Integrated Bio-behavioral Survey (IBBS) among Male Injecting Drug Users (IDUs) in the Western and the Far-Western Terai - 2007





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## **ABBREVIATIONS**

AHH - Association for Helping the HelplessAIDS - Acquired Immuno-Deficiency Syndrome

ASHA - Advancing Surveillance, Policies, Prevention, Care & Support to

Fight HIV/AIDS

DIC - Drop-in-Centre

ELISA - Enzyme Linked Immuno Assays FHI - Family Health International

FSW - Female Sex Worker

HIV - Human Immuno-Deficiency VirusIBBS - Integrated Bio-Behavioral Survey

ID - Identification NumberIDU - Injecting Drug User

IEC - Information, Education and Communication

INF - International Fellowship NepalMARPs - Most at Risk populations

MSM - Men who have Sex with Men

NCASC - National Centre for AIDS and STD Control

NGO - Non-Governmental OrganizationNHRC - Nepal Health Research Council

NNSWA - Nepal National Social Welfare Association N-SARC - Nepal STD & AIDS Research Center

OE - Outreach Educator PE - Peer Educator

PHSC - Protection of Human Subjects Committee

PPS - Probability proportional to Size

RPR - Rapid Plasma Reagin

SACTS - STD/AIDS Counseling and Training Services

SLC - School Leaving Certificate

SPSS - Statistical Package for the Social Sciences

STI - Sexually Transmitted Infection

TPHA - Treponema Pallidum Hemagglutination Assay

VCT - Voluntary Counseling and Testing
 WATCH - Women Together for Change
 WHO - World Health Organization

# **EXECUTIVE SUMMARY**

The National Center for AIDS and STD Control (NCASC), Nepal, has developed a comprehensive National Surveillance Plan for HIV and AIDS that includes a regular schedule for conducting an Integrated Biological and Behavioral Survey (IBBS) among most at risk populations (MARPs). These surveillance studies, conducted at regular intervals, help to assess health risk behaviors, to measure the prevalence of HIV and Sexually Transmitted Infections (STIs) among MARPs and to monitor trends in the epidemic to inform the HIV response in Nepal.

The IBBS is conducted by NCASC with technical and financial support from Family Health International/Nepal (FHI/Nepal) and the United States Agency for International Development (USAID). The current MARPs for which information is collected through IBBS include injecting drug users (IDUs), female sex workers (FSWs), and men who have sex with men (MSM).

This report details the findings of the second round of IBBS conducted among 300 male IDUs in the Western and Far-Western Terai. The primary objective of this study was to collect strategic information needed to analyze trends in risk behavior and HIV/STI infection among IDUs.

The study was conducted among IDUs in seven districts (Rupandehi, Kapilvastu, Banke, Bardia, Dang, Kailali and Kanchanpur, districts). Three hundred male IDUs were sampled using cluster sampling methodology.

Structured questionnaires were used to collect behavioral data and information on STI/HIV/AIDS awareness among respondents.

Study centers with laboratories/clinics were set up at easily accessible locations in all three districts. Pre-test counseling sessions were held before the clinical examination and blood sample collections. All the respondents were then examined for STI identification and blood samples were collected for biological testing of HIV and syphilis infection. Study participants were provided syndromic treatment for STI symptoms if warranted. HIV and syphilis test results were provided later at locally established VCT centers. Post test counseling was also provided at these sites by experienced counselors.

## **Below are the Key Findings:**

# **Socio Demographic Characteristics**

The IDUs were young in this survey; mostly below the age of 30 (63.4%). The median age of the respondents was 27.

Over two fifths (43.7%) of IDUs were single and 51 percent of IDUs were either living alone or without a co-habiting sex partner.

IDUs in the Western and Far-Western Terai were fairly well educated with 81 percent of them having attended secondary school or higher education. A quarter (25.7%) had attended primary school, 5 percent were literate but had no formal education and 14 percent of the IDUs were illiterate.

IDUs from various caste/ethnicities were represented in this study. Over a quarter (25.3%) came from Chhetri/Thakuri castes while 14.7 percent were from occupational groups.

### **STI/HIV/AIDS Prevalence**

Among the 300 study participants, 11 percent were tested to be HIV-positive. The prevalence rate was similar in 2005 with 11.7 percent

Syphilis history was found among 1.3 percent of IDUs while none of the respondents were currently infected with syphilis at the time of the study.

The prevalence of HIV was significantly higher (p<0.05) among those who had been injecting drugs for more than five years (17.4%), those who had injected with a previously used needle (22.6%) and those who had injected with a needle/ syringe left in a public place (38.5%).

Current sexual behavior of the respondents and the number of their sex partners did not have a significant relation with HIV prevalence rates among the respondents.

## **Drug Injecting Practices**

On average, the respondents had been injecting drugs for five and a half years, a considerable increase from 4.3 years in 2005. Forty four percent of IDUs had been injecting for five years or more, whereas 19 percent of respondents in the study districts had started injecting during the last two years.

Twenty three percent of respondents reported injecting once a day, while 19 percent had injected two or three times a day in the week preceding the survey.

Seventy one percent of IDUs injected a combination of different drugs.

# **Needle/Syringe Using Practice**

More IDUs had been avoiding risky injecting practices in 2007 than in 2005. Nevertheless, high risk behaviors, such as using a needle/ syringe which had been previously used by themselves or someone else or using those which had been left in public places, was reported by 10.3 percent of respondents in their most recent, 6.7 percent in their second most recent and 7.7 percent in their third most recent injections.

Ten percent of IDUs had used other's needle/syringe and 4.3 percent had used a needle/syringe kept in a public place at least once in the week preceding the survey.

Among those IDUs who had injected in other towns/cities, 8.2 percent had used a pre-used needle/syringe and 10.8 percent had given their needle/syringe to someone else after use.

### **Sexual Behavior**

Ninety eight percent of IDUs had engaged in sexual intercourse before. Around 84 percent of them were below 20 when they had their first sexual relation.

Overall, 47.3 percent of IDUs had two or more sex partners in the year preceding the survey.

In the past year, 48.6 percent of IDUs had sex with regular partners. Among them, 92 percent had sexual contact in the month preceding the survey.

Nineteen percent of respondents had sexual contact with non-regular female sex partners in the past year and 51.8 percent had sexual contacts with their non-regular partner/s in the previous month.

Thirty one percent of IDUs had sexual contact with female sex workers in the past year, while 49.5 percent of them had maintained sexual contact with them in the past month.

Sixty seven percent of IDUs had used a condom during their last sex act with a sex worker, while 57.1 percent had done so with a non- regular partner; 25.2 had used a condom during their last sexual act with a regular partner.

In the past year, 48.4 percent of IDUs had used condoms consistently with female sex workers, as compared to 39.3 percent with non-regular female sex partners and seven percent with regular female sex partners.

### STI and HIV/AIDS Awareness and Treatment Practices

Overall, 5.7 percent of IDUs had not heard about STIs before.

Around nine percent of respondents had experienced genital discharge and 10.3 percent had genital ulcer/sores in the past year. Almost 58 percent of those IDUs who had experienced STI symptoms had never sought treatment.

In total, 77.3 percent of IDUs knew about all three major indicators, abstinence from sexual contact - A, being faithful to one partner-B and condom use during each sexual contact - C. Meanwhile, 57 percent of IDUs were aware of all five major modes of HIV/AIDS transmission- BCDEF (a healthy looking person can be infected with HIV - D, a person can not get the HIV virus from a mosquito bite - E and sharing meal with an HIV infected person does not transmit the HIV virus - F).

### **HIV Test**

Around 95 percent of IDUs knew that a confidential HIV testing facility was available in their communities.

Fifty four percent of respondents had ever tested themselves for HIV. Among those who had tested, 79 percent had received their test result.

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

Altogether 80.3 percent of IDUs had met peer/outreach educators at least once in the past year. Sixty nine percent had visited a DIC and 14 percent had visited a VCT center in the past one year. However, only 3.3 percent of IDUs had been to an STI clinic during that same period of time.

Little over one-third (35.3%) of respondents had participated in a HIV/AIDS related program or similar community event before.

# 1. 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 subgroups since 1991. As of December 2007, a cumulative total of 10,546 HIV infections, including 1,610 cases of AIDS, have been reported in Nepal (NCASC, December 2007). In 2007, the NCASC has estimated about 70,000 people (including children and adults above the age of 49 years) to be infected with HIV in Nepal. This indicates a big gap between the estimated number of HIV infections and the number of people who have been tested and know their status.

The HIV epidemic in Nepal is currently concentrated in most at risk populations (MARPs). The National HIV/AIDS Strategy 2006-2011 has identified several MARPs and describes effective strategies and interventions for targeted programming for these groups. To inform the development of the Strategy and the National HIV/AIDS Action Plan, the NCASC has included the Integrated Bio-Behavioral Survey (IBBS) in its National Surveillance Plan to collect information on knowledge, risk behaviors, STI prevalence and HIV prevalence among specific MARPs. The IBBS studies provide information on trends over time and can be used to assess the impact of current programs and effectively plan for future direction.

The IBBS is being conducted at regular intervals in Nepal. This is the second round of the study in the Western and Far-Western Terai conducted among IDUs. 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 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 phase of the Integrated Bio-Behavioral Survey (IBBS) among IDUs in the Western and the Far-Western Terai conducted in 2005 found that 11.7 percent of IDUs were HIV-positive (New ERA/SACTS/FHI 2005). Similar studies, conducted in the same year in Pokhara, revealed that 22 percent of IDUs were HIV-positive in the Valley. Similarly, 52 percent, 33 percent and eight percent of IDUs were HIV-positive in Morang, Sunsari, and Jhapa districts respectively.

A number of intervention strategies are underway to promote HIV/AIDS awareness at a larger scale. Information derived from IBBS helps to design timely intervention strategies, as well as to monitor the HIV prevalence situation among the targeted populations.

This report focuses on the findings of the second round of study in the Western and Far- Western Terai and compares the results from the two surveys where possible.

# 2. DESIGN AND METHODOLOGY

# 2.1 Objectives of the Study

In line with the objectives of the previous round of IBBS, this second round of study was undertaken primarily to determine the prevalence of HIV/STI and to assess HIV/STI related risk behavior among IDUs in the Western and Far-Western Terai.

In addition, this study collected specific information on IDUs; their sociodemographic characteristics, level of awareness about HIV/STI and exposure to intervention programs in the Western and Far-Western Terai.

# 2.2 Study Population

This cross-sectional study was conducted among IDUs who are considered as one of the 'core groups' for transmission of HIV/STI infection. Current IDUs from the seven districts of the Western and Far-Western Terai (Rupandehi, Kapilvastu, Dang, Banke, Bardia, Kailali and Kanchanpur) were included in this study.

All participants were screened for eligibility criteria. For the purposes of this study, the inclusion definition for IDUs was "those current injectors aged 16 years and above who had been injecting illicit drugs for at least three months prior to the date of survey".

# 2.3 Sample Size and Sampling Design

The sample size was calculated to detect 15 percent differences in key indicators, such as needle/syringe sharing and consistent condom use. The sample size was determined by using a basic statistical formula which estimated a sample size of 300 IDUs (Annex 2).

This is the second round of IBBS conducted among IDUs in the Western and the Far Western Terai districts of Nepal. Before the initiation 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.

A networking study among IDUs in the Western and Far-Western Terai was conducted before the actual survey to see if Respondent Driven Sampling (RDS) methodology would be feasible in the region. IDUs in the study districts primarily have a short term acquaintance with other IDUs, sharing a weak or virtually anonymous relationship with each other. They do not meet frequently, and many of them share a very casual relationship which is limited to occasional meetings at DICs, drug purchasing places and adjoining Indian markets. It was further observed that inter-district networking of IDUs is very limited and has been restricted due to the long distances between districts. On this basis, two stage cluster sampling methodology was used for this study.

Concerned stakeholders at the district level and representatives from local governmental organizations (GOs) and non-governmental organizations (NGOs) were consulted to collect information on IDUs and their injecting practices. A rapid list of the IDUs and their gathering/injecting locations was made. In addition to this, estimated maximum and minimum numbers of IDUs to be found in the identified locations were listed.

Based on the preliminary information collected during the mapping exercise, lists of locations and the estimated number of IDUs in each location were prepared. Two-stage cluster sampling was used to draw the sample. A location with at least 20 IDUs was defined as a cluster in the first stage. Those sites with less than 20 estimated IDUs were combined with the neighboring site to make a cluster with minimum size of 20 IDUs. In the first stage, 30 clusters were selected using probability proportional to the size (PPS) method; in the second stage, from each selected cluster, 10 respondents were selected randomly.

# The fieldwork started on 25 August and was completed on 16 October, 2007.

# 2.4 Study Process

A quantitative research approach was adopted for this study. Structured questionnaires were used to collect behavioral data relating to drug injection, 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 round were repeated. A new section was also added to the questionnaire this year to derive information on issues like exposure of the IDUs to ongoing HIV/AIDS awareness programs and their participation in such activities. The questionnaires were developed based on the "Guidelines for Repeated Behavioral Surveys in Populations at Risk of HIV" (FHI, 2000). The new section on program exposure was pre-tested before finalizing the questionnaire (Annex 1).

Before initiating the actual interview, all those coming with referral cards were informally asked certain question in order to ensure that they met the inclusive criterion set for the study. Injection marks were also observed 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, medical records, and blood specimen of the particular respondent. This card was also used for the distribution of the test results. Only those participants who produced their ID card were provided the HIV and syphilis test results verbally with 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, 30 first stage clusters were defined as explained above. From each of the first stage clusters 10 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 communities.

Because of the social stigma and discrimination associated to injecting drug behavior, some of the randomly selected IDUs were not easily accessible as they did not want to disclose their IDU 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 for contacting them. At least three attempts were made to contact and include the person randomly selected. If it was not successful after three attempts that individual was replaced by the next 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 survey. Among 73 refusal cases, 66 did not meet the study criteria, three were afraid of drawing blood for the test and four were busy in other works. Those who did not take part in the study were offered the provision of 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" approvals were obtained from Family Health International's ethical review body, Protection of Human Subject Committee (PHSC), and the Nepal Health Research Council (NHRC) prior to the commencement of the fieldwork. The study protocols were carefully reviewed and approved by these organizations. Moreover, verbal informed consent was obtained from all the participants in the presence of a witness prior to the interview and collection of the blood sample. 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 Procedure

The study participants were clinically checked for any symptoms of STIs by the health assistant who also filled in a checklist with information provided by the respondents (Annex 5). They provided syndromic treatment to the respondents with 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 5 ml blood sample 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 -12 to -20°C at SACTS laboratory.

