workers and the general population should be stressed.

- Around 61 percent of IDUs had never been to a de-addiction treatment center. PEs/OEs and DICs should put more emphasis on treatment alternatives. Rehabilitation and detoxification centers should be further extended and also supported to allow them to provide IDUs with the necessary services, especially to IDUs belonging to economically deprived families. Rehabilitation programs should also incorporate family counseling services to make them more effective.

- Around 51 percent of those IDUs who had ever experienced any STI symptoms had never sought any treatment. At the same time, around 38 percent of IDUs had never taken up HIV testing. HIV/AIDS awareness campaigns should also focus on STI education. Client-friendly HIV/STI testing facilities should be made available to encourage more IDUs to come forward voluntarily for such services.

- PE/OEs are good contact points to disseminate necessary information and IEC materials to the target population. Around 91 percent of respondents had met them at least once in the past year. One-to-one education for behavioral change and safe injecting and sexual practices through wider mobilization of PEs/OEs could yield positive results.

- Monitoring and evaluation of HIV prevalence and risk behaviors of IDUs to design and implement timely intervention strategies are needed at regular time intervals.

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New ERA/SACTS/FHI 2007 " **Integrated Bio-behavioural Survey (IBBS) among Male Injecting Drug Users (IDUs) in the Eastern Terai"**

ANNEXES

ANNEX – 1: Indicators for Monitoring and Evaluation of HIV

Prevention 1: HIV related risk and transmission among IDUs	Results (%)	Indicator
Impact/Outcome indicators		
Percentage of IDUs who are HIV infected	8.1	PMP/ASHA/ National/UNGASS
Percentage of IDUs who had adopted behavior that reduce transmission of HIV i.e. who both avoided using non sterile injecting equipment and used condom in the last sex in last month	17.2	National
Percentage of IDUs reporting the use of sterile injecting equipment in the last time they injected	92.8	UNGASS
Percentage of IDUs who avoided sharing injecting equipment in the last month	49.6	ASHA
Percentage of IDUs who used condom at last sex with female sex worker in the last 12 months	73.3	PMP/ASHA
Percentage of IDUs who say they consistently use a condom when they have sex with a female sex worker in the last 12 months	44.5	PMP/ASHA
Percentage of IDUs who both correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV transmission	63.2	PMP/ASHA/National/UNGASS
Output/Coverage Indicators		
Percentage of IDUs reached with targeted HIV prevention service programs (BCC with OE/PE or DIC or STI Clinics or VCT or community events / trainings or drug treatment or rehabilitation)	97.1	ASHA/National
Percentage of IDUs reached with HIV prevention programs (Knows where to receive HIV test and received condoms)	64.9	UNGASS
Percentage of IDUs who received an HIV test in the last 12 months and who know their results	33.3	UNGASS

ANNEX – 2: Formula for Calculating Sample Size*

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

n = required minimum sample size per survey round

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

P_1 = the estimated proportion at the time of the first survey.

P_2 = the target population at some future date, so that (P_2-P_1) is the magnitude of change of change you want to be able to detect.

$\bar{P}$ = (P_1 + P_2)/2

$Z_{1-\alpha}$ = the Z-score corresponding to the level of significance

$Z_{1-\beta}$ = the Z-score corresponding to the level of power

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

ANNEX – 3: Questionnaire

Government of Nepal
Ministry of Health and Population (MoHP)
National Center for AIDS and STD Control (NCASC) - 2009

Integrated Biological and Behavioral Surveillance Survey (IBBS) among Male Injecting Drug Users (IDUs) in Kathmandu Valley, Pokhara Valley, Eastern Terai and West-Far Western Terai of Nepal

Namaste! My name is…… I am here from New ERA to collect data for a research study being conducted under the leadership of **National Centre for AIDS and STD Control (NCASC), Ministry of Health and Population, Government of Nepal.** During this data collection, I will ask you some personal questions that will be about sexual behavior, use and promotion of condoms, STI/HIV/AIDS and use of drugs and needle/syringes. You may feel uncomfortable to answer some questions relating to your personal behavior, but it is important that you provide correct information. We will also take your blood sample for testing HIV and STI infection. If it is determined that you have any STI symptoms, we will provide treatment free of charge. The information given by you will be strictly treated as confidential. Nobody will know whatever we talk about because your name will not be mentioned on this form and collected samples. All the mentioned information will be used only for the study purpose. This survey will take about an hour.

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

Would you be willing to participate?

1. Yes 2. No

Signature of the interviewer: _____
Date:_____/_____/2065

Operational definition of respondent:

Male Injecting Drug User (IDU): M*ale injectors who inject different types of drugs in their nerves for intoxication. Please bear in mind that those people who inject for medical purpose should not be treated as IDUs. Respondents should be a current injector and should have been injecting drugs for at least three months prior to the date of survey. Those who have been injecting drugs for a period of less than three months should not be included in the survey.*

Male IDUs under the age of 16 will be excluded.

Code Respondents: (Kathmandu and Pokhara Sites only)

Seed: 1. Yes 2. No

IDENTIFICATION NUMBER (Coupon Number): ☐☐☐☐☐ ***(Write '0' for seed)***
Coupon number given: (For only Pokhara and Kathmandu sites)

☐☐☐☐☐

☐☐☐☐☐

☐☐☐☐☐

Did the interviewee abandon the interview?

1. Yes (Precise the number of the last question completed: Q ____)
2. No

Interviewer Name: _____ Code Interviewer: _____

Date Interview: _____ / _____ / 2065
Checked by the supervisor: Signature: _____ Date: ____/ ____ / 2065

Data Entry # 1: Clerk's name: _____ Date _____/_____/2065
Data Entry # 2: Clerk's name: _____ Date _____/_____/2065

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

1. Yes → When? _____Days ago **(make sure that it was interviewed by New ERA and close the interview)**

2. No **(continue interview)**

002. Respondent's ID #: ☐☐☐☐☐☐

002.1 Respondent referred by coupon no. ☐☐☐☐☐ **(Only for Kathmandu and Pokhara IBBS study)**

002.2 In which part of the body respondent usually inject? **(Confirm by observation)**

_____

002.3 Did you share needle/syringe with the friend who brought you here? (Don't ask with seed, only for Kathmandu and Pokhara IBBS study)

1. Yes 2. No

002.4 How long you have been injecting drugs?

Years ☐☐ Months ☐☐

(NOTE: THIS IS A SCREENING QUESTION. IF THE RESPONSE IS LESS THAN THREE MONTHS STOP INTERVIEW BECAUSE THIS PERSON IS NOT ELIGIBLE FOR INCLUSION IN THE SAMPLE)

003.

Interview Location
(to be filled by interviewer)

003.1 Name of location _____

003.2 Ward No. ☐☐

003.3 VDC/Municipality: _____

003.4 District: _____

1.0 BACKGROUND OF RESPONDENT

Q.N.	Questions	Coding Categories	Skip
101	Where are you living now? **(Write current place of residence: Ward No. Tole, Lane etc.)**	Ward..... ☐☐ VDC/Municipality_____ District_____ _	
101.1	How long have you been living continuously at this location?	Month ..... ☐☐☐ Always (since birth) ..... 0 Others (Specify)_____ 96	
102	In the last 12 months have you been away from your home for more than one-month altogether? **(Left home, village/district)**	Yes ..... 1 No..... 2 Don't' know..... 98 No response 99	
103	How old are you?	Age ..... ☐☐ **(write the completed years)**	
104	What is your educational status?	Illiterate..... 0 Literate ..... 19 Grade ..... ☐☐ **(write the completed grade)**	
105	What is your caste? **(Specify Ethnic Group/Caste)**	Ethnicity/Caste _____ Code No..... ☐☐	
106	What is your current marital status?	Never married ..... 1 → 108 Married ..... 2 Divorced/Permanently separated. 3 Widow..... 4 Other (Specify)_____ 96	
107	How old were you when you first got married?	Age ..... ☐☐ **(write the completed years)**	
108	With whom you are living now?	Living with wife ..... 1 Living with female sexual partner. 2 Living without sexual partner..... 3 Others (Specify)_____ ..... 96 No response 99	→ 110
109	Do you think your wife/female sexual partner has any other sexual partners?	Yes ..... 1 No..... 2 Don't' know..... 98 No response 99	→ 110
109.1	If yes, what is the sex of your partner?	Male..... 1 Female 2	

Q.N.	Questions	Coding Categories	Skip
110	During the past one-month how often have you had drinks containing alcohol? **(Such as beer, local beer etc.)**	Every day ..... 1 More than once a week..... 2 Less than once a week ..... 3 Never drink..... 4 Others (Specify)_____ ..... 96 No response..... 99	

2.0 DRUG USE

Q.N.	Questions	Coding Categories	Skip
201	How long have you been using drugs? **(Drug means medicine not used for treatment purpose rather used for Intoxication**)	Years..... ☐☐ Months..... ☐☐ No response 99	
202	How old were you when you first injected drugs? **(Include self-injection or injection by another)**	Years ..... ☐☐ *(write the completed years)*	
203	How long have you been injecting drugs? **(Include self-injection or injection by others**)	Years..... ☐☐ Months..... ☐☐ No response 99	
203.1	Have you injected drugs in the last month?	Yes ..... 1 No..... 2 →	204
203.2	If Yes, have you used non-sterile syringe/needle at any time in the last month?	Yes ..... 1 No..... 2	
203.3	Have you used non-sterile injecting equipment at any time in the last month?	Yes ..... 1 No..... 2	

204 Which of the following types of drugs have you used and/or injected in the past one-week? ***(Read the list, multiple answer possible)***

Description	Used in Last-Week				Injected in Last-Week			
	YES	NO	DK	NR	YES	NO	DK	NR
1. Tidigesic	1	2	98	99	1	2	98	99
2. Brown Sugar	1	2	98	99	1	2	98	99
3. Nitrosun	1	2	98	99	1	2	98	99
4. Ganja	1	2	98	99	1	2	98	99
5. Chares	1	2	98	99	1	2	98	99
6. White Sugar	1	2	98	99	1	2	98	99
7. Phensydyl	1	2	98	99	1	2	98	99
8. Calmpose	1	2	98	99	1	2	98	99
9. Diazepam	1	2	98	99	1	2	98	99
10. Codeine	1	2	98	99	1	2	98	99
11. Phenergan	1	2	98	99	1	2	98	99
12. Cocaine	1	2	98	99	1	2	98	99
13. Proxygin	1	2	98	99	1	2	98	99
14. Effidin	1	2	98	99	1	2	98	99
15. Velium 10	1	2	98	99	1	2	98	99
16. Lysergic Acid Dithylamide(LSD)	1	2	98	99	1	2	98	99
17. Nitrovate	1	2	98	99	1	2	98	99

Q.N.	Questions	Coding Categories	Skip
	18. Combination (Specify) ___	1 2 98 99 1 2 98 99	
	96. Others (Specify)_____	1 2 98 99 1 2 98 99	
204.1	In the last month, did you switch from one drug to another?	Yes ..... 1 No ..... 2 → 205	
204.1.1	If yes, which drug?	From _____drug To _____drug	
204.1.2	What is the reason for switching?	_____ _____ _____ _____ ___	
205	How many times would you say you injected drugs yesterday?	Times..... ☐☐ Not injected ..... 0 → 209	
206	Would you like to tell me why you did not injected yesterday?	_____ _____ _____ _____ ___	
207	How many days ago did you get injected?	**Days ago .....** ☐☐	
208	How many times would you say you injected drugs on the last day?	Times..... ☐☐	
209	During the past one-week how often would you say you injected drugs?	Once a week ..... 1 2-3 times a week ..... 2 4-6 times a week ..... 3 Once a day ..... 4 2-3 times a day ..... 5 4 or more times a day ..... 6 Not injected in the last week ..... 7 Don't know ..... 98 No response 99	

3.0 NEEDLE SHARING BEHAVIORS

Q.N.	Questions	Coding Categories	Skip
301	Think about the times, you have injected drugs yesterday/last day. How many times did you inject drugs on that day? **(Fill the number from answer to Q. 205 or 208 and verify by asking the respondent)**	Times ..... ☐☐	
302	The lat time you injected, how did you get that syringe/needle? **(Public place means places other than the IDU's home that are used to hide syringe/needle)**	My friend/relative gave it to me after his use ..... 1 Unknown person gave it to me after he use ..... 2 I picked it up from a public place which was left there by others+ 3 I picked it up from a public place which was left there by myself+.. 4 I used a new needle/syringe given by NGO staff/volunteer.... 5 (write the name of Organization)	

Q.N.	Questions	Coding Categories	Skip
		I used a needle/syringe which I purchased ..... 6 I reused my own needle/syringe 7 My friend gave new needle/syringe..... ...8 Others (Specify) _____ 96 Don't know ..... 98 No response..... 99	
302.1	If you were in a group the last time that you injected, how many different people in the group do you think used the same needle?	Nos. .....☐☐ Injected alone..... 95	
303	Think about the time before the last time you injected, how did you get that syringe/needle? **(Public place means places other than the IDU's home that are used to hide syringe/needle)**	My friend/relative gave it to me after his use ..... 1 Unknown person gave it to me after he use..... 2 I picked it up from a public place which was left there by others+ 3 I picked it up from a public place which was left there by myself+ 4 I used a new needle/syringe given by NGO staff/ volunteer 5 (write the name of Organization) I used a needle/syringe which I purchased ..... 6 I reused my own needle/syringe ..... 7 My friend gave new needle/syringe..... 8 Others (Specify) _____ 96 Don't know ..... 98 No response 99	
303.1	That time, If you were in a group, how many different people in the group do you Think had used the same needle?	Nos. .....☐☐ Injected alone..... 95	
304	Now think about the time before **(before Q. 303**), how did you get that syringe/ needle? **(Public place means places other than the IDU's home that are used to hide syringe/needle)**	My friend/relative gave it to me after his use ..... 1 Unknown person gave it to me after he use..... 2 I picked it up from a public place which was left there by others+ 3 I picked it up from a public place which was left there by myself+ 4 I used a new needle/syringe given by NGO staff/ volunteer 5 (write the name of Organization) I used a needle/syringe which I purchased ..... 6 I reused my own needle/syringe ..... 7 My friend gave new	

Q.N.	Questions	Coding Categories	Skip
		needle/syringe..... 8 Others (Specify) _____ 96 Don't know ..... 98 No response 99	
304.1	That time If you were in a group, how many different people in the group do you think had used the same needle?	Nos. ..... ☐☐ Injected alone..... 95	
305	Think about the times, you have injected drugs during the past one-week. How often was it with a needle or syringe that had previously been used by someone else?	Every times ..... 1 Almost every-times ..... 2 Sometimes ..... 3 Never used..... 4 Not injected in the last week .... 5 Don't know ..... 98 No response..... 99	→ 314

Q.N.	Questions	Coding Categories				Skip
305.1	When you injected drug during the past week, how often did you use a syringe/needle that had been left in public place? **(Public place means places other than the IDU's home that are used to hide syringe/needle)**	Every times ..... 1 Almost every-times ..... 2 Sometimes ..... 3 Never ..... 4 Don't know ..... 98 No response..... 99				
306	In the past one-week, did you ever share needles and syringes with any of the following?					
	Read out list. Multiple answers possible	**Yes**	**No**	**DK**	**NR**	
	1. Your usual sexual partner	1	2	98	99	
	2. A sexual partner who you did not know	1	2	98	99	
	3. A friend	1	2	98	99	
	4. A drugs seller	1	2	98	99	
	5. Unknown Person	1	2	98	99	
	96. Other (Specify) _____	1	2	98	99	
307	With how many different injecting partners did you share needles or syringes in the past one-week? **(Count everyone who injected from the same syringe)**	Number of partners..... ☐☐ Don't know ..... 98 No response..... .99				
308	In the past one-week, how often did you give a needle or syringe to someone else, after you had already used it?	Every times ..... 1 Almost every-times ..... 2 Sometimes ..... 3 Never ..... 4 Don't know ..... 98 No response..... 99				
309	In the past-week, did you ever inject with a pre-filled syringe? **(By that I mean a syringe that was filled without you witnessing it)**	Yes..... 1 No..... 2 Don't know..... 98 No response..... 99				
310	In the past one-week, how often did you inject drugs using a syringe after someone else had squirted drugs into it from his/her used syringe? **(front-loading/back-loading/ splitting)**	Every times ..... 1 Almost every-times ..... 2 Sometimes ..... 3 Never ..... 4 Don't know ..... 98 No response..... 99				
311	In the past one-week, when you injected drugs, how often did you share a cooker/ vial/container, cotton/filter, or rise water?	Every times ..... 1 Almost every-times ..... 2 Sometimes ..... 3 Never ..... 4 Don't know ..... 98 No response..... 99				
312	In the past one-week, how often you draw up your drug solution from a common container used by others?	Every times ..... 1 Almost every-times ..... 2 Sometimes ..... 3 Never ..... 4 Don't know ..... 98 No response..... 99				