Syphilis was tested using the *Rapid Plasma Reagin* (RPR) test card manufactured by Omega Diagnostics Ltd UK and confirmed by means of *the Serodia Treponema Pallidum Hem Agglutination test* (TPHA; Omega Diagnostics Ltd. UK). TPHA positive samples and all samples with positive RPR were further tested for the titre up to 64 times dilution. On the basis of titre of RPR, all the specimens with RPR/TPHA positive results were divided into two categories.

- TPHA positive with RPR-negative or RPR -positive with titre < 1:8 were classified as history of syphilis
- TPHA positive with RPR titre 1:8 or greater were classified as current syphilis requiring immediate treatment

For detection of HIV antibody *Enzyme Linked Immuno Sorbent Assay* (ELISAs) was used. If the ELISA test showed a negative result no further test was conducted and the test result was reported as non-reactive. But if the first test showed a positive result then a second ELISA test was performed. If the second result too confirmed the first result then the test result was reported as reactive. But if the second result contradicted with the first then a third test was done. The final test results thus were declared positive if the test results showed "negative, negative, positive" and negative if it gave out "positive, negative, negative"). The proposed testing protocol is based on World Health Organization (WHO) guidelines (strategy 3) and the National VCT Guidelines of Nepal developed by the NCASC, 2004.

# 2.5 Study Management

The study was conducted by a team that was comprised of one study director, one research coordinator, one research officer, two research assistants and field teams. The field teams formed for the survey included one research assistant, five supervisors/interviewers, one health assistant, one lab technician, one runner and local motivator/s (as per 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, 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 counselors from SACTS conducted a separate session on STI and HIV/AIDS and pre-test counseling. The study team was also made familiar with the general behavior of IDUs and skills required to deal with them by personnel from Recovering Nepal, an organization that works with IDUs. In addition, the training focused on providing a clear concept of informed consent to the research team.

Study centers were established at the central parts of Bhairahawa, Butwal, Nepalgunj, Dhangadi and Mahendranagar municipalities for carrying out the survey (see Annex 6). Individual interviews, clinical examinations and blood collection were carried out in separate rooms in each of the study centers.

To ensure the quality of data, New ERA and FHI officials supervised the fieldwork regularly. Field supervisors reviewed all the completed questionnaires. Any inconsistencies in the responses were clarified through discussions with the concerned interviewer later the same day. Cross-checking questions were also asked to the study participants to avoid duplication.

## 2.6 Post-Test Counseling and Test Result Distribution

All the study participants who went to receive their test results with their ID card were provided HIV and Syphilis test results with post-test counseling by a trained counselor at Namuna, Naulo Ghumti, International fellowship Nepal (INF), Association for Helping the Helpless (AHH) and Nepal National Social Welfare Association (NNSWA) VCT Centers in Bhairahawa, Butwal, Nepalgunj, Dhangadi and Mahendranagar respectively. The study participants were informed about the location and operating hours of the VCT site right after the collection of their blood sample for testing.

Post-test counseling and individual report dissemination was completed between the 24<sup>th</sup> of September and the 7<sup>th</sup> of November, 2007, at the above mentioned VCT centers in the study districts. Out of the 300 IDUs tested for HIV, only 50 (16.7%) turned up for their test results (Annex 7). This might be because there was no provision for the reimbursement of transportation costs which may have otherwise prompted the IDUs to visit the VCT center and collect their report. Secondly, the time gap between the actual interview and test result dissemination might have 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 was focused on high-risk behavior and other aspects of STI and HIV. Some participants were also referred to other health facilities for additional services.

# 2.7 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. 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, 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, socio-demographic characteristics, injecting practices and sexual behaviors.

# 3. SOCIO-DEMOGRAPHIC CHARACTERISTICS OF IDUS

This chapter discusses the demographic and social characteristics of 300 male IDUs recruited for the sample from seven districts of the Western and the Far-Western Terai.

## 3.1 Demographic Characteristics

The demographic characteristics of the IDUs are presented in Table 3.1. The IDUs were mostly young; six in ten (63.4%) were younger than 30 at the time of the survey. Adolescents aged 19 or younger made up 6.7 percent of the total study participants, while five percent of IDUs were 40 years or older. The median age of the participants was 27 years.

Four in ten (43.7%) were single and 5.7 percent were either divorced/separated from their wives or widowers, while half of the respondents (50.7%) were married at the time of the survey. The majority of those who ever got married (78.7%) had been married before they turned 25. The median age at respondents' first marriage was 21 years.

Just over one half (51%) lived alone or without a sexual partner while 49 percent were living with their spouses.

**Table 3.1: Demographic Characteristics of the Sample Population** 

Demographic characteristics		N	%
Age			
<= 19 Yrs		20	6.7
20-24		78	26.0
25-29		92	30.7
30-34		67	22.3
35-39		28	9.3
40 +		15	5.0
Medi	ian age	27	-
Marital status			
Married		152	50.7
Never married		131	43.7
Divorced/Separated/Widower		17	5.7
	Total	300	100.0
Age at first marriage			
<=14		4	2.4
15-19		57	33.7
20-24		72	42.6
25-29		32	18.9
30-37		4	2.4
Median age		21	-
	Total	169	100.0
Currently living with			
Alone/ friend / without a sexual partner		153	51.0
Spouse		147	49.0
	Total	300	100.0

# 3.2 Social Characteristics

IDUs in the Western and the Far Western Terai were fairly well educated with 81 percent of them having attended secondary school or higher education. A quarter (25.7%) had attended primary school, 5 percent were literate but had no formal education and 14 percent of the IDUs were illiterate.

IDUs from various caste/ethnicities were represented in this study. Over a quarter (25.3%) came from Chhetri/Thakuri castes while 14.7 percent were from occupational groups.

A large majority (78%) of the study participants were born in the districts under study. Seventeen percent had been living in the study districts for more than five years (Table 3.2).

**Table 3.2: Social Characteristics of the Sample Population** 

Social Characteristics	N=300	%
Education		
SLC and above	60	20.0
Secondary	106	35.3
Primary	77	25.7
Literate only	15	5
Illiterate	42	14.0
Ethnicity		
Chhetri/Thakuri	76	25.3
Occupational caste	44	14.7
Tamang/Magar	37	12.3
Musalman	32	10.7
Brahmin	31	10.3
Terai caste	26	8.7
Newar	23	7.7
Gurung/Rai	17	5.7
Giri/Puri/Sanyasi	4	1.3
Chaudhary/Tharu	3	1.0
Majhi/Sunuwar	3	1.0
Thakali	2	0.7
Others	2	0.7
Duration of stay in Western to Far-Western Terai		
Since birth	234	78.0
Since 5 years	16	5.3
More than 5 years	50	16.7

# 4. PREVALENCE OF HIV AND STI

Enzyme Linked Immuno Sorbent Assay (ELISA) was used to detect HIV antibody. Syphilis was tested using Rapid Plasma Reagin (RPR). All the specimens with RPR/TPHA positive results were divided into two categories on the basis of titre of RPR:

- TPHA positive with RPR negative or RPR positive with titre ≤1:8 were classified as history of syphilis
- TPHA positive with RPR titre 1:8 or greater were classified as current syphilis requiring immediate treatment

### 4.1 HIV/STI Prevalence

Among the 300 study participants 11 percent were HIV-positive while four (1.3%) had a history of syphilis; none of the study participants were currently infected with high titre syphilis. This finding indicates that sexually transmitted infection is not a major problem among the IDUs in the study districts.

Table 4.1: HIV and STI Prevalence among IDUs

HIV and STI Prevalence	N=300	%
HIV	33	11.0
Active Syphilis	0	0.0
Syphilis History	4	1.3

## 4.2 Relation between Socio-Demographic Characteristics and HIV Infection

Table 4.3 shows the relation between HIV infection and selected demographics and social characteristics of the respondents. HIV prevalence was 11.8 percent among IDUs aged 20 or more, whereas no respondent younger than 20 was HIV-positive. The difference, however, was not large enough to be statistically significant.

Similarly, no statistical significance was observed between HIV prevalence rate and marital status; respondents who were married (11.8%) were only marginally more likely to be HIV-positive than single participants (9.9%).

Education status of the sampled IDUs did not have a statistically significant association with HIV infection either. It was 7.1 percent among illiterate respondents and 11.6 among the rest.

Table 4.2: Relation between Socio-Demographic Characteristics and HIV Infection

Socio-demographic characteristics	Total	HIV+	%	P Value
Age				
Below 20 years	20	0	0.0	>0.05
20 years and above	280	33	11.8	>0.03
Marital status				
Ever married	169	20	11.8	>0.05
Never married	131	13	9.9	>0.03
Literacy				
Illiterate	42	3	7.1	>0.05
Literate/formal school	258	30	11.6	>0.05
Total	300	33	11.0	

## 4.3 Relation between Drug Injection Behavior and HIV

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

A significant relation was noticed between how long respondents have been injecting and HIV prevalence (p<0.01). The infection rate was 17.4 percent among those respondents who had been injecting drugs for more than five years. The rate dropped to eight percent among those who had been injecting drugs for two to five years and to 1.8 among those who had been injecting drugs for less than two years.

The frequency of injection during the past week did not have a significant association with HIV infection (p > 0.05) even though a higher rate of HIV infection was found among those IDUs who injected 1-6 times in the past week than among those who injected every day (Table 4.3).

Data indicates that sharing syringes puts IDUs at a greater risk of contracting HIV. The HIV infection rate was almost three times higher among those IDUs who had shared needles/syringe with others (22.6%) than among those who had avoided this practice (9.7%) in the past week. The difference is statistically significant (p<0.05).

Likewise, those respondents who used syringes left in public places during the past week were more vulnerable to HIV than those who stayed away from these types of syringes. HIV prevalence was significantly higher among IDUs who had injected with a needle/syringe kept in a public place (38.5%) than among those who avoided such syringes (9.8%) in the past week. This too is statistically significant (p < 0.01).

Table 4.3: Relation between Drug Injecting Behavior and HIV Infection

Drug injecting behavior	Total	HIV+	%	P value
Injecting drugs since				
Less than 2 year	56	1	1.8	
2-5 Years	112	9	8.0	< 0.01
More than 5 years	132	23	17.4	
Frequency of drug injection in the past week				
Not Injected	30	2	6.7	
1-6 times a week	142	18	12.7	>0.05
Everyday	69	6	8.7	>0.03
2 or more times a day	59	7	11.9	
Used a previously used needle/syringe during the past week				
Not injected/Never	269	26	9.7	< 0.05
Every Injected	31	7	22.6	<0.03
Used a needle/syringe kept in a public place during the past week				
Not injected/Never	287	28	9.8	< 0.01
Every Injected	13	5	38.5	<0.01
Total	300	33	11.0	

# 4.4 Relation between Sexual Behavior and HIV

The association between HIV infection and risk behavior needs to be examined with caution. Current sexual behaviors may not necessarily be related to the HIV status of the respondents as they may have changed their behavior after being diagnosed with HIV. Similarly, IDUs who are not sexually active may share drugs/needles which may have infected them with HIV.

Table 4.4: Relation between Sexual Behavior and HIV

Sex with different partners in the past 12 months	Total	HIV+	%	P value
With a regular partner				>0.05
Yes	143	18	12.6	
No	151	15	9.9	
Never had sexual experience	6	0	0	
With a non-regular partner				
Yes	56	3	5.4	>0.05
No	238	30	12.6	
Never had sexual experience	6	0	0	
With a sex worker				
Yes	91	7	7.7	>0.05
No	203	26	12.8	
Never had sexual experience	6	0	0	
Number of regular partners in the past 12				
months	157	1.5	0.6	>0.05
0 Partner	157 143	15 18	9.6 12.6	
1 partner	143	18	12.0	
Number of non-regular partners in the past 12 months				
0 Partner	244	30	12.3	
1 partner	29	3	10.3	>0.05
Number of sex workers in the past 12 months				
0 Partners	209	26	12.4	
1 sex worker	25	2	8.0	>0.05
2 or more sex workers	66	5	7.6	
Total	300	33	11.0	

Note: The cells with zero cases have been excluded from Chi-Square tests.

The rate of HIV infection was higher among IDUs who had sexual contact with regular partners in the past year (12.6%) than among those who did not (9.9%). As for non-regular partners and sex workers, IDUs who abstained from having sex with them had a higher HIV prevalence rate (12.6% and 12.8%) than IDUs who had maintained sexual relations with these types of partners in the last year (5.4% and 7.7%). Although the differences in HIV prevalence rates were not statistically significant, the data points towards a trend among HIV-positive IDUs. They are more likely to maintain sex with their regular partners and less likely to engage in sexual encounters with non-regular partners or FSWs than IDUs who are not diagnosed with HIV. It is important to note here that this trend reflects their current sexual behavior and may have been different prior to HIV diagnosis.

Like the type of sexual partners, the number of partners in the year preceding the survey did not have a statistical impact on the HIV prevalence rate among IDUs in the Western and Far-Western Terai.

Odds ratio of HIV risk was calculated to analyze the risk associated with infection. IDUs who had injected with another's previously used needle/syringe in the past week were 2.73 times more at risk of HIV infection than among those who had not done so. Likewise, an IDU who used needles/syringes kept in a public was 5.78 times more likely to contract HIV than those who did not. Notably, the estimated risk for using needles/syringes kept in public places varies between 1.52 and 21.35, and the relation is statistically significant.

Similarly, the risk of HIV infection is higher for IDUs who have previously injected drugs in other parts of the country or in other countries than among those who had not done so in the past year. These IDUs had about 1.44 times higher odds ratio of

HIV compared to the rest (Table 4.5). Although the difference is not statistically significant, the data indicates a general trend.