Q.N.	Questions	Coding Categories	Skip
313	In the past one-week, when you injected with needles or syringes that had previously been used, how often did you clean them first?	Every time ..... 1 Almost every-times ..... 2 Sometimes ..... 3 Never ..... 4 Never reused ..... 5 Others (Specify)_____ 96 Don't know ..... 98 No response..... 99	314
313.1	If cleaned, how did you usually clean them?	With water ..... 1 With urine ..... 2 With saliva..... 3 Boil the syringe in water..... 4 With bleach ..... 5 Burning the needle with matchstick ..... 6 Others (Specify)_____ 96 Don't know ..... 98 No response..... 99	
314	Can you obtain new, unused needles and syringes when you need them?	Yes..... 1 No..... 2 Don't' know..... 98 No response..... 99	316
315	Where can you obtain new unused needles and syringes? **(Do not read out list. Multiple answers possible. Probe only with "Anywhere Else?")**	Drugstore ..... 1 Other shop ..... 2 Health worker..... 3 Hospital ..... 4 Drug wholesaler/drug agency ... 5 Family/relatives ..... 6 Sexual partner..... 7 Friends ..... 8 Other drugs users ..... 9 Drugs seller..... 10 Needle exchange program of ____11 Steal from legitimate source (hospital./pharmacy) ..... 12 Buy on streets..... 13 Other (Specify) _____ 96	
316	In the past one-year, did you ever inject drug in another city/district (or another country)?	Yes..... 1 No..... 2 Don't' remember ..... 98 No response..... 99	316.4
316.1	If yes, in which other cities/districts did you inject, including cities in other countries?	Cities_____ Districts_____ Country _____	
316.2	Think about the times you injected drugs in another city/district (including abroad) how often was it with a syringe/needle that had previously been used by someone else?	Every times ..... 1 Almost every-times ..... 2 Sometimes ..... 3 Never ..... 4 Don't know ..... 98 No response..... 99	

Q.N.	Questions	Coding Categories	Skip
316.3	When you injected drugs in another city, how often did you give a syringe/needle to some one else?	Every times ..... 1 Almost every-times ..... 2 Sometimes ..... 3 Never ..... 4 Don't know ..... 98 No response.....99	
316.4	In the last 12 months, have any of an outreach worker, a peer educator or a staff from a needle exchange program given you a new needle/syringe?	Yes ..... 1 No..... 2 Don't' remember ..... 98 No response..... 99	
317	Are you currently under treatment (or receiving help) or have you ever received treatment (or help) because of your drug use?	Currently under treatment ....1 Was in treatment but not now ... 2 Have never received treatment...3 No response..... 99	401
318	How many months ago did you last receive treatment or help for your drug use?	Months ..... ☐☐ Don't know ..... 98 No response..... 99	
319	What kind of treatment or help you received? **(Do not read out the responses, probe asking, "Are there any other kinds of treatment that you've received?" Multiple Answers Possi**		

	Types of Treatments	Name of Institutions
	1. Outpatient counseling	
	2. Self-help groups	
	3. Detoxification w/methadone	
	4. Maintenance w/methadone	
	5. Detoxification w/other drugs	
	6. Detoxification with no drug	
	7. Residential rehabilitation	
	8. Helped for *cold turkey* without medicine	
	9. Forced for *cold turkey* by others without treatment	
	96. Other (Specify) _____	
	99. No response	

4.0 SEXUAL HISTORY

Q.N.	Questions	Coding Categories	Skip
401	How old were you at your first sexual intercourse?	Years old ..... ☐☐ ***(Write completed years)*** Never had sexual intercourse..... → 601 Don't know ..... 98 No response..... 99	
402	Have you had sexual intercourse in the last 12 months?	Yes ..... 1 No ..... 2 No response..... 99	404

Q.N.	Questions	Coding Categories	Skip
403	In total, how many different female sexual partners have you had sex in the last 12 months?	Total Number ..... ☐☐	
403.1	How many were female "regular partners"? **(Your wife or live-in sexual partners)**	Number ..... ☐☐ Don't know ..... 98 No response..... 99	
403.2	How many were female “sex worker”? **(Partners to whom you bought or sold sex in exchange for money or drug)**	Number ..... ☐☐ Don't know ..... 98 No response..... 99	
403.3	How many were female "non-regular partners"? **(Sexual partners, you are not married to and have never lived with and did not have sex in exchange for money)**	Number ..... ☐☐ Don't know ..... 98 No response..... 99	
404	We have just talked about your female sexual partners? Have you ever had any male sexual partners also?	Yes ..... 1 No ..... 2 No response..... 99	501
404.1	If yes, have you had anal sex with any of your male partners in the last 12 months?	Yes ..... 1 No ..... 2 No response..... 99	501
404.2	With how many different male partners have you had anal sex in the last 12 months?	Number ..... ☐☐ Don't know ..... 98 No response..... 99	
404.3	The last time you had anal sex with a male sex partner did you and your partner use a condom?	Yes ..... 1 No..... 2 Don't Know ..... 98 No response 99	
404.4	How often have you used a condom in an anal sex with male sex partner in the past 12 months	Every Times ..... 1 Almost Every Times ..... 2 Some Times ..... 3 Never Used ..... 4 Don't Know..... 98 No response 99	

5.0 NUMBERS AND TYPES OF PARTNERS

(Check Q. 403.1 and circle the response of Q.501)

Q. N.	Questions	Coding Categories	Skip
501.	Did you have sex with female regular partner (wife or live-in partner) during last 12 months?	Yes ..... 1 No..... 2	→ 502
501.1	Think about your most recent female regular sexual partner. How many times did you have sex with her during last one-month?	Times..... ☐☐ Don't know..... 98 No response..... 99	
501.2	The last time you had sex with a female regular partner did you and your partner use a condom?	Yes ..... 1 No..... 2 Don't know..... 98 No response..... 99	→ 501.4 501.4
501.3	Why did not you or your partner use a condom that time?	Not available ..... 1 Too expensive..... 2 Partner objected..... 3	

Q. N.	Questions	Coding Categories	Skip
	(Do not read the possible answers, multiple answer possible)	Don't like them....4 Used other contraceptive....5 Didn't think it was necessary....6 Didn't think of it....7 Other (Specify) _____ 96 Don't know....98 No response....99	
501.4	How often have you used a condom with female regular partners in the past year?	Every times....1 Almost every-times....2 Sometimes....3 Never used....4 Don't know....98 No response....99	
501.5	Did your female regular partner also inject drugs?	Yes....1 No....2 Don't know....98 No response....99	
501.6	Have you ever had anal sex with your female regular partners?	Yes....1 No....2 Don't know....98 No response....99	502
501.7	The last time you had anal-sex with a female regular partner did you and your partner use a condom?	Yes....1 No....2 Don't know....98 No response....99	
501.8	How often have you used a condom in an anal-sex with female regular partners in the past 12 months?	Every times....1 Almost every-times....2 Sometimes....3 Never used....4 Don't know....98 No response....99	
502	Did you have a sexual intercourse with a female sex worker in last 12 months? ***(Check 403.2 and circle the response of Q. 502)***	Yes....1 No....2 →	503
502.1	Think about the female sex workers that you have had sex in the past one-month. In total how many female sex workers you sold sex in exchange for money or drugs?	No.... ☐☐ Don't know....98 No response....99	
502.1.1	With how many sex workers you had sex in last month by paying them money or drugs?	No.... ☐☐ Don't know....98 No response....99	
502.2	Think about your most recent female sex worker. How many times did you have sexual intercourse with her in the past one-month?	Times.... ☐☐ Don't know....98 No response....99	
502.3	The last time you had sex with a female sex worker did you and your partner use a condom?	Yes....1 → No....2 Don't know....98 No response....99	502.5 502.5
502.	Why did not you and your partner use a	Not available....1	

Q. N.	Questions	Coding Categories	Skip
4	condom that time? **(Do not read the possible answers, multiple answer possible)**	Too expensive ..... 2 Partner objected ..... 3 Don't like them ..... 4 Used other contraceptive ..... 5 Didn't think it was necessary… .6 Didn't think of it ..... 7 Other (Specify) _____ 96 Don't know ..... 98 No response 99	