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

Characteristics	Odd Ratio	# cases (n)	95% Confidence Interval
Education			
Illiterate	-	42	(0.47, 7.40)
Literate	1.71	258	
Marital Status			
Never married	-	131	(1.52,21.35)
Ever married	1.22	169	
Injected with another's previously used syringe during past week			
Yes	2.73	31	(0.96, 7.49)
No	-	287	
Injected with a syringe kept in a public place			
Yes	5.78	13	(1.52,21.35)
No	-	287	
Injected with a pre-filled syringe			
Yes	-	12	(0.17, 29.41)
No	1.38	288	
Injected in another part of the country or in another country			
Yes	1.44	158	(0.65,3.21)
No	-	142	

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

# 5. DRUG USE, NEEDLE SHARING AND TREATMENT

Needle/syringe and drugs sharing behavior of IDUs needs to be carefully explored to design and implement preventive strategies for the target population. The information in this chapter relates specifically to alcohol intake, drug using and needle sharing behavior among IDUs, in addition to any kind of treatment sought by the respondents in order to quit drugs.

# 5.1 Alcohol Consumption and Oral Drug Use among IDUs

Eighty five percent of sampled IDUs had consumed alcohol at least once in the past month. Almost 44 percent had consumed alcohol everyday while 21 percent had an alcoholic drink more than once a week. On the other hand, fifteen percent of IDUs had refrained from any alcohol intake in the past month.

Overall, 68.7 percent of IDUs had been using drugs orally for over five years and 26.7 percent had been doing so for the last two to five years. The average duration of oral drug use among the respondents was eight years.

Table 5.1: Alcohol Intake and Oral Drug Use among IDUs

Alcohol and oral drug use	N=300	%
Alcohol intake during the past month		
Every day	131	43.7
More than once a week	63	21.0
Less than once a week	61	20.3
Never	45	15.0
Duration of drug use		
Less than 2 years	14	4.7
2 – 5 years	80	26.7
More than 5 years	206	68.7
Average duration in years	8.0	-

As for the types of oral drugs used by the respondents in the week preceding the survey, Marijuana, locally called *Ganja*, was the most popular oral drug with 64.3 percent reporting to have used it in the previous week. Around one third had used Nitrosun (34.3%), brown sugar (32.7%) and Charas (32.3%). Some other IDUs had used oral drugs like Nitrovate (18.7%) and Proxygin (16%).

Table 5.2: Types of Drugs Used Orally by IDUs

Types of drugs used orally in the last week	N=300	%
Ganja	193	64.3
Nitrosun	103	34.3
Brown Sugar	98	32.7
Chares	97	32.3
Nitrovate	56	18.7
Proxygin	48	16.0
Spasmo	30	10.0
Phensydyl	23	7.7
Corex	9	3.0
Velium 10	4	1.3
Effidin	3	1.0
Others	8	2.7

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

## 5.2 Drug Injecting Practices of IDUs

On average, the respondents had been injecting drugs for 5.5 years. As seen in Table 5.3, 44 percent of IDUs had been injecting for five years or more, 37.3 percent had been doing so for the past two to five years and about 19 percent of respondents in the study districts had started injecting in the last two years.

Nearly four in ten (39%) had injected drugs for the first time when they were under 21. The median age for the first injection was 22 years.

Twenty three percent of IDUs had injected once a day and 19 percent had injected two to three times a day in the past week. While 10 percent of respondents had not injected in the previous week, there were few IDUs (0.7%) who had injected four or more times a day in the week preceding the survey.

As for the number of shots on the last day respondents injected drugs, 21.7 percent had injected twice and 7.7 percent of them had injected three or more times on the last day. The majority had injected only once.

**Table 5.3: Drug Injecting Practices of IDUs** 

Drug Injecting Practices	N=300	%
Duration of drug injection habit		
Less than 2 years	56	18.7
2 – 5 years	112	37.3
More than 60 months	132	44.0
Average duration years	5.5	-
Age at first drug injection		
Up to 20 years	116	38.7
21 + years	184	61.3
Median age	22	-
Frequency of drug injections within the past week		
Not injected	30	10.0
Once a week	20	6.7
2-3 times a week	63	21.0
4-6 times a week	59	19.7
Once a day	69	23.0
2-3 times a day	57	19.0
4 or more times a day	2	0.7
Frequency of drug injections on the last day		
1 time	212	70.7
2 times	65	21.7
3 or more times	23	7.7
Mean	1.4	-

IDUs reported injecting drugs into different parts of their body as per their convenience in locating their veins. The majority (62.7%) mentioned that they injected in their calves. Eighteen percent injected in their wrists while 12.7 percent did so in their upper arms (Annex 9).

The respondents gathered at different sites to inject drugs. Around 45 percent met at a forest/bush. Some crossed the border and injected at the nearby Indian town of Sunauli (25.7%); sixteen percent injected at home. Other injecting spots included lavatories, river bank and slums (Annex 10).

Table 5.4 lists the types of drugs injected by the respondents during the past week. Seventy one percent of them had used a combination of various drugs. In this regard the most common combination of drugs was Lubrigesic and Phenargan (For other types of combinations, see Annex 11). Around 18 percent had injected brown sugar in the week preceding the survey.

**Table 5.4: Types of Drugs Injected by IDUs** 

Types of drugs injected	N=300	%
Combination	213	71.0
Brown sugar	53	17.7
Proxibon	32	10.7
Norfin	12	4.0
Luprijesic	6	2.0
Tidigesic	2	0.7
Diazepam	2	0.7
Others	4	1.3

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

In the past month only four IDUs (1.3%) had switched from one drug to another. Unavailability of the drugs in the market was the main reason cited for switching from one drug to another (Annex 12).

# 5.3 Syringe Use and Sharing Behavior

Drug injecting/sharing habits of the IDUs were assessed in terms of their last three injections. In this regard, the respondents were asked how they had obtained the needle/syringe used in the last three injections. Answers provided by the IDUs have been categorized as low risk (Low risk: Use of new needles and syringes obtained from different places) or high risk (High Risk: Use of own previously used syringe, use of needles and syringes given by friends or relatives and/or use of needles and syringes kept in public places by himself or others) injecting behavior in the following table (Table 5.5).

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

	Drug injecting acts N=300					
Needle/syringe use during recent drug injections	Most Recent			d Most cent		l Most cent
	n	%	n	%	n	%
Low Risk Injecting Behavior						
Used a new needle/syringe that was purchased	218	72.7	230	76.7	211	70.3
Used a new needle/syringe given by NGO staff/volunteers/friend	51	17.0	50	16.7	66	22.0
Low Risk Behavior Total	269	89.7	280	93.3	277	92.3
High Risk Injecting Behavior						
Used own previously used needle/syringe	24	8.0	7	2.3	10	3.3
Friend/relatives gave after his use	1	0.3	7	2.3	7	2.3
Used needle/syringe that had been kept in a public place by himself	0	0.0	2	0.7	2	0.7
Used needle/syringe that had been kept in a public place by someone	4	1.3	2	0.7	1	0.3
Others	2	0.7	2	0.7	3	1.0
High Risk Behavior Total	31	10.3	20	6.7	23	7.7
Persons in the group using the same needle/syringe						
2 persons	21	7.0	18	6.0	25	8.3
3 or more persons	3	1.0	3	1.0	3	1.0
None/Alone	276	92.0	279	93.0	272	90.7
Total	300	100.0	300	100.0	300	100.0

As reflected in the above table, most of the IDUs had adopted low risk behavior during their last three injections. Around 90 percent in their most recent, 93.3 percent in their second most recent and 92.3 in their third most recent injection had used a new syringe/needle either self purchased or given by an NGO staff or a friend. The proportion of IDUs using a self-purchased needle/syringe was the highest in all the last three injection acts compared to those who used a new needle/syringe given by NGO staff/volunteers/friend (Table 5.5).

On the other hand, 10.3 percent of IDUs in their most recent, 6.7 percent in their second most recent and 7.7 percent in their third most recent injections had chosen to adopt high risk injecting behavior. They had injected with a needle/syringe they had previously used or which was given by friends or relatives after their use, or that had been left in a public place.

As in the last three injections, data on needle/syringe using behavior in the week preceding the survey also point towards increasing consciousness among current IDUs regarding the risk associated with needle/syringe sharing. A larger proportion of IDUs (about 90% and over) had avoided high-risk injecting behaviors such as use of needle/syringe that had been used by others, used needle/syringe that had kept in a public place and gave needle/syringe to someone else in the week preceding the survey (Table 5.6).

Nevertheless, 10.3 percent of IDUs had used an old needle/syringe, 4.3 percent had injected with a syringe left in a public place and nine percent had given their used needle/syringe to others at least once in the past week (Table 5.6). Moreover, 11.7 percent of IDUs had shared their syringe with two or more injecting partners in the week preceding the survey. While all of them had shared their needle/syringe with their friends, one IDU (2.9%) had also shared with an unknown person and another respondent had also shared the same needle with his drug seller (2.9%).

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

Needle/syringe use throughout the past week	N	%
Used a needle/syringe that had been used by others		
Never Used	269	89.7
Used	31	10.3
Used a needle/syringe that had been kept in a public place		
Never Used	287	95.7
Used	13	4.3
Gave a needle/syringe to someone else		
Yes	273	91.0
No	27	9.0
Number of partners with whom a needle/syringe was shared		
None	265	88.3
Two partners	26	8.7
Three or more partners	9	3.0
Total	300	100.0
Types of needle/syringe sharing partners* n=35		
Friend	35	100.0
Unknown person	1	2.9
Drug Seller	1	2.9
Total	35	*

<sup>\*</sup> Note: Because of multiple answers, the percentages may add up to more than 100.

# 5.4 Drug Sharing Behavior

Some IDUs had followed unsafe drug sharing practices in the past week. Four percent had injected with a pre-filled syringe and 8.7 percent had injected at least once with a syringe filled from another syringe. Thirty one percent of respondents had drawn drug solutions from a common container and 12.3 percent had shared injecting materials, such as spoons, cookers, vial/containers and cotton, at least once in the past week.

Table 5.7: Past Week's Drugs Sharing Behavior among IDUs

Drug sharing practices during the past week	N=300	%
Injected with a pre-filled syringe		
Yes	12	4.0
No	288	96.0
Injected with a syringe after drugs were transferred into it from another's syringe		
Never injected	274	91.3
Injected	26	8.7
Shared a bottle, spoon, cooker, vial/container, cotton/filter or rinse water		
Never shared	263	87.7
Shared	37	12.3
Drew drug solution from a common container used by others		
Never	207	69.0
Drew at least once	93	31.0

Information on IDUs movement both within and outside the country and their injecting practices in the place/s of their visit was also collected during this survey. Over half of the respondents (52.7%) had injected drugs elsewhere in Nepal or in other countries that they had visited in the past year. Among these IDUs, 8.2 percent had injected with somebody else's previously used syringe and 10.8 percent had given their used needle/syringe to others at least once while injecting at the place/s of their visit (Table 5.8).

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

Injecting practices in other parts of the country and out of the country in the past 12 months	N	%
Injected in other parts of the country/out of the country		
Yes	158	52.7
No	142	47.3
Total	300	100.0
Used a needle/syringe that had been used by others		
Yes	13	8.2
No	145	91.8
Gave a needle/syringe to someone else after use		
Sometimes – Always	17	10.8
Never	141	89.2
Total	158	100.0

# 5.5 Needle/Syringe Cleaning Practice

Previous studies have shown that some IDUs inject with previously used syringe/needle after washing them. Improper cleaning of shared and used needles/syringes increases the risk of HIV infection among IDUs. Twenty two percent of respondents had cleaned a used syringe in the past week before re-using it. Among them, only 13.6 percent had cleaned a used needle/syringe with bleach.

Table 5.9: Needle/Syringe Cleaning Practice of IDUs

Needle/syringe cleaning behavior	N	%
Cleaned a pre-used needle/syringe in the past week		
Yes	66	22.0
No	234	78.0
Total	300	100.0
Ways of cleaning needle/syringe		
Bleach	9	13.6

Without Bleach	57	86.4
Total	66	100.0

# 5.6 Knowledge of and Access to New Needle/Syringe

The majority (97.3%) said that they could obtain a new syringe whenever necessary. Drugstores (95%) and needle exchange programs (82.3%) run by different NGOs were named as important sources. Other main sources were drug sellers (35.7%) and hospitals (28.3%) (Table 5.10).

Table 5.10: Knowledge of Sources of New Syringes among IDUs

Descriptions	N=300	%
Can obtain new syringe		
Yes	292	97.3
No	8	2.7
Can obtain syringe from*		
Drugstore	286	95.3
Needle exchange program	247	82.3
Drug seller	107	35.7
Hospital	85	28.3
Friends	6	2.0
Drug wholesaler	5	1.7
Other shop	2	0.7
Health Worker	2	0.7
Others	5	1.7

<sup>\*</sup>Note: Because of multiple answers, the percentages may add up to more than 100.

### **5.7** Treatment Practice

Table 5.11 shows IDUs' treatment status. The majority of them (72.3%) had not received any kind of treatment so far. Among the ever-treated IDUs, 60.2 percent had received de-addiction treatment less than two years ago, while the rest had received treatment more than two years ago.

**Table 5.11: Treatment Received by IDUs** 

Treatment for De-addiction		N	%
Treatment status			
Ever treated		83	27.7
Never treated		217	72.3
To	otal	300	100.0
Last treatment received			
Less than 6 months		9	10.8
6-11 months before		15	18.1
12-23 months before		26	31.3
24-35 months before		23	27.7
36-47 months before		8	9.6
48 or more months before		2	2.4
To	otal	83	100.0
Types of treatment received			
Residential Rehabilitation		71	85.5
Out Patient Counseling		6	7.2
Detoxification with/without drugs		4	4.8
Other treatment/help		4	4.8
To	otal	83	*

Overall, 85.5 percent of IDUs who had received treatment were provided residential rehabilitation by different NGOs. Some (7.2%) had received out patient counseling or detoxification (4.8%) (for types of treatment and list of NGOs see Annex 13).

# 6. 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 have been reviewed. This chapter also deals with sexual history and condom use among IDUs.

### 6.1 Sexual Behavior of IDUs

Ninety eight percent of the respondents in this study had sexual relations before. The median age at first sexual intercourse was 17 years.