Q. N.	Questions	Coding Categories	Skip
502.5	How often have you used a condom with female sex workers in the past year?	Every times.....1 Almost every-times.....2 Sometimes .....3 Never used.....4 Don't know.....98 No response.....99	
502.6	Do you know whether female sex worker with whom you had sex also injected drugs?	Yes .....1 No.....2 Don't know.....98 No response.....99	
502.7	Have you ever had anal sex with your female sex workers?	Yes .....1 No.....2 Don't know.....98 No response.....99	503
502.8	The last time you had anal-sex with a female sex worker did you use a condom?	Yes .....1 No.....2 Don't know.....98 No response.....99	
502.9	How often have you used a condom in an anal sex with female sex workers in the past 12 months?	Every times.....1 Almost every-times.....2 Sometimes .....3 Never used.....4 Don't know.....98 No response.....99	
503	Did you have a sexual intercourse with a female non-regular sex partner during last 12 months? **(Check 403.3 and circle the response of Q. 503)**	Yes .....1 No.....2	→ 504
503.1	Think about your most recent female non-regular sexual partner. How many times did you have sexual intercourse with her over the past one-month?	Times..... ☐☐ Don't know.....98 No response.....99	
503.2	The last time you had sex with a female non-regular partner did you and your partner use a condom?	Yes .....1 No.....2 Don't know.....98 No response.....99	→ 503.4 503.4
503.3	Why did not you and your partner use a condom that time? **(Don't read the possible answers, multiple answer possible**)	Not available.....1 Too expensive.....2 Partner objected.....3 Don't like them.....4 Used other contraceptive .....5 Didn't think it was necessary.....6 Didn't think of it.....7 Other (Specify) _____ 96 Don't know.....98 No response.....99	
503.4	How often have you used a condom with a female non-regular partner in the past year?	Every times.....1 Almost every-time.....2 Sometimes .....3 Never used.....4 Don't know.....98 No response.....99	

Q. N.	Questions	Coding Categories	Skip
503.5	Did you know whether your female non-regular partners also injected drugs?	Yes ..... 1 No ..... 2 Don't know ..... 98 No response..... 99	
503.6	Have you ever had anal sex with your female non-regular partners?	Yes ..... 1 No ..... 2 Don't know ..... 98 No response..... 99	504
503.7	The last time you had anal sex with a female non-regular partner, did you and your partner use a condom?	Yes ..... 1 No ..... 2 Don't know ..... 98 No response..... 99	
503.8	How often have you used a condom in an anal-sex with female non-regular partners in the past year?	Every times ..... 1 Almost every-times ..... 2 Sometimes ..... 3 Never used..... 4 Don't know ..... 98 No response..... 99	
504	Have you had anal sex with a male partner in the past one year? **(See the response in Q. 404.1 and circle Q. 504 response)**	Yes ..... 1 No 2	→ 505
504.1	Think of your last male sex partner with whom you had anal sex: in the last one month, how many times you had anal sex with him?	Times ..... ☐☐ Don't know ..... 98 No response..... 99	
504.2	The last time you had anal sex with him; did you use condom?	Yes ..... 1 → No ..... 2 Don't know ..... 98 No response..... 99	504.4 504.4
504.3	Why didn't you use condom at that time? **(Don't read possible answer, multiple answer possible)**	Not available ..... 1 Too expensive..... 2 Partner objected..... 3 Don't like ..... 4 Used other contraceptive..... 5 Didn't think it was necessary..... 6 Didn't think of it ..... 7 Other (Specify) _____ 96 Don't know ..... 98 No response..... 99	
504.4	How often have you used a condom during anal sex with a male partner is the past year?	Every times ..... 1 Almost every-times ..... 2 Sometimes ..... 3 Never used..... 4 Don't know ..... 98 No response..... 99	
504.5	Do you know if your male partner with whom you had anal sex also injected drugs?	Yes ..... 1 No ..... 2 Don't know ..... 98 No response..... 99	
505	Have you had sexual intercourse in the last month?	Yes ..... 1 No ..... 2 Don't know 98	507

Q. N.	Questions	Coding Categories	Skip
		No response..... ..99	
505.1	If yes, did you or your partner use a condom when you had last sex in the last month?	Yes..... 1 No ..... 2 Don't know ..... 98 No response.....9 9	
506	In the last month, how often did you or your partner use a condom when you had sex?	Every times ..... 1 Almost every-times ..... 2 Sometimes ..... 3 Never used..... 4 Don't know ..... 98 No response 99	
507	With whom did you have the last sexual intercourse?	FSW .....1 Regular partner .....2 (Wife or live in sexual partner) Other female friend .....3 Male friend .....4 Did not have sexual contact in the past year .....5 Don't Know.....98 No response 99	601
508	Did you use condom in the last sexual intercourse	Yes..... 1 No 2	

6.0 USE AND AVAILABILITY OF CONDOM

(Check responses in Q.N. 404.3, 404.4, 501.2, 501.4, 501.7, 501.8, 502.3, 502.5, 502.8, 502.9, 503.2, 503.4, 503.7, 503.8, 504.4, 505.1, 506, 508 and circle responses in Q. 601 & 602)

Q. N.	Questions	Coding Categories	Skip
601	Have you ever heard of a condom? **(Show picture or sample of condom)**	Yes .....1 No.....2 Don't know.....98 No response 99	701
602	Have you ever used a condom?	Yes .....1 No.....2	
603	Do you know of any place or person from which you can obtain condom?	Yes .....1 No.....2 No response 99	701
604	**n which place or people, you can obtain condoms?** ltiple answer possible. Don't read the list but probe)	Shop .....1 Pharmacy .....2 Clinic .....3 Hospital .....4 Family planning center .....5 Bar/Guest house/Hotel .....6 Health worker .....7 Peer Educator/Outreach doctor 8 Friend .....9 *Pan Pasal* .....10 Others (Specify) _____ 96 No response 99	

Q. N.	Questions	Coding Categories	Skip
604.1	Did any organization give you condom in the last 12 months?	Yes, free of cost.....1 Yes, by taking money.....2 No 3	
605	How long would it take ***(from your house or the place where you work)*** to obtain a condom?	Less than 30 minutes.....1 More than 30 minutes .....2 Don't know.....98 No response.....99	

7.0 KNOWLEDGE AND TREATMENT OF STIs

Q. N.	Questions	Coding Categories	Skip
701	Have you ever heard of diseases that can be transmitted through sexual intercourse?	Yes ..... 1 No ..... 2 No response 99	704
702	Can you describe any symptoms of STIs in women? **(Do not read possible answers, multiple answers possible.)**	Lower abdominal pain ..... 1 Genital discharge ..... 2 Foul smelling ..... 3 Burning pain on urination ..... 4 Genital ulcers/sore ..... 5 Swelling in groin area ..... 6 Itching ..... 7 Other (Specify) _____ 96 Don't know ..... 98 No response 99	
703	Can you describe any symptoms of STIs in men? **(Do not read possible answers, multiple answer possible)**	Genital discharge ..... 1 Burning pain on urination ..... 2 Genital ulcers/sore blister ..... 3 Swellings in groin area ..... 4 Others (Specify) _____ 96 Don't know ..... 98 No response 99	
704	Have you had genital discharge/burning urination during the last 12 months?	Yes ..... 1 No ..... 2 Don't know ..... 98 No response 99	705
704.1	Currently, do you have genital discharge/burning urination problem?	Yes ..... 1 No ..... 2 Don't know ..... 98 No response 99	
705	Have you had a genital ulcer/sore blister during the last 12 months?	Yes ..... 1 No ..... 2 Don't know ..... 98 No response 99	706
705.1	Currently, do you have genital ulcer/sore blister?	Yes ..... 1 No ..... 2 Don't know ..... 98 No response 99	
706	Last time you had a genital discharge/ burning urination or a genital ulcer/sore blister, where did you go for treatment?	Did not seek treatment ..... 1 With private doctor ..... 2 In hospital ..... 3 Never had such symptoms ..... 4 Others (Specify) _____ 96	