Out of the 294 respondents who reported having had sex before, 75.5 percent had been sexually active during the past year. Whilst 52.7 percent of IDUs had one female sex partner, the rest (47.3%) had two or more sex partners in the past year.

**Table 6.1: Sexual History of IDUs** 

Sexual behavior	N	%
Sexual behavior		
Ever had sexual intercourse	294	98.0
Never had sexual intercourse	6	2.0
Total	300	100.0
Age at first sexual intercourse		
Below 20 years	246	83.7
20 years and above	48	16.3
Median Age	17.0	100.0
Sexual intercourse in the past 12 months		
Yes	222	75.5
No	72	24.5
Total	294	100.0
Numbers of different female sexual partners in the past 12 months		
1 partner	117	52.7
2 or more partners	105	47.3
Total	222	100.0

The sex partners of the study population were categorized as regular partners, non-regular partners and female sex workers. A "regular female sex partner" was defined as a spouse or any sexual partner co-habiting with the respondent. Among those respondents who had maintained sexual contact during the past year, 48.6 percent had sex with a regular female sex partner. Of them, most (91.6%) had sex with their regular female sex partner in the month preceding the survey, and around 80 percent of them had at least five sexual contacts with their regular partner during the course of that same period of time.

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	143	48.6
No	151	51.4
Total	294	100.0
Sex with a regular partner during the last month		
Yes	131	91.6
No	12	8.4
Total	143	100.0
Frequency of sex with the last regular female sex partner during the last month		
1-4	26	19.8
5+	105	80.2
Total	131	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 to or living with, however, they were also defined as distinctly separate from female sex workers. Table 6.3 shows that nineteen percent of IDUs had sex with non-regular female sex partners in the past 12 months. Of them, 48.2 percent had two or more non-regular female sex partners. A little over one half (51.8%) had sexual contact with their non-regular female sex partners in the month preceding the survey during which thirty one percent had at least five sexual contacts.

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

Sexual practice	N	%
Sex with a non-regular female sex partner in the past 12 months		
Yes	56	19.0
No	238	81.0
Total	294	100.0
Number of non-regular female sex partners in the past 12 months		
1 partner	29	51.8
2 or more partners	27	48.2
Sex with a non-regular female sex partner during last one month		
Yes	29	51.8
No	27	48.2
Total	56	100.0
Frequency of sex with last non-regular female sex partners during last one month		
1-4	20	69.0
5+	9	31.0
Total	29	100.0

The IDUs were further asked if they had maintained sexual relationships with female sex workers during the past year. "Female sex workers" were defined as those who sell sex in exchange for cash or drugs. Thirty one percent of IDUs had sex with a female sex worker in the past year. Among them, the majority (72.5%) had sex with two or more FSWs. Almost one half (49.5%) had sexual encounters with FSWs in the month preceding the survey. Among them, 24.4 percent had at least five sexual contacts during the same period of time.

Table 6.4: Sexual Intercourse of IDUs with Female Sex Workers

Sexual practice		N	%
Sex with a female sex worker in the past 12 months			
Yes		91	31.0
No		203	69.0
	Total	294	100.0
Number of female sex workers in the past 12 months			
1 partner		25	27.5
2 or more partners		66	72.5
Sex with a female sex worker during the last one month			
Yes		45	49.5
No		46	50.5
	Total	91	100.0
Frequency of sex with the last female sex worker during the last month			
1- 4		34	75.6
5+		11	24.4
	Total	45	100.0

# 6.2 Knowledge and Use of Condom

All the IDUs had heard about condoms before. As seen in Table 6.5 condom use was higher in the last sexual contact with a female sex worker (67%) than with a non-regular partner (57.1%) or regular partner (25.2%). A total of 74.8 percent of IDUs had not used a condom during their last sexual encounter with a regular female partner, 42.9 percent had not with their non-regular female partner and 33 percent had not used a condom during their last sexual interaction with a female sex worker.

Table 6.5: Knowledge and Use of Condoms among IDUs

Knowledge and use of condom during the last sex act	N	0/0
Condom use with regular female sex partner during last sexual intercourse		
Yes	36	25.2
No	107	74.8
Total	143	100.0
Condom use with non-regular female sex partner during last sexual intercourse		
Yes	32	57.1
No	24	42.9
Total	56	100.0
Condom use with female sex worker during last sexual intercourse		
Yes	61	67.0
No	30	33.0
Total	91	100.0

HIV/AIDS awareness campaigns focus on educating the target groups on the need to use a condom during every sexual act. In this context, all the IDUs were asked about their consistent use of condoms with different female sexual partners during the year preceding the survey. More IDUs had used condoms consistently with female sex workers (48.4%) than with their non-regular partners (39.3%) and regular partners (7%) in the past year (Table 6.6).

Table 6.6: Consistent Use of Condoms in the Past Year

Consistent use of condoms	N	%
Use of condom with regular female sex partners during past 12 months		
Everytime	10	7.0
Sometimes or Never	133	93.0
Total	143	100.0
Use of condom with non-regular female sex partners during past 12 months		
Everytime	22	39.3
Sometimes or Never	34	60.7
Total	56	100.0
Use of condom with female sex workers during past 12 months		
Everytime	44	48.4
Sometimes or Never	47	51.6

Total	91	100.0

All of the respondents who reported not using a condom during their last sexual contact with different partners were further asked reasons for choosing not to use one. Data obtained from the study participants, as shown in Annex 14, indicates that the reasons for not using condoms differ according to the type of partner.

In general, IDUs considered condoms as only contraceptive devices when with their regular partners as 57.9 percent said that they had been using other contraceptive methods and so did not use condoms consistently with their regular partners. Some others also mentioned that they did not consider it necessary to use a condom with their regular partners (38.3%).

As for the reasons for not using condoms with non-regular partners, an unavailability of condoms at the time, and that they did not like to use them were reasons mentioned by 33.3 percent of respondents each. Notably, one third (33.3%) did not consider using condoms necessary during their last sexual contact with sex workers. Another 41.7 percent said they could not use a condom when they last had sex with a sex worker because condoms were not available (Annex 14).

#### 6.3 Source of Condoms

All the sampled IDUs knew at least one place from where they could obtain condoms. Nearly all (96%) said that they could get condoms from a pharmacy. Other popular sources of condoms as mentioned by the IDUs were shops (57.7%), hospitals (46.3%), and peer/outreach educators (45.3%). It is evident that condoms were available at accessible points, as 99 percent of IDUs said that they could have them if necessary in less than 30 minutes (Table 6.7).

Table 6.7: Sources of Condom and Time Needed to Obtain It

Sources of condom and time to obtain it	N=300	%
Place/person from where condom can be obtained*		
Pharmacy	288	96.0
Shop	173	57.7
Hospital	139	46.3
Peer Educator/Outreach Educator	136	45.3
Pan shop	96	32.0
Association for Helping Helpless (AHH)	84	28.0
Naulo Ghumti	52	17.3
Clinic	46	15.3
International Nepal Fellowship	37	12.3
NAMUNA	32	10.7
Family Planning Center	28	9.3
Change Team	11	3.7
Health worker/Health Post	9	3.0
Women Acting Together for Change (WATCH)	8	2.7
Friends	6	2.0
Others	9	3.0
Time taken to obtain condom		
Less than 30 minutes	297	99.0
More than 30 minutes	1	0.3
Don't Know	2	0.7

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

### **6.4** Sources of Information about Condoms

IDUs in the study districts had heard about condoms from different sources. The most common sources of information for more than 90 percent of respondents were radio (98%), pharmacies (97.7%), television (95.7%) and NGOs workers (94%). A considerable proportion of respondents had also heard about condoms from newspapers/posters (88.7%), billboards/signboards (86.7%), and friends/neighbors (83%) (Table 6.8).

Table 6.8: Sources of Information about Condoms among IDUs

Sources of knowledge about condoms	N=300	%
Radio	294	98.0
Pharmacy	293	97.7
Television	287	95.7
NGO people	282	94.0
Newspapers/posters	266	88.7
Bill board/sign board	260	86.7
Friends/neighbors	249	83.0
Hospital	237	79.0
Health workers/volunteers	181	60.3
Street drama	171	57.0
Cinema hall	169	56.3
Health Post	152	50.7
Health Center	129	43.0
Community event/training	112	37.3
Community worker	111	37.0
Video van	83	27.7
Comic books	70	23.3
Others	2	0.7

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

In order to further analyze the exposure of IDUs to ongoing initiatives to educate the target groups about condoms, the study participants were asked if they were aware of any of the messages being publicized with the help of IEC materials like posters, pamphlets, and billboards or which are being aired on radio/television. The survey asked the respondents about certain specific messages regarding condoms and HIV/STI prevention. A considerable proportion of IDUs were aware of messages like *Youn rog ra AIDS bata bhachnalai* (84.7%), *Jhilke dai chha chhaina condom* (83%), *Condom kinna ma bhaya hunna ra* (83%), *Condom bata surakchhya youn swastha ko rakchhya* (82.3%), *Ramro sanga prayog gare jokhim huna dinna* (79.3%) and HIV/AIDS bare aajai dekhi kura garau (78%).

Table 6.9: Exposure of IDUs to Specific Condom Messages in the Past Year

Heard/seen/read messages/characters in past one year	N=300	%
Youn Rog Ra AIDS Bata Bachnalai Rakhnu Parchha Sarbatra Paine Condom Lai	254	84.7
Jhilke Dai Chha Chhaina Condom	249	83.0
Condom Kinna Ma Bhaya Hunna Ra	249	83.0
Condom Bata Surakchhya Youn Swastha ko Rakchhya	247	82.3
Ramro Sanga Prayog Gare Jokhim Huna Dinna Bharpardo Chhu Santosh Dinchhu	238	79.3
Jhanjhat Manna Hunna		
HIV/AIDS Bare Aaji Dekhi Kura Garaun	234	78.0
Maya Garaun Sadbhav Badaun	138	46.0
Manis Sanga Manis Mile hara Jeet kasko Hunchha	67	22.3
Ek Apas Ka Kura	56	18.7
Des Pardes	55	18.3
Others	1	0.3

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

# 7. KNOWLEDGE OF STIS AND HIV/AIDS

This chapter deals with the level of knowledge about STIs and HIV/AIDS among IDUs in the Western and Far Western Terai, as well as awareness levels regarding the ways in which HIV is transmitted. Respondents' 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 (94.3%) had heard about STIs. On the other hand, 5.7 percent had not heard about STIs before this survey.

Table 7.1: STI Awareness among IDUs

Heard of STIs	N	%
Heard of STIs		
Yes	283	94.3
No	17	5.7
Total Respondents	300	100

The most common symptoms cited by the respondents who had heard of STIs before, were genital ulcer/sore blister (62.9% in females and 78.8% in males) and genital discharge (47.7% in females and 56.2% in males). Symptoms like foul smelling discharges (42%) and abdominal pain (11%) were specifically mentioned as female STI symptoms. On the other hand, experiencing a burning sensation while urinating was mentioned as a male STI symptom by more than two-fifths (43.1%) of respondents, and as a female symptom by 27.9 percent (Table 7.2).

Table 7.2: STI Understanding among IDUs

STI symptoms as mentioned by IDUs	STIs Symptoms as mentioned by respondent				
	Among Fer	Among Female (n=283)		Among Male (n=283)	
	Number	%	Number	%	
Genital ulcer/sore blisters	178	62.9	223	78.8	
Genital discharge	135	47.7	159	56.2	
Foul-smelling discharge	119	42.0			
Burning/pain during urination	79	27.9	122	43.1	
Itching	66	23.3	53	18.7	
Abdominal pain	31	11.0			
Swelling in groin area	23	8.1	46	16.3	
Become thinner	7	2.5	3	1.1	
Fever	3	1.1	6	2.1	
Pain during intercourse	1	0.4	1	0.4	
Ulcer in the body	0	0.0	3	1.1	
Others	4	1.4	2	0.7	
Don't know	51	18.0	38	13.4	

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

IDUs were also asked if they had experienced any symptoms, such as genital discharges and/or genital ulcer/sores, in the past year. Nine percent (8.7%) reported having had genital discharges while 10.3 percent had genital ulcer/sores in the past year.

Table 7.3: STI Symptom/s Experienced by IDUs

Experience of STI symptoms	N=300	%
Had a genital discharge in the past year		
Yes	26	8.7
No	274	91.3
Had a genital ulcer/sore blister in the past year		
Yes	31	10.3
No	269	89.7

Among those IDUs who had genital discharge in the past year, 61.5 percent were experiencing genital discharge at the time of this study. Similarly, among those IDUs who had a genital ulcer/sore in the past year, 71 percent were experiencing the symptoms during the period of this study.

Overall, 12.7 percent of respondents had reportedly ever experienced at least one STI symptom. More than one half (57.9%) had never sought any medical aid to treat the symptom; of those who had sought treatment, over a quarter had been to a private doctor (26.3%) and very few to hospital/health post (5.3%) (Table 7.4).

Table 7.4: STI Symptoms Experienced and Treatment Sought by IDUs

STI Symptoms and Treatment		N	%
Currently has genital discharge			
Yes		16	61.5
No		10	38.5
	Total	26	100.0
Currently has genital ulcer/sore blister			
Yes		22	71.0
No		9	29.0
	Total	31	100.0
STI Experiences			
Never had STI symptoms		262	87.3
Ever had some symptoms		38	12.7
	Total	300	100.0
Source of treatment			
Private Doctor		10	26.3
Hospital/Health Post		2	5.3
Others		4	10.5
Did not seek treatment		22	57.9
	Total	38	100.0

#### 7.2 Knowledge about HIV/AIDS

All of the IDUs surveyed had heard of HIV/AIDS before. A good proportion of them (83.7%) also knew people who had HIV/AIDS or had died because of AIDS. When asked about the kind of relation they shared with those persons, 39 percent said they were their close friends and 6.8 percent said they were their relatives. Another 54.2 shared no close relation with the people who they knew had HIV/AIDS or had died because of AIDS.

Table 7.5: Awareness of HIV/AIDS among IDUs

Knowledge of HIV/AIDS		N	%
Know anyone who is living with HIV/AIDS or has died due to AIDS			
Yes		251	83.7
No		49	16.3
Т	Total	300	100.0
Nature of relationship with the person			
Close friend		98	39.0
No relation		136	54.2
Close relative		17	6.8
	Total	251	100.0

The respondents' knowledge regarding the ways in which HIV/AIDS is transmitted was analyzed with the help of some questions regarding preventive measures. In this regard their understanding of three major 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 being faithful to one sexual partner (B) and using a condom every time during sex (C) prevented them from contracting HIV (96% and 99.7% respectively). Eighty percent of IDUs knew that they could also protect themselves against HIV through abstinence from sexual contact (A). Overall 77.3 percent of IDUs were aware of all three major modes of preventing HIV/AIDS transmission.

Additionally, 98.7 percent were aware that a healthy looking person can be infected with HIV (D) and 84.3 percent knew that sharing a meal with an HIV infected person did not transmit HIV (F). However, a relatively smaller proportion of IDUs (64.3%) agreed that a person can not get the HIV virus from a mosquito bite. In total, 57 percent of IDUs were aware of all five major indicators (BCDEF).

Table 7.6: Knowledge about Major Ways of Avoiding HIV/AIDS

Knowledge of Six Major Indicators on HIV/AIDS	N=300	%
HIV transmission can be avoided through		
A Abstinence from sexual contact	240	80.0
B Being faithful to one partner	288	96.0
C Condom use during each sexual contact	299	99.7
Perception regarding HIV/AIDS		
<b>D</b> A healthy-looking person can be infected with HIV	296	98.7
E A person can not get the HIV virus from a mosquito bite	193	64.3
F Sharing a meal with an HIV infected person does not transmit the HIV virus	253	84.3
Knowledge of all ABC	232	77.3
Knowledge of all five major indicators – <b>BCDEF</b> of HIV/AIDS	171	57.0

The IDUs' understandings of HIV/AIDS and its different modes of transmission were further tested with the help of certain probing questions. More than nine in ten respondents said that HIV can be transmitted through the transfusion of blood from an infected person to another (99.7%), a person can get HIV by using a previously used needle/syringe (99.3%), that a person can not get HIV by holding an HIV infected person's hand (93.3%), a pregnant woman infected with HIV/AIDS can transmit the virus to her unborn child (91%) and that a drug user can protect himself from HIV by switching to non-injecting drugs (90.3%). A relatively lower percentage of respondents (69.7%) said that a woman with HIV can transmit the virus to her newborn child through breast-feeding.

Almost 57 percent of IDUs were not aware of any measures by which a pregnant woman can reduce the risk of transmission of HIV to her unborn child. The rest suggested that the expecting mother should follow the medical advice of a doctor (38.1%) and take medicine (5.1%) (Table 7.7).

Table 7.7: IDUs' Knowledge on Ways of HIV/AIDS Transmission

Statements Related to HIV/AIDS		%
A person can get HIV by using a needle that has been previously used by others	298	99.3
An IDU can protect themselves from HIV/AIDS by switching to non-injecting drugs	271	90.3
A woman with HIV/AIDS can transmit the virus to her new-born child through breastfeeding	209	69.7
Blood transfusion from an infected person to the other transmit HIV	299	99.7
A person can not get HIV by holding an HIV infected person's hand	280	93.3
A pregnant woman infected with HIV/AIDS can transmit the virus to her unborn child	273	91.0
Ways by which a pregnant woman can reduce the risk of transmission of HIV to her	N=273	%

unborn child		
Take medicine	14	5.1
Treatment/ consultation with doctor	104	38.1
Others	2	0.7
Don't Know	155	56.8

<sup>\*</sup> Note: Because of multiple answers, the percentages may add up to more than 100.

#### 7.3 Knowledge about HIV Testing Facilities

Availability of a confidential HIV testing facility and awareness of the existence of such provisions allows people to undertake HIV tests promptly and without the fear of being exposed. A good proportion of the IDUs (94.7%) were aware of the existence of this type of facility in their communities.

Forty six percent of respondents had never tested themselves for HIV while the rest (54%) had tested themselves for HIV at least once. Among them, 83.3 percent had taken up the test voluntarily. Of those who had been tested, 79 percent had received their test result and 29 percent had taken up the test within past year (Table 7.8).

Table 7.8: Knowledge about HIV Testing Facilities and History of HIV Test among IDUs

Description on HIV testing	N	%
A confidential HIV testing facility is available in the community		
Yes	284	94.7
No	2	0.7
Don't know	14	4.7
Ever had an HIV test		
Yes	162	54.0
No	138	46.0
Total	300	100.0
Type of test taken		
Required HIV test	27	16.7
Voluntary HIV test	135	83.3
Test result received		
Yes	128	79.0
No	34	21.0
Timing of last HIV test		
Within the past year	47	29.0
1-2 years ago	75	46.3
2-4 years ago	37	22.8
More than 4 years ago	3	1.9
Total	162	100.0

#### 7.4 Source of Knowledge about HIV/AIDS

Radio (98%), television (95.7%) and NGO workers (94.3%) were the three most commonly cited sources of information regarding HIV/AIDS among the study participants. A large proportion of the respondents had also derived some information on HIV/AIDS from pamphlets/posters (89%), billboard/signboards (87%), their friends/relatives (86.7%), and newspaper/magazines (75%). Other sources of information as mentioned by the respondents have been shown in the table below (Table 7.9).

Table 7.9: Sources of Knowledge Regarding HIV/AIDS among IDUs

Sources of knowledge of HIV/AIDS	N=300	º/o
Radio	294	98.0
Television	287	95.7
NGO workers	283	94.3
Pamphlets/Posters	267	89.0
Billboard/signboard	261	87.0
Friends/Relatives	260	86.7
Newspapers/Magazines	225	75.0
Cinema halls	183	61.0
Street drama	177	59.0
Health workers/Volunteers	172	57.3
Workplace	170	56.7
Community workers	118	39.3
Community events or training	114	38.0
School/Teachers	106	35.3
Video van	90	30.0
Comic books	73	24.3
Others	2	0.7

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. HIV related information had been disseminated to a fairly large proportion of the respondents (85.7%). IEC materials like brochures/booklets/pamphlets on HIV/AIDS had reached 76 percent of IDUs while 74.3 percent had received condoms/information relating to condoms. Few other respondents (7.3%) had received some other IEC materials like t-shirts/vests or caps with HIV/AIDS messages (Table 7.10).

Table 7.10: Information/Materials Received During the Past Year

Informative materials received	N=300	%
Condoms / information on condom		
Yes	223	74.3
No	77	25.7
Brochures/booklets/pamphlets on HIV/AIDS		
Yes	228	76.0
No	72	24.0
Received Information on HIV/AIDS		
Yes	257	85.7
No	43	14.3
Others IEC materials		
Yes	22	7.3
No	278	92.7

#### 7.5 Perceptions about HIV/AIDS

The stigma associated with HIV/AIDS increases the impact of HIV on the infected, as well as on the most at risk population. The perception of IDUs regarding HIV-infected persons and stigma associated with the disease was examined with the help of series of questions.

The majority of respondents were ready to take care of an HIV positive male relative (98.3%) or an HIV-positive female relative (97.3%) at their homes if such a need arose. However, more than half of the sample population (57.7%) said that if a family member had HIV they would rather keep it confidential and not talk about it with others.

The majority of respondents (93%) said that they would readily buy food from an HIV infected vendor. Ninety six percent agreed, that unless very sick, people with HIV/AIDS should be allowed to continue their jobs. When asked about the health care needs of HIV infected persons, 58.7 percent of IDUs maintained that they should be provided the same care and treatment as is necessary for chronic disease patients, while 36.7 percent believed that the

health care needs of an HIV infected person were more involved than those of people suffering from chronic disease.

Table 7.11: Attitude of IDUs Towards HIV/AIDS

Individual Perception	N=300	%
Would readily take care of an HIV positive male relative in the household		
Yes	295	98.3
No	5	1.7
Would readily take care of an HIV positive female relative in the household		
Yes	292	97.3
No	8	2.7
Would prefer not to talk about a family member being HIV positive		
Yes	173	57.7
No	127	42.3
Would readily buy food from an HIV infected shopkeeper		
Yes	279	93.0
No	21	7.0
Believe that the health care needs of an HIV infected person is the same, more or less than those required by someone with other chronic disease		
Same	176	58.7
More	110	36.7
Less	14	4.7
Believe that an HIV infected person should be allowed to continue working unless very sick		
Yes	288	96.0
No	12	4.0

#### 8. EXPOSURE TO HIV/AIDS AWARENESS PROGRAMS

This is a new section added to the survey in 2007. The exposure of IDUs to ongoing HIV/AIDS awareness programs and their participation in these activities has been examined in this round of survey. To this end, respondents were asked several questions relating to different components of current HIV/AIDS related programs run by various organizations.

#### 8.1 Peer/Outreach Education

The peer/outreach education component consists of activities that involve the mobilization of peer educators (PEs), community mobilizers (CMs) and outreach educators (OEs) for conducting awareness raising activities in community sites. They meet the target groups and hold discussions with them regarding HIV/AIDS, 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 needle/syringes for distribution among the IDUs.

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

IDUs' Meeting with Peer Educators (PE) or Outreach Educators (OE)	N	%
Met, discussed or interacted with a PE or OE in the last 12 months		
Yes	241	80.3
No	59	19.7
Total	300	100.0
Activities carried out with PE/OEs		
Discussion on safe injecting behavior	219	90.9
Discussion on how HIV/AIDS is/isn't transmitted	202	83.8
Discussion on how STI is/isn't transmitted	85	35.3
Demonstration on using condom correctly	73	30.3
Discussion on regular/non-regular use of condom	40	16.6
Given syringe/Taken Syringe	31	12.9
Discussion of giving up drugs	24	10.0
Given Distilled Water	2	0.8
Suggested to stay at rehabilitation center	1	0.4
Discussion on Hepatitis 'B' and 'C'	1	0.4
Given Condom	1	0.4
Total	241	*
Organizations Represented by PE/OEs		
АНН	88	36.5
Naulo Ghumti	69	28.6
INF Nepalgunj	48	19.9
Namuna	43	17.8
Change Team	18	7.5
SAHARA Nepal	7	2.9
Youth Vision	3	1.2
Nav Kiran	1	0.4
Others	16	6.6
Total	241	*
Number of Meetings with PE or OE	2.1	
Once	7	2.9
2-3 times	32	13.3
4-6 times	56	23.2
7-12 times	45	18.7
More than 12 times	101	41.9
MOIC man 12 mines	101	41.7

<sup>\*</sup> Note: Because of multiple answers, the percentages may add up to more than 100.

The majority (80.3%) of the study population had met with PE/OEs representing various organizations at least once during the past year. In such meetings, 90.9 percent had discussed safe injecting behavior while 83.8 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/are not transmitted (35.3%), and provided demonstrations on using condoms (30.3%) during their meetings with PE/OEs.

Over one third had met with PE/OEs from the Association for Helping the Helpless (AHH) (36.5%). Some had met PE/OEs representing Naulo Ghumti (28.6%), International Fellowship Nepal (INF) Nepalgunj (19.9%) and Namuna (17.8%). It is evident from Table 8.1 that the IDUs meet PE/OEs quite often, as 41.9 percent of IDUs had met with PE/OEs more than once a month.

#### 8.2 Drop-in-Center

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. The DICs offer a number of services to the target group, including group counseling, classes, discussions, individual counseling, and video shows on STI/HIV/AIDS. Certain NGOs also run needle exchange programs through their DICs. The IDUs are also provided IEC materials and condoms at DICs.

**Table 8.2: DIC Visiting Practices of IDUs** 

DIC Visiting Practices	N	%
Visit ed a DIC in the Last 12 Months		
Yes	207	69.0
No	93	31.0
Tota	300	100.0
Activities Participated in at DIC		
Collected a new syringe	171	82.6
Learnt about safe injecting behavior	123	59.4
Collected condoms	110	53.1
Watched film on HIV/AIDS	91	44.0
Participated in discussion on HIV transmission	59	28.5
Learnt about the correct way of using condom	38	18.4
Collected medicine	26	12.6
Collected distilled water	15	7.2
Had wound dressing	9	4.3
Went to have treatment	4	1.9
Participated in discussion on reducing drug taking	3	1.4
Gave back syringe	1	0.5
Others	6	2.9
Total	207	*
Name of Organizations that Runs the Visited DIC		
АНН	77	37.2
Naulo Ghumti	57	27.5
Namuna	44	21.3
INF Nepalgunj	37	17.9
Others	8	3.9
Total	207	*
Number of Visits to DICs		
Once	8	3.9
2-3 times	43	20.8
4-6 times	32	15.5
7-12 times	38	18.4
More than 12 times	86	41.5
Total	207	100.0

<sup>\*</sup> Note: Because of multiple answers, the percentages may add up to more than 100.

Sixty nine percent of IDUs in this study had visited a DIC in the past one year; the majority of them (82.6%) had gone to get a new syringe. While visiting the DIC respondents had been informed about safe injecting behavior (59.4%) and had collected condoms (53.1%). Moreover, IDUs had also watched films on HIV/AIDS (44%) and had participated in discussions on HIV transmission (28.5%) at DICs.

The DICs were run by various organizations implementing HIV/AIDS awareness and prevention programs in the region. The DICs that the study participants had mostly visited were run by AHH (37.2%), Naulo Ghmuti (27.5%), Namuna (21.3%) and INF Nepalgunj (17.9%). Although 3.9 percent of sampled IDUs had visited the DIC just once, others had been to a DIC more than once in the past year (96.2%). Around 42 percent of IDUs had visited DICs more than once a month on average in the last 12 months preceding the survey.

#### 8.3 STI Clinic

IDUs who engage in unsafe sexual encounters are at risk of contracting certain sexually transmitted infections (STIs). Timely detection of STIs may prevent them from serious health problems. There are different clinics being run by various government agencies, as well as non-government organizations, for providing STI testing and treatment facilities. However, the majority of the respondents (96.7%) had not been to an STI clinic in the past year. Among the few (3.3%) who had visited an STI clinic, the majority had received a physical examination for STI detection (70%) and had given their blood sample for STI identification (50%); some were also informed about the use of condoms (20%) and STI transmission (10%). The majority of respondents (80%) who had visited an STI clinic had only been there once in the past year.