8.0 KNOWLEDGE, OPINIONS AND ATTITUDES ON HIV/AIDS

Q. N.	Questions	Coding Categories	Skip
801	Have you ever heard of HIV or the disease called AIDS?	Yes ..... 1 No ..... 2 No response 99	
802	Do you know anyone who is infected with HIV or who has died of AIDS?	Yes ..... 1 No ..... 2 No response 99	804
803	Do you have close relative or close fried who is infected with HIV or has died of AIDS?	Yes, a close relative ..... 1 Yes, a close friend ..... 2 No ..... 3 No response 99	
804	Can a person protect himself/herself from HIV, the virus that causes AIDS, by using a condom correctly during each sexual act?	Yes ..... 1 No ..... 2 Don't know ..... 98 No response 99	
805	Can a person get HIV, from mosquito bites?	Yes ..... 1 No ..... 2 Don't know ..... 98 No response 99	
806	Can a person protect himself/herself from HIV, by having only one uninfected faithful sex partner?	Yes ..... 1 No ..... 2 Don't know ..... 98 No response 99	
807	Can a person protect himself/herself from HIV, by abstaining from sexual intercourse?	Yes ..... 1 No ..... 2 Don't know ..... 98 No response 99	
808	Can a person get HIV, by sharing a meal with someone who is infected?	Yes ..... 1 No ..... 2 Don't know ..... 98 No response 99	
809	Can a person get HIV, by getting injections with a needle that was already used by someone else?	Yes ..... 1 No ..... 2 Don't know ..... 98 No response 99	
810	Can a person who inject drug protect himself/herself from HIV, the virus that causes AIDS, by switching to non-injecting drugs? **(Oral or inhaling drugs)**	Yes ..... 1 No ..... 2 Don't know ..... 98 No response 99	
811	Can a pregnant woman infected with HIV transmit the virus to her unborn child?	Yes ..... 1 No ..... 2 Don't know ..... 98 No response 99	813
812	What can a pregnant woman do to reduce the risk of transmission of HIV to her unborn child? **(Do not read the possible answers, multiple answer possible)**	Take medication (Antiretroviral) ..... 1 Others (Specify) _____ 96 Don't know ..... 98 No response 99	
813	Can women with HIV transmit the virus to her newborn child through breast-feeding?	Yes ..... 1 No ..... 2 Don't know ..... 98 No response 99	

Q. N.	Questions	Coding Categories	Skip
813.1	Do you think a healthy-looking person can be infected with HIV?	Yes ..... 1 No ..... 2 Don't know 98	
813.2	Can a person get HIV by shaking hand with an infected person?	Yes ..... 1 No ..... 2 Don't know 98	
813.3	Can blood transfusion from an infected person to the other transmit HIV?	Yes ..... 1 No ..... 2 Don't know 98	
814	Is it possible in your community for someone to have a confidential HIV test? **(By confidential, I mean that no one will know the result if you don't want him or her to know it.)**	Yes ..... 1 No ..... 2 Don't know ..... 98 No response 99	
814.1	Do you know where to go for HIV test?	Yes ..... 1 No 2	
815	I don't want to know the result, but have you ever had an HIV test?	Yes ..... 1 No ..... 2 No response 99	901
816	Did you voluntarily take up the HIV test, or were you required to have the test?	Voluntary ..... 1 Required ..... 2 No response 99	
817			
817.1			
818	When did you have your most recent HIV test?	Within the past 12 months ..... 1 Between 13-24 months ..... 2 Between 25-48 months ..... 3 More than 48 months ..... 4 Don't know ..... 98 No response 99	
819	Please do not tell me the result, but did you find out the result of your HIV test?	Yes ..... 1 No ..... 2 No response 9	→ 901 → 901
819.1	Why did you not receive the test result?	Sure of not being infected ..... 1 Afraid of result ..... 2 Felt unnecessary ..... 3 Forgot it ..... 4 Others (Specify) _____ 96 No response 99	

9.0 AWARENESS OF HIV/AIDS

(If answer to Q. 801 "No", Go to Q. 902)

Q. N.	Questions	Coding Categories		Skip to Q.N.
901	Of the following sources of information, from which sources have you learned about HIV/AIDS? ***(Read the following list, multiple answers possible)***			
	Source of Information	**Yes**	**No**	
	1. Radio	1	2	
	2. Television	1	2	
	3. Newspapers/Magazines	1	2	
	4. Pamphlets/Posters	1	2	
	5. School/Teachers	1	2	
	6. Health Worker/Volunteer	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	
902	Has anyone give you following information or items in the past year? ***(Multiple answer possible, read the list)***			
	Items	**Yes**	**No**	
	1. Condom	**1**	**2**	
	2. Brochure/Booklets/Pamphlets about HIV/AIDS	1	2	
	3. Information about HIV/AIDS	1	2	
	96. Others (Specify) _____	1	2	

10.0 PROMOTION OF CONDOM *(If answer to Q. 601 "No" Go to Q. 1004)*

Q. N.	Questions	Coding Categories		Skip
1001	In the past one-year have you seen, read or heard any advertisements about condoms from the following sources? ***(Read the following list, multiple answer possible)***			
	Sources	**Yes**	**No**	
	1. Radio	1	2	
	2. Television	1	2	
	3. Pharmacy	1	2	
	4. Health Post	1	2	
	5. Health Center	1	2	
	6. Hospital	1	2	
	7. Health Workers/Volunteers	1	2	
	8. Friends/Neighbors	1	2	
	9. NGOs	1	2	
	10. Newspapers/Posters	1	2	
	11. Video Van	1	2	
	12. Street Drama	1	2	
	13. Cinema Hall	1	2	
	14. Community Event/Training	1	2	
	15. Bill Board/Sign Board	1	2	
	16. Comic Book	1	2	
	17. Community Workers	1	2	
	96. Others (Specify) _____	1	2	
1002	Have you ever seen, heard or read following messages/characters during past one year? ***(Multiple answer possible)***			
	Message/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	
	10. Manis Sanga Manis Mile hara Jeeta Kasko Hunchha	1	2	
	96. Others (Specify)_____	1	2	
1003	Have you ever heard/seen or read messages or materials other than mentioned above?	Yes ..... 1 No 2		→ 1004

Q. N.	Questions	Coding Categories	Skip
1003.1	What? Have you seen, read or heard of ?	_____ _____ _____ _____	
1004	Generally, where do you gather to inject drug?	_____ _____ _____ _____	
1005	How many IDUs do you know who also know you well? **Knowing someone is defined as being able to contact them, and having had contact with them in the past 12 months**	Total _____ ☐☐☐ Don't know..... 98 No response 99	1008
1005.1	Among them, how many are male and female?	Male _____ Female _____ Don't know..... 98 No response 99	
1006	Among those persons, please try to estimate the number of people by range of age:	Less than 15 years old .. ☐☐ 15-19 years old ..... ☐☐ 20-24 years old ..... ☐☐ 25-29 years old ..... ☐☐ 30-40 years old ..... ☐☐ > 40 years old..... ☐☐	
1007	Again, among those, please try to estimate the number of people by religion:	Hindu ..... ☐☐ Buddhist ..... ☐☐ Muslim ..... ☐☐ Christian ..... ☐☐ Others (Specify) _____ ..... ☐☐	
1008	How is the person who gave you the coupon related to you ? (For Pokhara and Kathmandu only)	A close friend ..... 1 A friend ..... 2 Your sexual partner ..... 3 A relative ..... 4 A stranger..... 5 Others (Specify)_____ 96 Don't know..... 98 No response 99	

11.0 KNOWLEDGE AND PARTICIPATION IN STI AND HIV/AIDS PROGRAMS

Q. N.	Questions	Coding Categories	Skip to Q.N.
1101	Have you met or discussed or interacted with Peer Educators (PE) or Outreach Educators (OE) or Community Mobilizes (CM) or Community Educators (CE) in the last 12 months?	Yes ..... 1 No ..... 2 → 1105 No response 99	
1102	What activities did these PE or OEs involve you in when you met them? **(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 Discussion on safe injecting behavior ..... 3 Regular/non-regular use of condom ..... 4 Demonstration on using condom correctly ..... 5 Others (Specify)_____ 96	
1103	Do you know which organization were they from? **(Multiple answers. DO NOT READ the possible answers)**	KCC. ..... 1 HELP. ..... 2 KYC. ..... 3 PSK ..... 4 LALS ..... 5 Youth Vision ..... 6 Naulo Ghumti ..... 7 CSG ..... 8 INF (Nepalgunj) ..... 9 SMF ..... 10 AHH ..... 11 RICHMOND ..... 12 Nav Kiran ..... 13 Jhapa Plus ..... 14 Namuna ..... 15 Others (Specify) _____ 96 Don't know 98	
1104	How many times have these PE, OE, CM and/or CE met you in the last 12 months?	Once ..... 1 2-3 times ..... 2 4-6 times ..... 3 7-12 times ..... 4 More than 12 times 5	
1105	Have you visited or been to any out reach center (DIC, IC or CC) in the last 12 months? **Drop-In Center (DIC), Information Center (IC), Counseling Center (CC)**	Yes ..... 1 No ..... 2 → 1109	
1106	What did you do when you went to the out reach center (DIC,IC or CC) in the 12 last months ? **(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 learn about the safe injecting behavior ..... 3 Went to watch film on HIV/AIDS ..... 4 Participated in discussion on HIV transmission 5	