**Table 8.3: STI Clinic Visiting Practices of IDUs** 

STI Clinic Visiting Practices		N	%
Visited any STI Clinic in the Last 12 Months			
Yes		10	3.3
No		290	96.7
Т	otal	300	100.0
Activities Participated in at STI Clinic			
Physical examination conducted for STI identification		7	70.0
Blood tested for STI		5	50.0
Participated in discussion on regular/non-regular use of condom		2	20.0
Participated in discussion on STI transmission		1	10.0
Took a friend		1	10.0
Others		1	10.0
T	otal	10	*
Name of Organizations that Runs the Visited STI Clinic			
N-SARC		2	20.0
FPAN		2	20.0
Others		6	60.0
To	otal	10	*
Number of Visits to STI Clinics			
Once		8	80.0
2-3 times		2	20.0
T	otal	10	100.0

<sup>\*</sup> Note: Because of multiple answers, the percentages may add up to more than 100.

The STI clinics visited by the respondents were run by N-SARC (Nepal STD and AIDS Research Center), the Family Planning Association of Nepal (FPAN) and other organizations.

#### 8.4 VCT Centers

Fourteen percent of respondents had been to a VCT center in the past year. All of them had given their blood for HIV testing at the center. They had also received pre-HIV test counseling (92.9%) and post HIV test counseling (85.7%). Sixty nine percent had received their test results and 47.6 percent had received information on safe injecting behavior at these centers.

More than two fifths of IDUs had visited the VCT center run by Namuna (45.2%) and some others had been to FPAN VCT center (11.9%). The majority of these IDUs had been to a VCT center only once (80.9%), while 19 percent had visited the centers two or three times during the past year (Table 8.4).

**Table 8.4: VCT Visiting Practices of Sample Population** 

VCT Visiting Practices	N	%
Visited a VCT Center in the Last 12 months		
Yes	42	14.0
No	258	86.0
Total	300	100.0
Activities Participated in at VCT Center		
Gave blood sample for HIV test	42	100.0
Received pre- HIV test counseling	39	92.9
Received post HIV test counseling	36	85.7
Received HIV test result	29	69.0
Got information on HIV/AIDS window period	24	57.1
Received information on safe injecting behavior	20	47.6
Received counseling on using a condom correctly in each sexual intercourse	11	26.2
Took a friend	1	2.4
Total	42	*
Name of the Organization that Runs the Visited VCTs		
Namuna	19	45.2
FPAN	5	11.9
NRCS	4	9.5
Naulo Ghumti	2	4.8
Youth Vision	1	2.4
N-SARC	1	2.4
WATCH	1	2.4
Others	11	26.2
Total	42	*
Number of Visits to VCTs		
Once	34	80.9
2-3 times	8	19.0
Total	42	100.0

<sup>\*</sup> 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.

Table 8.5 deals with the participation of respondents in HIV/AIDS awareness programs. More than one third (35.3%) of respondents had participated in at least one HIV/AIDS awareness raising program or similar community event.

Half of them had taken part in a condom or AIDS day celebration and some IDUs had participated in HIV/AIDS related group discussions (44.3%) and trainings (26.4%). Among them, 32.1 percent of IDUs had participated in these programs just once, while 55.7 percent had participated two or three times (Table 8.5).

The activities participants mentioned were conducted by AHH (39.6%), Naulo Ghumti (26.4%), INF (14.2%) and other organizations

**Table 8.5: Participation in HIV/AIDS Awareness Programs by IDUs** 

Participation in HIV/AIDS Awareness Programs	N	%
Ever Participated in HIV/AIDS Awareness Raising Program or Community Event		
Yes	106	35.3
No	194	64.7
Total	300	100.0
Activities Participated in		
AIDS Day celebration	53	50.0
Condom Day celebration	53	50.0
Group discussions	47	44.3
HIV/AIDS related training	28	26.4
HIV/AIDS related Workshops	12	11.3
Street drama	8	7.5
Others	7	6.6
Total	106	*
Name of the Organizations that Conducted Such Activities		
АНН	42	39.6
Naulo Ghumti	28	26.4
INF	15	14.2
Namuna	9	8.5
WATCH	6	5.7
Recovery Nepal	6	5.7
SAHARA	5	4.7
Youth Vision	1	0.9
N-SARC	1	0.9
Others	19	17.9
Total	106	*
Frequency of Such Participation in Last 12 months		
Once	34	32.1
2-3 times	59	55.7
4-6 times	9	8.5
7-12 times	1	0.9
More than 12 times	3	2.8
Total	106	100.0

<sup>\*</sup> Note: Because of multiple answers, the percentages may add up to more than 100.

## 9. A COMPARATIVE ANALYSIS OF SELECTED CHARACTERISTICS

This chapter seeks to analyze the trends by comparing the data obtained during the first and second round of studies. It specifically deals with socio-demographic characteristics, drug injecting behavior, needle/syringe using practices, and condom use among study participants. Trends in HIV prevalence are also analyzed.

#### 9.1 Socio-Demographic Characteristic

The demographic characteristics of the study participants show that a significantly higher proportion of IDUs were aged less than 25 years in 2005 (41.3%) than in 2007 (32.7%). The median age of the respondents was 25 years in the first round and 27 years in the second round.

Literacy status of the respondents did not show a significant difference between the first and second rounds. Over one in ten was illiterate (11.3% in 2005 and 14% in 2007), more than a third had completed secondary level of education (37.7% in 2005, and 35.3% in 2007) and twenty percent had completed SLC or a higher level of study in both rounds of IBBS (20.3% in 2005 and 20% in 2007).

**Table 9.1: Socio-Demographic Characteristics of IDUs** 

Ci- D	First round (2005)		Second round (2007)	
Socio-Demographic characteristics	N	%	N	%
Age				
< 25Yrs.	124	41.3	98	32.7
>25 years	176	58.7	202	67.3
Median age	25	-	27	-
Education				
Secondary	113	37.7	106	35.3
Primary	78	26.0	77	25.7
SLC and above	61	20.3	60	20.0
Illiterate	34	11.3	42	14.0
Literate only	14	4.7	15	5.0
Ethnicity				
Chhetri/Thakuri	91	30.3	76	25.3
Occupational caste	41	13.7	44	14.7
Tamang/Magar	36	12.0	37	
Brahmin	31	10.3	31	10.3
Terai caste	30	10.0	26	8.7
Musalman	26	8.7	32	10.7
Gurung/Rai	20	6.7	17	5.7
Newar	16	5.3	23	7.7
Chaudhary/Tharu	6	2.0	3	1.0
Giri/Puri/Sanyasi	2	0.7	4	1.3
Majhi/Sunuwar	0	0.0	3	1.0
Thakali	0	0.0	2	0.7
Marwadi	0	0.0	1	0.3
Others	1	0.3	1	0.3

Ethnic/caste composition of IDUs did not change significantly from 2005. Chhetri/Thakuri cast was represented by 30.3 percent of IDUs in the first round and 25.3 percent in the second round. Similarly, proportions of other caste/ethnic groups differed only slightly between the first and the second rounds, but none of the differences were statistically significant.

#### 9.2 Drug Injecting Practices

Most of the study participants had been injecting drugs for more than a year with the average duration being 4.3 years in 2005 and 5.5 years in 2007. Those IDUs who had been injecting for less than one year made up about 10 percent of respondents in both rounds (9.7% in 2005 and 10.7% in 2007). At the same time, the number of IDUs injecting for five or more years increased significantly from 36.3 percent in 2005 to 51.7 percent in 2007.

The median age of respondents at their first injection was 21 years in 2005 and 22 years in 2007. In 2005, 42 percent of respondents had injected drugs for the first time before they turned 21; in 2007 this proportion was down to 38.7 percent. The decrease however was not statically significant.

**Table 9.2: Drug Injecting Practices of IDUs** 

Drug Injecting Practices	First rou	First round (2005)		und (2007)
Drug injecting i factices	N=300	%	N=300	%
Duration of drug injection habit				
Up to 11 months	29	9.7	32	10.7
12-23 months	46	15.3	24	8.0
24-59 months	116	38.7	89	29.7
=> 60 months	109	36.3	155	51.7
Average duration of years	4.3	-	5.5	-
Age at first drug injection				
Up to 20 years	126	42.0	116	38.7
21 + years	174	58.0	184	61.3
Median age	21	-	22	-

#### 9.3 Needle/Syringe Using Practice in the Past Week

Data relating to injecting practices of the study population in both rounds shows that a higher proportion of IDUs avoided unsafe injecting behaviors, such as injecting with anothers' previously used needle/syringe (81 percent in 2005/89.7% in 2007) and using a needle/syringe kept in a public place (84.7% in 2005/95.7% in 2007), in 2007 than in 2005. In other words, in the first round 19 percent of IDUs had used an old needle/syringe in the week preceding the survey, while only 10.3 percent of IDUs reported doing so in the second round. This is a statistically significant difference.

Similarly, there was a significant decrease in the proportion of IDUs who ever used a needle/syringe which had been kept in a public place since the first round (15.3% in 2005 and 4.3% in 2007). Moreover, fewer respondents (70.7%) in the first round had not shared their needle/syringe with anyone than in the second round (88.3%), this difference too was statistically significant.

The proportion of respondents who had injected in the past week with their own previously used needle/syringe also decreased significantly since the first round (38.7 percent in 2005, and 22 percent in 2007).

Table 9.3: Past Week's Syringe Use and Sharing Behavior of IDUs

Needle/syringe use throughout the past week	First rou	nd (2005)	Second round (2007)		
Needle/syringe use throughout the past week	N=300	%	N=300	%	
Used a needle/syringe that had been used by another					
Never Used	243	81.0	269	89.7	
Ever Used	57	19.0	31	10.3	
Used a needle/syringe that had been kept in a public place					
Never Used	254	84.7	287	95.7	
Ever Used	46	15.3	13	4.3	
Number of partners shared needle/syringe with					
None	212	70.7	265	88.3	
Two or more partners	88	29.3	35	11.7	
Re-used needle/syringe in the past week					
Yes	116	38.7	66	22.0	
No	184	61.3	234	78.0	

#### 9.4 Condom Use with Different Partners

Consistent condom use in the year preceding the survey with regular and non-regular partners, as well as with FSWs, was similar in both rounds.

Even though consistent condom use improved with regular partners (from 5.9% in 2005 to 7% in 2007), with non-regular partners (from 31.5% in 2005 to 39.3% in 2007) and with FSWs (46.5% in 2005 to 48.4% in 2007), none of these differences are statistically significant.

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

Consistent use of condom	First round (2005)		Second round (2007)	
Consistent use of condom		%	N	%
Use of condom with regular female sex partners during the past 12 months				
Every time	5	3.9	10	7.0
Sometimes – Never	123	96.1	133	93.0
Total	128	100.0	143	100.0
Use of condom with non-regular female sex partners during the past 12				
months				
Every time	17	31.5	22	39.3
Sometimes – Never	37	68.5	34	60.7
Total	54	100.0	56	100.0
Use of condom with female sex workers during the past 12 months				
Every time	47	46.5	44	48.4
Sometimes – Never	54	53.5	47	51.6
Total	101	100.0	91	100.0

#### 9.5 HIV Prevalence among IDUs

HIV prevalence among the IDUs decreased slightly since the first round; however, the decrease is not statistically significant. As seen in Table 9.5, the first round of IBBS showed that the rate of infection was 11.7 percent among IDUs in the Western and Far Western Terai, this number only slightly decreased to 11 percent in the second round.

**Table 9.5: Study Center/District – Specific HIV Prevalence among IDUs** 

District	First round (2005)			Second round (2007)		
District	Total sample	HIV+	%	Total sample	HIV+	%
Study centers (Districts)						
Bhairahawa/Butawal (Rupandehi)	150	20	13.3	140	14	10.0
Nepalgunj (Banke)	50	15	30.0	60	19	31.7
Dhanagadi (Kailali)	50	0	0.0	50	0	0.0
Mahendra Nagar (Kanchanpur)	50	0	0.0	50	0	0.0
Total	300	35	11.7	300	33	11.0

Banke remains as the study center with the highest prevalence rate (30% in 2005 and 31.7% in 2007). The small decrease of 3.3 percentage points in Rupandehi study center is not statistically significant. As in 2005, no respondents were diagnosed with HIV in Kailali and Kanchanpur study centers.

#### 10. SUMMARY OF MAJOR FINDINGS AND RECOMMENDATIONS

#### 10.1 Summary of Major Findings

- Eleven percent of IDUs tested HIV positive. Syphilis history was found among 1.3 percent of IDUs while none of the study participants currently had high titre syphilis. The HIV prevalence did not change significantly since 2005.
- The prevalence of HIV was significantly higher (p<0.05) among those who had been injecting drugs for more than five years (17.4%), those who had injected with a previously used needle (22.6%) and those who had injected with a needle/syringe which had been left in a public place (38.5%).
- The IDUs consisted predominantly of younger members of the population with 63.4 percent being below the age of 30 years. The average age of IDUs was up from 25 in 2005 to 27 in 2007.
- On average, the respondents had been injecting drugs for 5.5 years, a considerable increase from 4.3 in 2005. Forty four percent of IDUs had been injecting for five years or more, whereas 19 percent of respondents in the study districts had started injecting during the last two years.
- The injecting practices of the respondents during the week preceding the study indicated that 10.3 percent of respondents had used another's previously used needle/syringe, 4.3 percent had used a needle/syringe kept in a public place and 11.7 percent had shared their needle/syringe with others at least once. These indicators point towards an increased level of awareness regarding risky injecting practices since 2005.
- Ninety eight percent of IDUs had sex before. Among them, 75.5 percent had been sexually active in the past year.
- In the past year, consistent condom use was reported by 48.4 percent of respondents with sex workers, 39.3 percent with non-regular partners and seven percent with regular sex partners.
- Some IDUs (5.7 %) had not heard about STIs before this survey.
- Thirteen percent of IDUs had experienced at least one STI symptom before, among them, 57.9 percent had not sought any treatment.
- Overall, 77.3 percent of IDUs were aware of all three major measures to prevent HIV while 57 percent of IDUs were aware of all five major modes of HIV/AIDS transmission.

- Around 95 percent of IDUs knew that a confidential HIV testing facility was available in their communities. However, only 46 percent had ever taken an HIV test.
- Overall, 80.3 percent of IDUs had met with PE/OEs, 69 percent had visited a DIC and 14 percent had visited a VCT center at least once in the past year. However, very few IDUs (3.3%) had visited an STI clinic.
- Over a third (35.3%) had ever participated in at least one HIV/AIDS awareness program or similar community event.

#### 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 indicates that youth and adolescents are more susceptible to falling into an injecting habit (32.7% respondents were below 25 years of age while 38.7% had their first injection at the age of less than 21 years). Specific program activities that target school children, college students, youth, and adolescents should be designed to impart knowledge on the dangers of drug use, HIV/AIDS awareness and sex education
- A significant relation was noticed between HIV prevalence and drug injecting practices. HIV prevalence was significantly higher among IDUs who had injected with a previously used syringe and among those who had injected with syringes left in public places during the past week. Ongoing HIV/AIDS awareness activities should continue and be expanded geographically to cover more IDUs. Advocacy, behavioral change activities and health promotion intervention should be further scaled up. Harm reduction initiatives like 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 7 percent of IDUs with their regular partners, 39.3 percent with their non-regular partners and 48.4 percent with commercial sex workers in the past one 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.
- Overall, 72.3 percent of IDUs had never been to a de-addiction treatment center. Rehabilitation and detoxification centers should be further extended and supported for providing necessary services to IDUs; particularly those belonging to economically deprived families. Rehabilitation programs should also incorporate family counseling services
- Forty six percent of respondents had never taken an HIV test. Additionally, around 58 percent of those IDUs who had ever experienced an STI symptom had never sought any treatment. HIV/AIDS awareness campaigns should also focus on STI education. Client friendly STI testing and treatment facilities, as

well as VCT centers, should be made available to encourage more IDUs to voluntarily come forward for such services.

- PE/OEs are good contact points to disseminate necessary information and IEC materials to the target population. Around 80 percent of respondents had met with them at least once in the course of the past year. One to one education for behavioral change and safe injecting and sexual practices through wider mobilization of PE/OEs could yield positive results.
- A good number of IDUs visit DICs; 69 percent of respondents had visited a DIC in the past year. More DICs with expanded activities at central locations could cover more of the target groups.
- Around 65 percent of respondents had never participated in any HIV/AIDS related program. Ongoing programs should be expanded geographically and capacity building of local NGOs should be focused on to increase access to more of the target population.
- Monitoring and evaluation of HIV prevalence and risk behaviors of IDUs are needed at regular time intervals to design and implement timely intervention strategies.

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# **ANNEXES**

### **ANNEX – 1: Questionnaire**

#### **Confidential**

## Integrated Bio-Behavioral Survey (IBBS) among Injecting Drug Users (IDUs) in Selected Sites of Nepal FHI/New ERA/SACTS – 2007

Namaste! My name is I am here from New ERA to collect data for					
a research. During this data collection, I will ask you some personal questions that					
will be about drugs, use of needle/syringe when injecting drugs, sexual behavior,					
use of condoms and knowledge about STI/HIV/AIDS. You may feel uneasy					
responding to some personal questions. But it is important that you answer					
truthfully. We will also take your blood sample for laboratory testing for syphilis					
and HIV. 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 research purpose. This survey will take about					
40 to 60 minutes.					
It depends on your wish to participate in this survey or not. You do not have to answer 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:/2064					

#### **Operational definition of respondent:**

**Male Injecting Drug User (IDU)**: Person who injects various drugs in muscles or in veins for intoxication purposes. Please note that people who inject drugs as part of medical treatment are not included in IDUs. The respondent must be a current injecting drug user who has started injecting at least *three months before the interview date*. Those who have started injection within last three months are not eligible for interview.

Male IDUs under the age of 16 will be excluded.

	Code Respondents:	
Seed: 1. Yes	2. No	

IDENT	TIFICATION NUMBER	R (Coupon Number): _	(Write '0' for seed)
Coupo	on number given:	1)	2)
		3)	
Did th	e interviewee abando	on the interview?	
	1. Yes (Precise the 2. No	number of the last	question completed: Q)
Interv	iewer Name:		_ Code Interviewer:
Date I	nterview:/	/ 2064	
Check	ted by the supervisor:	Signature:	Date:// 2064
Data E Data E	Entry # 1: Clerk's nan Entry # 2: Clerk's nan	ne:	_ Date/2064 _ Date/2064
001.	Has someone interv weeks?	iewed you from N	ew ERA with a questionnaire in last few
	1. Yes	2. No (contin	nue interview)
	When? Days ago ( <b>mak</b> o	e sure that it was	interviewed by New ERA and close the
	interv	view)	
002.	Respondent's ID #:		
002.1	Respondent referred	by coupon no	
002.2	In which part of the	body respondent u	isually inject? (Conform by observation)
002.3	Did you share needl seed)	e/syringe with the	friend who brought you here? (Don't ask with
	1. Yes	2. No	
002.4	How long you have	been injecting dru	gs?
	Years Mont	ths	

(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 to Q.N.
101	Where are you living now?	Ward	
	(Write current place of residence: Ward No. Tole, Lane etc.)	VDC/Municipality District	
101.1	How long have you been living continuously at this location?	Month	
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	
105	What is your caste? (Specify Ethnic Group/Caste)	Ethnicity/Caste	
106	What is your current marital status?	Never married1Married2Divorced/Permanently3separated3Widow4Other (Specify)96	108
107	How old were you when you first married?	Age(write the completed years)	
10 8	With whom you are living now?	Living with wife	110 110 110
10 9	Do you think your wife/female sexual partner has any other sexual partners?	Yes       1         No       2         Don't' know       98         No response       99	110 110 110

Q. N.	Questions	Coding Categories	Skip to Q.N.
10 9.1	If yes, what is the sex of the partner?	Male1	
		Female2	
110	During the past one-month how often have	Every day1	
	you had drinks containing alcohol?	More than once a week2	
		Less than once a week3	
	(Such as beer, local beer etc.)	Never drink4	
		Others (Specify)96	
		No response99	

## 2.0 DRUG USE

Q. N.	Questions		Coding Categories				Skip to Q.N.		
201.	How long have you been using	drugs?		Years					
	(Drug means medicine not used for purpose rather used for Intoxication		ţ	Months No respo			. <b></b> 9	]	
202.	How old were you when you findrugs? (Include self-injection or injection by	-		Years					
203	How long have you been inject			Years					
	(Include self-injection or injection b	y another	)	Months No respo			99	9	
203.1	Have you injected drugs in the	last mon	th?	Yes No					.04
203.2	If Yes, have you used non-steri equipment at any time in the last	st month	?	Yes No				1 2	
204.	Which of the following types of week? (Read the list, multiple of				and/or i	njected	in the	past c	one-
		Use	ed in	Last-We	eek	Inje	cted in	Last	-Week
	Description	YES	N	O 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		99	1	2	98	99
	6. White Sugar	1	2	98	99	1	2	98	99
	7. Phensydyl	1	2		99	1	2	98	99
	8. Calmpose	1	2		99	1	2	98	99
	9. Diazepam	1	2		99	1	2	98	99
	10. Codeine	1	2		99	1	2	98	99
	11. Phenergan	1	2		99	1	2	98	99
	12. Cocaine	1	2		99	1	2	98	99
	13. Proxygin	1	2		99	1	2	98	99
	14. Effidin	1	2	98	99	1	2	98	99
	15. Velium 10	1	2		99	1	2	98	99
	16. Lysergic Acid	1	2	98	99	1	2	98	99
	Dithylamide(LSD)								
	17. Nitrovate	1	2		99	1	2	98	99
	18. Combination (Specify)	1	2		99	1	2	98	99
	96. Others (Specify)	1	2	98	99	1	2	98	99

Q. N.	Questions	Coding Categories	Skip to Q.N.
204.1	Did you switch in the last month from one	Yes1	
	drug to another?	No2	205
204.1.1	If yes	Fromdrug	
		Todrug	
204.1.2	What is the reason for switching?		
205.	How many times would you say you		209
	injected drugs yesterday?	Times	
		Not injected0	
206.	Would you like to tell me why you did not		
	injected yesterday?		
207	**		
207.	How many days ago did you get injected?	Days ago	
208.	How many times would you say you	Ti.	
	injected drugs on the last day?	Times	
209.	During the past one-week how often would	Once a week1	
	you say you injected drugs?	2-3 times a week2	
		4-6 times a week3	
		Once a day4	
		2-3 times a day5	
		4 or more times a day6	
		Not injected in the last week7	
		Don't know98	
		No response99	

## 3.0 NEEDLE SHARING BEHAVIORS

Q. N.	Questions	Coding Categories	Skip to Q.N.
301.	Think about the times, you have injected drugs yesterday/last day. How many times did you inject drugs that day? (Fill the number from answer to Q. 205 or 208 and verify by asking the respondent)	Times	
302.	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	
		Others (Specify)         96           Don't know         98           No response         99	

Q. N.	Questions	Coding Categories	Skip to Q.N.
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	
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	
303.1	That time, If you were in a group, how many different people in the group do you think used the same needle?	Nos	
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	
304.1	That time If you were in a group, how many different people in the group do you think used the same needle?	Nos	
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 times1Almost every-times2Sometimes3Never used4Not injected in the last week5Don't know98No response99	314

Q. N.	Questions	Coding Categories				Skip to Q.N.
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	
	Your usual sexual partner	1	2	98	99	
	2. A sexual partner who you did not	1	2	98	99	
	know					
	3. A friend	1	2	98	99	
	4. A drugs seller	1	2	98	99	
	5. Unknown Person	1	2	98	99	
207	96. Other (Specify)	1	2	98	99	
307.	With how many different injecting	Numbe	r of nar	tners		
	partners did you share needles or syringes					
	in the past one-week?					
	(Count everyone who injected from the same syringe)	T (0 Tesp				
308.	In the past one-week, how often did you	Every times1				
	give a needle or syringe to someone else,			mes		
	after you had already used it?					
309.	In the past week did you aver inject with a					
309.	In the past-week, did you ever inject with a pre-filled syringe?					
	pre-fined syringe:					
	(By that I mean a syringe that was filled without					
	you witnessing it)	r to resp	01130			
310.	In the past one-week, how often did you					
	inject drugs using a syringe after someone	Almost	every-ti	mes	2	
	else had squirted drugs into it from his/her					
	used syringe?					
	(front-loading/back-loading/ splitting)					
311.	In the past one-week, when you injected					
311.	drugs, how often did you share a cooker/			mes		
	vial/container, cotton/filter, or rise water?					
312.	In the past one-week, how often you draw					
	up your drug solution from a common	Almost	every-ti	mes	2	
	container used by others?					
		No resp	onse		99	

Q. N.	Questions	Coding Categories	Skip to Q.N.
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 time1Almost every-times2Sometimes3Never4	314
		Never reused       5         Others (Specify)       96         Don't know       98         No response       99	314 314 314 314
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       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	316 316 316
315.	Where can you obtain new unused needles and syringes?	Drugstore         1           Other shop         2           Health worker         3           Hospital         4           Drug wholesaler/drug         agency         5           Family/relatives         6           Sexual partner         7	
	(Do not read out list. Multiple answers possible. Probe only with "Anywhere Else?")	Friends	
316.	In the past one-year, did you ever inject drug in another city/district?	Yes       1         No       2         Don't' remember       98         No response       99	317 317 317
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 to Q.N.
316.3	When you injected drugs in another city,	Every times1	
	how often did you gave a syringe/needle	Almost every-times2	
	to some one else?	Sometimes	
		Don't know	
		No response 99	
317.	Are you currently under treatment (or	Currently under treatment 1	
	receiving help) or have you ever received	Was in treatment but not now2	
	treatment (or help) because of your drug	Have never received	401
	use?	treatment	401 401
318.	How many months ago did you last	No response	401
310.	receive treatment or help for your drug	Months	
	use?	Don't know98	
319.	Wilest Lind of the state of the last section	No response99	
319.	What kind of treatment or help have you received?		
	(Do not read out the responses, probe asking, "Are there any other kinds of treatment that you've received?" Multiple Answers Possible.)		
	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 <i>cold turkey</i>		
	9. Forced for <i>cold turkey</i>		
	96. Other (Specify)		
	99. No response		

## 4.0 SEXUAL HISTORY

Q. N.	Questions	Coding Categories	Skip to Q.N.
401.	How old were you at your first sexual intercourse?	Years old	601
402.	Have you had sexual intercourse in the last 12 months	No response       .99         Yes       .1         No       .2	404
		No response99	404

Q. N.	Questions	Coding Categories	Skip to Q.N.
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	
403.2	How many were female "sex worker"?  (Partners to whom you bought or sold sex in exchange for money or drug)	Number	
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	
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	501 501
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	501 501
404.2	With how many different male partners have you had anal sex in the last 12 months?	Number	
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 to Q.N.
501.	Did you have sex with female regular partner during last 12 months?	Yes1 No2	502
501.1	Think about your most recent female regular sexual partner. How many times did you have sex with her during last onemonth?	Times	
501.2	The last time you had sex with a female regular partner did you and your partner use a condom?	Yes	501.4
	use a condom:	No response99	501.4

Q. N.	Questions	Coding Categories	Skip to Q.N.
501.3	Why did not you or your partner use a condom that time?	Not available	
	(Do not read the possible answers, multiple answer possible)	Didn't think it was necessary6 Didn't think of it	
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 had ever-anal sex with your female regular partners?	Yes       1         No       2         Don't know       98         No response       99	502 502 502
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	503
	Think about the female sex workers that you have had sex in the past one-month.		
502.1	In total how to many female sex workers you sold sex in exchange for money or drugs?	No	
502.1.	With how many sex workers you had sex in last month by paying them money or drugs?.	No	
502.2	Think about your most recent female sex worker. How many times did you have sexual intercourse with her in the past onemonth?	Times	

Q. N.	Questions	Coding Categories	Skip to Q.N.
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	502.5 502.5 502.5
502.4	Why did not you and your partner use a condom that time?	Not available         1           Too expensive         2           Partner objected         3           Don't like them         4	302.3
	(Do not read the possible answers, multiple answer possible)	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	
502.5	How often have you used a condom with female sex workers in the past year?	No response       99         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 inject drugs?	Yes       1         No       2         Don't know       98	
502.7	Have you ever had anal sex with your female sex workers?	No response       99         Yes       1         No       2         Don't know       98         No response       99	503 503 503
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	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	
503.2	The last time you had a 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	503.4 503.4 503.4