Q. N.	Questions	Coding Categories	Skip to Q.N.
		Went to have new syringe..... 6 Other (Specify)_____ 96	
1107	Do you know which organizations run those out reach center (DIC, IC or CC)? **(Multiple answers. DO NOT READ the possible answers)**	KCC..... 1 HELP..... 2 KYC..... 3 PSK ..... 4 LALS..... 5 Youth Vision ..... 6 Naulo Ghumti ..... 7 CSG ..... 8 INF (Nepalgunj)..... 9 SMF ..... 10 AHH ..... 11 RICHMOND ..... 12 Nav Kiran..... 13 Jhapa Plus ..... 14 Namuna..... 15 Others (Specify) _____ 96 Don't know..... 98	
1108	How many times have you visited out reach centers (DIC, IC or CC) in the last 12 months?	Once..... 1 2-3 times..... 2 4-6 times ..... 3 7-12 times..... 4 More than 12 times 5	
1109	Have you visited any STI clinic in the last 12 months?	Yes ..... 1 No..... 2	→ 1113
1110	What did you do when you visited such STI clinic? **(Multiple answers. DO NOT READ the possible answers given below)**	Blood tested for STI ..... 1 Physical examination conducted for STI identification ..... 2 Discussion on how STI is/isn't transmitted. ..... 3 Discussion on safe injecting behavior ..... 4 Regular/non-regular use of Condom..... 5 Took a friend with me..... 6 Other (Specify)_____ 96	
1111	Do you know which organizations run those STI clinics? **(Multiple answers. DO NOT READ the possible answers)**	AMDA ..... 1 SACTS ..... 2 NFCC ..... 3 CAC..... 4 Paluwa..... 5 Siddhartha Club ..... 6 NRCS ..... 7 NSARC..... 8 FPAN..... 9 Others (Specify)_____ ..... 96 Don't know 98	
1112	How many times have you visited STI clinic in the last 12 months?	Once..... 1 2-3 times..... 2 4-6 times ..... 3 7-12 times 4	

Q. N.	Questions	Coding Categories	Skip to Q.N.
		More than 12 times 5	
1113	Have you visited any Voluntary Counseling and Testing (VCT) centers in the last 12 months?	Yes ..... 1 No ..... 2 →	1117
1114	What did you do when you visited such VCT center/s? **(Multiple answers. DO NOT READ the possible answers)**	Received pre-HIV/AIDS test counseling ..... 1 Blood sample taken for HIV/AIDS test ..... 2 Received post HIV/AIDS test counseling ..... 3 Received information on safe injecting behavior ..... 4 Received HIV/AIDS test result.... 5 Received counseling on using condom correctly in each sexual intercourse ..... 6 Received information on HIV/AIDS window period..... 7 Took a friend with me..... 8 Other (Specify)_____96	
1115	Do you know which organizations run those VCT centers? **(Multiple answers. DO NOT READ the possible answers)**	AMDA..... 1 Youth Vision ..... 2 SACTS..... 3 NFCC ..... 4 CAC ..... 5 Naulo Ghumti ..... 6 NSARC ..... 7 NRCS..... 8 FPAN ..... 9 WATCH ..... 10 Namuna ..... 11 Others (Specify) _____ 96 Don't know 98	
1116	For how many times have you visited VCT center in the last 12 months?	Once..... 1 2-3 times..... 2 4-6 times ..... 3 7-12 times ..... 4 More than 12 times 5	
1117	Have you ever participated in HIV/AIDS awareness raising program or community events in the last 12 months?	Yes ..... 1 No..... 2 →	1121
1118	If Yes, What activities did you participate in? **(Multiple answers. DO NOT READ the possible answers)**	Street drama ..... 1 AIDS Day ..... 2 Condom Day ..... 3 Video Shows ..... 4 Group discussions ..... 5 Talk programs ..... 6 HIV/AIDS related training ..... 7 HIV/AIDS related Workshops.... 8 Condom use demonstrations .... 9 Others (Specify) _____ 96	

Q. N.	Questions	Coding Categories	Skip
1119	Do you know which organizations organized those activities? **(Multiple answers. DO NOT READ the possible answers given below)**	AMDA ..... 1 HELP ..... 2 KYC ..... 3 Youth Vision ..... 4 NFCC ..... 5 LALS ..... 6 Naulo Ghumti ..... 7 WATCH ..... 8 GWP ..... 9 NRCS ..... 10 NSARC ..... 11 AHH ..... 12 Recovery Nepal ..... 13 SAHARA ..... 14 CSG ..... 15 Others (Specify) _____ 96 Don't know 98	
1120	How many times have you participated in such activities in the last 12 months?	Not participated within last year.....0 Once ..... 1 2-3 times ..... 2 4-6 times ..... 3 7-12 times ..... 4 More than 12 times 5	
1121	Have you heard of any Community Home Based Care (CHBC) services that are provided for HIV positive people?	Yes ..... 1 No 2	
1122	Have you heard of care and support programs that provide information regarding ART and ART services necessary for HIV infected people?	Yes ..... 1 No 2	

12.0 STIGMA AND DISCRIMINATION

Q. N.	Questions	Coding Categories	Skip
1201	If a male relative of yours gets HIV, would you be willing to take care of him in your household?	Yes ..... 1 No ..... 2 Don't know 98	
1202	If a female relative of yours gets HIV, would you be willing to take care of her in your household?	Yes ..... 1 No ..... 2 Don't know 98	
1203	If a member of your family gets HIV, would you want to keep it a secret?	Yes ..... 1 No ..... 2 Don't know 98	
1204	If you knew a shopkeeper or food seller had HIV, would you buy food from him/her?	Yes ..... 1 No ..... 2 Don't know ..... 98 No response 99	
1205	Do you think a person with HIV should get the same, more or less health care than someone with any other chronic disease?	Same ..... 1 More ..... 2 Less ..... 3 Don't know ..... 98 No response 99	
1206	If one of your colleagues has HIV but	Yes 1	

Q. N.	Questions	Coding Categories	Skip
	he/she is not very sick, Do you think he/she should be allowed to continue working?	No.....2 Don't know.....98 No response.....99	

ANNEX – 4: Oral Informed Consent

Oral Informed Consent Form for male Injecting Drug Users

Title: Integrated Biological and Behavioral Surveillance Survey among Injecting Drug Users in Kathmandu Valley, Pokhara Valley, Eastern *terai* Highway Districts, and Western to Far Western *terai* Districts.

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

Principal Investigator/s:

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Introduction

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

Information about the Research

In total 1245 male injecting drug users (IDUs) will be selected for interview from Kathmandu Valley, Pokhara Valley, Eastern *terai* highway districts and Western to Far Western *terai* highway districts. You are in the pool of possible candidates, but the final selection would be based on your choice.

Study participants in the Kathmandu Valley and the Pokhara Valley will be selected by a process in which individuals who have participated in the study invite others they know to participate. In the Eastern *terai* highway districts and western to far western *terai* highway districts two stage cluster sampling method will be used to select study participants. We will ask you some questions and then ask you to provide blood sample for HIV and syphilis test. We will draw 5-6 ml blood by 10 ml disposable syringe from your vein in your arm.

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

Possible Risks

The risk of participating in this study is the minor discomfort during blood drawing. Providing blood sample does not put you at any other risk. Some of the questions we ask make you feel uncomfortable to answer them. You are free not to answer such questions and also to stop participating in the research at any time you want to do so. You might feel some mental stress after getting your test results. But at such time you will get counseling on HIV and STI through a qualified counselor. They will provide information about STIs and counseling for any mental stress you have.

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

Possible Benefits

You will be provided with free treatment, if currently you have any STI symptoms. You will be given lab test results of HIV and Syphilis and made aware of how STI/HIV is transmitted and how it can be prevented and controlled. If your STI tests are positive for the curable sexual infection such as syphilis and you have not already been treated for this, you will be offered free treatment. We will refer you for treatment for HIV but will not provide this treatment for you. If you go to the ART sites/hospital run by the Government of Nepal, you will get service free of cost. You will also be provided with information on safer sex to reduce your risk of being infected by or infecting your sexual partners. The information we obtain from this research will help to plan strategies to control and prevent further spread of HIV/AIDS and other sexually transmitted diseases in your cities and particularly among your community.

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

If You Decide Not to Be in the Research

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

Confidentiality

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

Payment

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

successful referral of peers for the study will be provided. You may refer up to three peers or friends.

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

If you have a questions about the study
If you have any questions about the research, please contact:
Satish Raj Pandey, ASHA project - FHI/Nepal, Baluwatar, Kathmandu, Phone: 01-4437173; **OR *Siddhartha Man Tuladhar***, New ERA, Kalopool, Kathmandu, Phone: 01-4413603; **OR *Laxmi Bilas Acharya*,** ASHA project - FHI/Nepal, Baluwatar, Kathmandu, Phone: 01-4437173
We will not be able to pay for/care for injuries that occur as a result of the study.

Your Rights as a Participant

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

VOLUNTEER AGREEMENT

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

_____

_____
Signature of witness Date

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

_____

_____
Signature of Person Who Obtained Consent Date

ANNEX – 5: Clinical/Lab Checklist

CONFIDENTIAL

INTEGRATED BIO- BEHAVIORAL SURVEY (IBSS) AMONG INJECTING DRUG USERS IN SELECTED SITES OF NEPAL
FHI/NEW ERA/SACTS – 2009

Clinical/Lab Checklist

Respondent ID 2065/___/___ | | | | | | | Number: Date:

Name of Clinician: _____

Name of Lab Technician: _____

(33A) Clinical TEST (B) Specimen Collection

Weight : _____Kg.

B.P. : _____mm of Hg

Pulse : _____

Temperature: _____° F

	Yes	No
Pre-test counseled	1	2
Blood Collected for HIV & Syphilis	1	2
Date & place for post-test results given	1	2
Condom given	1	2
IEC materials given	1	2

1.0 Syndromic Treatment Information

101. Have you experienced genital discharge/burning urination/swelling and tenderness of testis or epididymis in the past one month?

1. Yes 2. No

[If yes, give urethral discharge/scrotal swelling syndrome treatment]

102. Have you had genital ulcer/sore blister in the past one month?

1. Yes 2. No

[If yes, give genital ulcer syndrome treatment and time for follow-up]

103. Have you had a tender or non-tender/solid or fluctuant swelling in the groin area in the past one month?

1. Yes 2. No

[If yes, give inguinal swelling (bubo) syndrome treatment and time for follow-up]

ANNEX – 6: Study Centers

District	Lab Centers	No. of Centers	Sample Covered	Total
Jhapa	Kakarvitta	4	20	75
	Bhadrapur		10	
	Birtamod		20	
	Damak		25	
Morang	Urlabari	3	30	135
	Belbari		25	
	Biratnagar		80	
Sunsari	Dharan	2	105	135
	Itahari		30	
Total		**9**	**345**	**345**

ANNEX – 7: Participation in Post Test Counseling

Date	Counseling Center	Expected Client	Client Counseled		Client with HIV+	Client with HIV-
			N	%		
February 11 - 13,2009	Kakarvitta	20	8	40.0	0	8
February 11 - 12,2009	Bhadrapur	10	9	90.0	1	8
February 15 - 19,2009	Damak	25	11	44.0	1	10
February 17 - 20,2009	Birtamod	20	7	35.0	0	7
February 20 - 24,2009	Urlabari	30	9	30.0	0	9
March 15 - 19,2009	Belbari	25	5	20.0	2	3
February 28 – March 22,2009	Biratnagar	80	22	27.5	1	21
February 22 - 25,2009	Itahari	30	7	23.3	0	7
March 08 - 22,2009	Dharan	105	11	10.5	0	11
Total		**345**	**89**	**25.8**	**5**	**84**

ANNEX – 8: HIV Prevalence by Study Centers

District	Total sample	HIV Positive	%
Interviewed Districts			
Morang	135	17	12.6
Sunsari	135	7	5.2
Jhapa	75	4	5.3
Total	**345**	**28**	**8.1**

ANNEX – 9: Reasons for Not Injected Drugs on the Previous Day of the Survey

Injecting practice	First round (2003)		Second round (2005)		Third round (2007)		Fourth round (2009)	
	n=50	%	n=89	%	n=78	%	n=81	%
Reasons for not injecting the previous day yesterday *								
Lack of money	17	34.0	51	57.3	32	41.0	27	33.3
To quite slowly	17	34.0	15	16.9	17	21.8	14	17.3
Unavailability/lack of drugs	6	12.0	6	6.7	5	6.4	25	30.9
Busy in house work	5	10.0	7	7.9	9	11.5	5	6.2
Due to illness	0	0.0	3	3.3	4	5.1	1	1.2
Trying other medicines	0	0.0	3	3.3	0	0.0	4	4.9
Not a regular users (Use sometimes only)	0	0.0	0	0.0	6	7.7	3	3.7
Others	7	14.0	6	6.7	6	7.7	4	4.9

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

ANNEX – 10: Typical Injecting Points

Typical injection points	First round (2003)		Second round (2005)		Third round (2007)		Fourth round (2009)	
	N=345	%	N=345	%	N=345	%	N=345	%
Upper arms	141	40.9	104	30.1	82	23.8	35	10.2
Wrists	107	31.0	73	21.2	119	34.5	51	14.8
Forearms	43	12.5	76	22.0	11	3.2	95	27.5
Back of palm	24	7.0	16	4.6	7	2.0	3	0.9
Calves	14	4.1	3	0.9	42	12.2	138	40.0
Thigh	9	2.6	46	13.3	2	0.6	19	5.5
Armpit	0	0.0	13	3.8	75	21.7	0	0.0
Arch	0	0.0	4	1.2	0	0.0	3	0.9
Others	7	2.0	10	2.9	7	2.0	1	0.3

ANNEX – 11: Gathering Place to Inject Drugs

S.N	Gathering places of IDUs to inject drugs	First round (2003)		Second round (2005)		Third round (2007)		Fourth round (2009)	
		N=345	%	N=345	%	N=345	%	N=345	%
1.	Own room/friends room/Drug seller's/User's house	115	33.3	36	10.4	75	21.7	47	13.6
2.	Jogbani (India)	70	20.3	136	39.4	105	30.4	88	25.5
3.	Forest/Bushes	70	20.3	98	28.4	98	28.4	144	41.7
4.	Open ground/town planning area /open places	35	10.1	0	0.0	0	0.0	0	0.0
5.	River bank/Slum area/Pond/bridge area	16	4.6	42	12.2	22	6.4	33	9.6
6.	Garage/Junk store/Buspark	12	3.5	6	1.7	0	0.0	1	0.3
7.	Pani Tanki (India)	7	2.0	7	2.0	15	4.3	2	0.6
8.	Temple area	5	1.4	0	0.0	0	0.0	3	0.9
9.	Shop	5	1.4	0	0.0	0	0.0	0	0.0
10.	Vacant house/New construction home	4	1.2	0	0.0	1	0.3	2	0.6
11.	Galgaliya (India)	3	0.9	0	0.0	17	4.9	8	2.3
12.	Pool house/Swimming pool	2	0.6	0	0.0	0	0.0	0	0.0
13.	Toilet/Public toilet	1	0.3	6	1.7	7	2.0	12	3.5
14.	Road/Railway lick	0	0.0	8	2.3	0	0.0	1	0.3
15.	Naxalbadi (India)	0	0.0	2	0.6	0	0.0	0	0.0
16.	Around campus/school	0	0.0	2	0.6	0	0.0	4	1.2
17.	Others	0	0.0	2	0.6	5	1.4	0	0.0

ANNEX – 12: Combination of Different Drugs Injected

S.N	Drugs Combination	N=319
1.	Norphin + Avil + Diazepam	123
2.	Diazepam + Phenergan + Lubrigesic	47
3.	Avil + Diazepam + Nerjesik	27
4.	Norphin + Avil + Diazepam + Phenergan	23
5.	Norphin + Avil + Diazepam + Phenergan+Fortwin	19
6.	Avil + Diazepam + Phenergan + Lubrigesic	12
7.	Avil + Diazepam + Phenergan+ Nerjesik	9
8.	Norphin + Diazepam + Phenergan	6
9.	Diazepam + Tidigesic + Phenergan	5
10.	Avil + Diazepam + Phenergan+ Fortwin + Nerjesik	4
11.	Avil + Diazepam + Phenergan	4
12.	Avil + Diazepam + Lubrigesic	4
13.	Avil + Diazepam + Phenergan + Fortwin	4
14.	Avil + Diazepam + Fortwin	3
15.	Norphin + Avil + Diazepam + Fortwin	3
16.	Norphin + Avil + Diazepam + Lubrigesic	2
17.	Avil+ Lubrigesic	2
18.	Norphin + Diazepam + Lubrigesic	2
19.	Nergesic + Avil + Phenergan	2
20.	Diazepam + Phenergan + Fortwin + Nerjesik	1
21.	Avil + Tidigesic+ Phenergan+Calmpose	1
22.	Avil + Diazepam + Phenergan+ Calmpose+ Nerjesik	1
23.	Avil + Diazepam + Tidigesic+ Phenergan	1
24.	Avil + Diazepam + Tidigesic	1
25.	Avil + Tidigesic+Elgic	1
26.	Avil + Diazepam	1
27.	Diazepam + Phenergan + Stargun	1
28.	Avil + Tidigesic + Phenergan + Fortwin	1
29.	Avil + Lubrigesic + Fortwin	1
30.	Diazepam + Phenergan + Lubrigesic + Proxyvon	1
31.	Avil + Diazepam + Phenergan + Fortwin + Stargun	1
32.	Norphin + Avil	1
33.	Avil + Diazepam + Fortwin + Nerjesik	1
34.	Avil + Phenergan + Fortwin	1
35.	Norphin + Avil + Phenergan + Lubrigesic	1
36.	Norphin + Diazepam + Nerjesic	1
37.	Avil + Diazepam + Phenergan + Spasmindant + Nerjesic	1

Note: Because of multiple answers, numbers may add up to more than 100.

ANNEX – 13: Drug Switching Practice of IDUs and Reasons for it

Drug switching behavior of IDUs	First round (2003)		Second round (2005)		Third round (2007)		Fourth round (2009)	
	N	%	N	%	N	%	N	%
Switched from one drugs to another drugs in past month Q204.1								
Yes	8	2.3	5	1.4	3	0.9	12	3.5
No	337	97.7	340	98.6	342	99.1	333	96.5
Total	**345**	**100.0**	**345**	**100.0**	**345**	**100.0**	**345**	**100.0**
Switched From								
Brown sugar to Tidigesic	8	100.0	1	20.0	0	0.0	0	0.0
Brown sugar to Proxyvon	0	0.0	1	20.0	0	0.0	0	0.0
Brown sugar to Norphin + Diazepam	0	0.0	1	20.0	0	0.0	0	0.0
Norphin + Nitrovate to Avil	0	0.0	1	20.0	0	0.0	0	0.0
Norphin + Diazepam + Avil to Alcohol + Phensydole	0	0.0	1	20.0	0	0.0	0	0.0
Brown Sugar to Nergesic	0	0.0	0	0.0	1	33.3	0	0.0
Norphin + Fortwin to Nergesic + Diazepam + Avil	0	0.0	0	0.0	1	33.3	0	0.0
Tidigesic + Diazepam + Phenergan + Algic to Brown Sugar	0	0.0	0	0.0	1	33.3	0	0.0
Norphin + Diazepam + Avil to Proxyvon	0	0.0	0	0.0	0	0.0	1	8.3
Diazepam + Tidigesic + Avil to Phensydyl	0	0.0	0	0.0	0	0.0	1	8.3
Lubrigesic to Velium 10	0	0.0	0	0.0	0	0.0	1	8.3
Brown sugar to Diazepam + Phenergan + Lubrigesic	0	0.0	0	0.0	0	0.0	1	8.3
Diazepam + Avil + Nerjesic to Corex + Nitrosun	0	0.0	0	0.0	0	0.0	1	8.3
Avil + Phenergan + Nerjesic to Corex + Nitrosun	0	0.0	0	0.0	0	0.0	1	8.3
Diazepam + Avil + Nerjesic to Marijuana + Nitrosun	0	0.0	0	0.0	0	0.0	1	8.3
Diazepam + Avil + Nerjesic to Brown sugar + Nitrosun	0	0.0	0	0.0	0	0.0	1	8.3
Avil + Phenergan + Nerjesic to Phensydyl + Corex + Nitrosun	0	0.0	0	0.0	0	0.0	1	8.3
Diazepam + Tidigesic + Phenergan to Norphin + Diazepam + Avil + Phenergan	0	0.0	0	0.0	0	0.0	1	8.3
Brown sugar to Diazepam + Phenergan + Nerjesic	0	0.0	0	0.0	0	0.0	1	8.3
Norphin + Diazepam + Avil to Marijuana + Spasmo + Nitrosun	0	0.0	0	0.0	0	0.0	1	8.3
Total	**8**	**100.0**	**5**	**100.0**	**3**	**100.0**	**12**	**100.0**
Reasons for switching								
Not access of brown sugar	5	62.5	0	0.0	0	0.0	0	0.0
To reduce/Leave slowly of drug	3	37.5	0	0.0	0	0.0	3	25.0
Unavailability/Scarcity of drug	0	0.0	3	60.0	1	33.3	4	33.3
Lack of money	0	0.0	2	40.0	1	33.3	3	25.0
Others	0	0.0	0	0.0	1	33.3	2	16.7
Total	**8**	**100.0**	**5**	**100.0**	**3**	**100.0**	**12**	**100.0**

ANNEX – 14: Name of Institutions and Types of Treatment Received

Types of Institutions \ Types of Treatments	Residential rehabilitation	With other drug	Out patient counseling
N=135	**%**	**%**	**%**
Punarjivan Kendra	19.3	-	2.2
Addiction Recovery Center (ARC)	14.8	-	-
Lifeline Help Group	11.9	-	-
Richmond Fellowship Center	11.9	-	-
Happy Nepal Wisdom Foundation	9.6	0.7	-
Gurukul	4.5	-	-
Samudayik Upachar Kendra	3.7	-	-
Astha Foundation	3.7	-	-
LALS	1.5	-	-
New Hope Foundation	0.7	-	-
Sparsha Nepal	0.7	-	-
B.P.Memorial Hospital	-	-	-
Own Home	-	1.7	-

Others	7.4	2.2	0.7
Total	**89.6**	**3.7**	**3.0**

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

ANNEX – 15: Reasons for not Using Condom in the Last Sex by Type of Sex Partners

Reasons of not using condom	First round (2003)		Second round (2005)		Third round (2007)		Fourth round (2009)	
	N	%	N	%	N	%	N	%
Reasons of not using condom with regular partner in the last sexual intercourse								
Not available	1	1.1	8	8.6	3	3.1	4	4.7
Partner objected	7	7.9	2	2.2	5	5.2	10	11.6
Don't like them	17	20.2	23	24.7	29	29.9	33	38.4
Used other contraceptive	13	14.6	14	15.1	31	32.0	21	24.4
Didn't think it was necessary	68	76.4	60	64.5	61	62.9	7	8.1
Didn't think of it	1	1.1	1	1.1	2	2.1	0	0.0
Willing to have baby	0	0.0	3	3.2	4	4.1	22	25.6
Trust on partner	0	0.0	5	5.4	0	0.0	9	10.5
Sexual Unsatisfaction	0	0.0	0	0.0	2	2.1	1	1.2
Total	**89**	*	**93**	*	**97**	*	**86**	*
Reasons of not using condom with sex worker in the last sexual intercourse								
Not available	14	56.0	16	66.7	9	40.9	13	54.2
Partner objected	3	12.0	1	4.2	3	13.6	2	8.3
Don't like them	4	16.0	7	29.2	7	31.8	12	50.0
Didn't think it was necessary	3	12.0	0	0.0	2	9.1	0	0.0
Didn't think of it	3	12.0	5	20.8	1	4.5	0	0.0
Others	1	4.0	0	0.0	3	13.6	0	0.0
Sexual Unsatisfaction	0	0.0	0	0.0	2	9.1	1	4.2
Used other contraceptive	0	0.0	0	0.0	1	4.5	0	0.0
Total	**25**	*	**24**	*	**22**	*	**24**	*
Reasons of not using condom with non- regular partner in the last sexual intercourse								
Not available	6	20.7	19	41.3	14	28.6	23	34.9
Partner objected	3	10.3	2	4.3	3	6.1	11	16.7
Don't like them	5	17.2	14	30.4	10	20.4	18	27.3
Used other contraceptive	1	3.4	2	4.3	4	8.2	3	4.6
Didn't think it was necessary	13	44.8	11	23.9	26	53.1	9	13.6
Didn't think of it	5	17.2	1	2.2	5	10.2	7	10.6
Trust on partner	0	0.0	1	2.2	0	0.0	11	16.7
Sexual Unsatisfaction	0	0.0	3	6.5	1	2.0	1	1.5
Others	3	10.3	2	4.3	3	6.1	0	0.0
Total	**29**	*	**46**	*	**49**	*	**66**	*

* Because of multiple answers percentages may add up to more than 100.