Q. N.	Questions	Coding Categories	Skip to Q.N.
503.3	Why did not you and your partner use a	Not available1	
	condom that time?	Too expensive2	
		Partner objected 3	
		Don't like them4	
		Used other contraceptive 5	
	(Don't read the possible answers, multiple	Didn't think it was necessary 6	
	answer possible)	Didn't think of it7	
		Other (Specify)96	
		Don't know98	
		No response 99	
503.4	How often have you used a condom with a	Every times 1	
	female non-regular partner in the past	Almost every-times2	
	year?	Sometimes3	
		Never used4	
		Don't know98	
		No response 99	
503.5	Did you know whether your female non-	Yes 1	
	regular partners also inject drugs?	No2	
		Don't know98	
		No response 99	
503.6	Have you ever had anal sex with your	Yes 1	
	female non-regular partners?	No 2	504
		Don't know98	504
		No response	504
503.7	The last time you had an anal sex with a	Yes 1	
	female non-regular partner, did you and	No2	
	your partner use a condom?	Don't know98	
		No response	
503.8	How often have you used a condom in an	Every times 1	
	anal-sex with female non-regular partners	Almost every-times	
	in the past year?	Sometimes3	
		Never used4	
		Don't know	
<b>704</b>		No response	
504	Have you had anal sex with a male partner	Yes 1	505
	in the past one year?	No 2	505
	(See the response in Q. 404.1 and circle Q. 504 response)		
504.1	Think of your last male sex partner with		
304.1	whom you had anal sex: in the last one	Times	
	month, how many times you had anal sex	Don't know98	
	with him?	No response	
504.2	The last time you had anal sex with him;	Yes1	504.4
30-T.Z	did you use condom?	No	304.4
	dia jou use condoni.	Don't know98	504.4
		No response	504.4
		1 to response	JUT.T

Q. N.	Questions	Coding Categories	Skip to Q.N.
504.3	Why didn't you use condom at that time?	Not available1	
		Too expensive2	
	(Don't read possible answer, multiple answer	Partner objected3	
	possible)	Don't like them4	
		Used other contraceptive 5	
		Didn't think it was necessary 6	
		Didn't think of it7	
		Other (Specify)96	
		Don't know98	
		No response99	
504.4	How often have you used a condom is an	Every times 1	
	anal sex with a male partner is the past	Almost every-times2	
	year?	Sometimes3	
		Never used4	
		Don't know98	
		No response99	
504.5	Do you know if your male partner with	Yes 1	
	whom you had anal sex also injects drugs?	No2	
		Don't know98	
		No response 99	
505.	Have you had sexual intercourse in the last	Yes 1	
	month?	No2	507
506.	If yes, did you or your partner use a	Every times1	
	condom when you had sex last month?	Almost every-times2	
		Sometimes3	
		Never used4	
		Don't know98	
		No response99	
507.	With whom did you have the last sexual	FSW 1	
	intercourse?	Regular partner2	
		(Wife or live in sexual partner)	
		Other female friend	
		Male friend	
		Don't Know	
500	Did non non condens in the last come i	No response	
508.	Did you use condom in the last sexual	Yes	
	intercourse	No2	

## 6.0 USE AND AVAILABILITY OF CONDOM

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

Q. N.	Questions	Coding Categories	Skip to Q.N.
601.	Have you ever heard of a male condom?	Yes1	
		No2	701
	(Show picture or sample of condom)	Don't know98	701
		No response99	701
602.	Have you ever used a condom?	Yes1	
		No2	
603.	Do you know of any place or person from	Yes1	
	which you can obtain condom?	Don't know98	701
		No response99	701
604.	From which place or people, you can	Shop1	
	obtain condoms?	Pharmacy2	
		Clinic3	
		Hospital4	
		Family planning center5	
	(Multiple answer possible. Don't read the list but	Bar/Guest house/Hotel6	
	should probe)	Health worker7	
		Peer Educator/outreach	
		educator8	
		Friend9	
		<i>Pan Pasal</i> 10	
		Others (Specify)96	
		No response99	
605.	How long would it take (from your house	Less than 30 minutes1	
	or the place where you work) to obtain a	More than 30 minutes2	
	condom?	Don't know98	
		No response99	

## 7.0 KNOWLEDGE AND TREATMENT OF STIS

Q. N.	Questions	Coding Categories	Skip to Q.N.
701.	Have you ever heard of diseases that can	Yes1	
	be transmitted through sexual intercourse?	No2	704
		No response99	704
702.	Can you describe any symptoms of STIs in	Abdominal pain1	
	women?	Genital discharge2	
		Foul smelling3	
		Burning pain on urination4	
		Genital ulcers/sore5	
	(Do not read possible answers, multiple answers	Swelling in groin area6	
	possible.)	Itching7	
		Other (Specify)96	
		Don't know98	
		No response99	
703.	Can you describe any symptoms of STIs in	Genital discharge1	
	men?	Burning pain on urination2	
		Genital ulcers/sore blister3	
	(Do not read possible answers, multiple answer	Swellings in groin area4	
	possible)	Others (Specify)96	
		Don't know98	
		No response99	
704.	Have you had a genital discharge/burning	Yes1	
	urination during the last 12 months?	No2	705
		Don't know98	705
		No response99	705
704.1	Currently, do you have a genital	Yes1	
	discharge/burning urination problem?	No2	
		Don't know98	
		No response99	
705	Have you had a genital ulcer/sore blister	Yes1	
	during the last 12 months?	No2	706
		Don't know98	706
		No response99	706
705.1	Currently, do you have a genital ulcer/sore	Yes1	
	blister problem?	No2	
	-	Don't know98	
		No response99	
706.	Last time you had a genital discharge/	Did not seek treatment1	
	burning urination or a genital ulcer/sore	With private doctor2	
	blister, where did you go for treatment?	In hospital3	
		No Symptoms4	
	1	Others (Specify)96	1

## 8.0 KNOWLEDGE, OPINIONS AND ATTITUDES ON HIV/AIDS

Q. N.	Questions	Coding Categories	Skip to Q.N.
801.	Have you ever heard of HIV or the disease	Yes1	
	called AIDS?	No2	804
		No response99	804
802.	Do you know anyone who is infected with HIV	Yes1	
	or who has died of AIDS?	No2	
		No response99	804
803.	Do you have close relative or close fried	Yes, a close relative1	
	who is infected with HIV or has died of	Yes, a close friend2	
	AIDS?	No3	
		No response99	
804.	Can a person protect himself/herself from	Yes1	
	HIV, the virus that causes AIDS, by using	No2	
	a condom correctly every time they have	Don't know98	
	sex?	No response99	
805.	Can a person get HIV, from mosquito	Yes1	
	bites?	No2	
		Don't know98	
		No response99	
806.	Can a person protect himself/herself from	Yes1	
	HIV, by having one uninfected faithful sex	No2	
	partner?	Don't know98	
00=	2 11 107 100	No response99	
807.	Can a person protect himself/herself from	Yes1	
	HIV, by abstaining from sexual	No2	
	intercourse?	Don't know98	
000	C AMV 1 1 1 1	No response	
808.	Can a person get HIV, by sharing a meal	Yes1	
	with someone who is infected?	No	
809.	Con a margan get IIIV by getting	No response99	
809.	Can a person get HIV, by getting injections with a needle that was already	Yes1 No2	
	used by someone else?	Don't know98	
	used by someone else:	No response99	
810.	Can a person who inject drug protect	Yes	
010.	himself/herself from HIV, the virus that	No	
	causes AIDS, by switching to non-	Don't know98	
	injecting drugs?	No response99	
		1 to response	
	(Oral or inhaling drugs)		
811.	Can a pregnant woman infected with HIV	Yes1	
	transmit the virus to her unborn child?	No2	813
		Don't know98	813
		No response99	813
812.	What can a pregnant woman do to reduce	Take medication	
	the risk of transmission of HIV to her	(Antiretrovirals)1	
	unborn child?	Others (Specify)96	
		Don't know98	
	(Do not read the possible answers, multiple answer possible)	No response99	

Q. N.	Questions	Coding Categories	Skip to Q.N.
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	
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?	Yes	
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 get a confidential test to find out if they are infected with HIV? (By confidential, I mean that no one will know the result if you don't want him or her to know it.)	Yes	
815	I don't want to know the result, but have you ever had an HIV test?	Yes       1         No       2         No response       99	901 901
816.	Did you voluntarily undergo the HIV test, or were you required to have the test?	Voluntary 1 Required 2 No response 99	
817.	Please do not tell me the result, but did you find out the result of your HIV test?	Yes       1         No       2         No response       99	818 818
817.1	Why did you not receive the test result?	Sure of not being infected1 Afraid of result	
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 49 months       4         Don't know       98         No response       99	

## 9.0 AWARENESS OF HIV/AIDS (If answer to Q. 801 "No", Go to Q. 902)

Q. N.	Questions	υ	Categories	Skip to Q.N.
901.	Of the following sources of information, from learned about HIV/AIDS?  (Read the following list, multiple answers possion)		have you	
	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 (Multiple answer possible, read the list)		ast year?	
	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 C	Categories	Skip to Q.N.	
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	
	1. Radio	1	2	-	
	2. Television	1	2	1	
	3. Pharmacy	1	2	1	
	4. Health Post	1	2	1	
	5. Health Center	1	2	-	
	6. Hospital	1	$\frac{2}{2}$	-	
	7. Health Workers/Volunteers	1	$\frac{2}{2}$	-	
	8. Friends/Neighbors	1	$\frac{2}{2}$		
	9. NGOs	1	$\frac{2}{2}$	1	
	10. Newspapers/Posters	1	2	1	
				-	
	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	<b>=</b> 	
	7. Ek Apas Ka Kura	1	2	1	
	8. Maya Garaun Sadbhav Badaun	1	2	1	
	9. Des Pardes	1	2		
	10. Manis Sanga Manis Mile hara Jeeta Kasko Hunchha	1	2	1	
	96. Others (Specify)	1	2	-	
1003.	Have you ever heard/seen or read messages or materials other than mentioned above?	Yes No		1004	

Q. N.	Questions	Coding Categories	Skip to Q.N.
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	Total	
	know you?		1000
	Knowing someone is defined as being able to	Don't know98	1008
	contact them, and having had contact with	No response99	1008
	them in the past 12 months – knowing each other		
1005.1	Among them persons how many are male	Male	
	and female?	Female	
		Don't know98	
		No response99	
1006	Among those persons, please try to	Less than 15 years old []	
	estimate the number of people by range of	15-19 years old []	
	age:	20-24 years old []	
		25-29 years old []	
		30-40 years old []	
		> 40 years old []	
		Don't know98	
		No response	
1007	A sain amana thasa anns mhasa tur ta	Not applicable97 Hindu	
1007	Again, among those guys, please try to estimate the number of people by religion:	Buddhist [ ]	
	estimate the number of people by rengion.	Muslim [ ]	
		Christian [ ]	
		Others (Specify) []	
		Don't know98	
		No response99	
		Not applicable97	
1008	How is the person who gave you the	A close friend1	
	coupon related to you?	A friend2	
	· ·	Your sexual partner3	
		A relative4	
		A stranger5	
		Others (Specify)6	
		Don't know98	
		No response99	

## 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	1105
1102	When you met/discussed/interacted with PE or OE in what kind of activities were you involved?  (Multiple answers. DO NOT READ the possible answers)	Discussion on how HIV/AIDS is/isn't transmitted	
1103	Do you know from which organization were they?  (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 you been visited by PE, OE, CM and/or CE in the last 12 months?	Once	
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	1109

Q. N.	Questions	<b>Coding Categories</b>	Skip to Q.N.
1106	When you went to the out reach center (DIC,IC or CC), in which activities did you take part?	Went to collect condoms	
	(Multiple answers. DO NOT READ the possible answers)	injecting behavior	
1107	Do you know which organizations run those out reach center (DIC, IC or CC)?	KCC.       1         HELP.       2         KYC.       3         PSK       4	
	(Multiple answers. DO NOT READ the possible answers)	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	1113
1110	When you visited such STI clinic in what activities were you involved?	Blood tested for STI	
	(Multiple answers. DO NOT READ the possible answers given below)	identification	

Q. N.	Questions	Coding Categories	Skip to Q.N.
1111	Do you know which organizations run those STI clinics?	AMDA	
	(Multiple answers. DO NOT READ the possible answers)	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         More than 12 times       5	
1113	Have you visited any Voluntary Counseling and Testing (VCT) centers in the last 12 months?	Yes	1117
1114	When you visited such VCT center in what activities were you involved?  (Multiple answers. DO NOT READ the possible answers)	Received pre-HIV/AIDS test counseling	
		intercourse	
1115	Do you know which organizations run those VCT centers?	AMDA 1 Youth Vision 2 SACTS 3 NFCC 4	
	(Multiple answers. DO NOT READ the possible answers)	CAC       5         Naulo Ghumti       6         NSARC       7         NRCS       8         FPAN       9         WATCH       10         Namuna       11         Others (Specify)       96         Don't know       98	

Q. N.	Questions	Coding Categories	Skip to Q.N.
1116	For how many times have you visited VCT	Once1	
	center in the last 12 months?	2-3 times	
		4-6 times	
		7-12 times 4	
		More than 12 times 5	
1117	Have you ever participated in HIV/AIDS	Yes1	
	awareness raising program or community	No 2	1121
	events in the last 12 months?		
1118	When you participated in such events in what	Street drama1	
	activities were you involved?	AIDS Day2	
		Condom Day 3	
	(Multiple answers. DO NOT READ the possible	Video Shows4	
	answers)	Group discussions5	
		Talk programs6	
		HIV/AIDS related training 7	
		HIV/AIDS related Workshops 8	
		Condom use demonstrations 9	
		Others (Specify)96	
1119	Do you know which organizations organized	AMDA 1	
	those activities?	HELP2	
		KYC 3	
	(Multiple answers. DO NOT READ the possible	Youth Vision 4	
	answers given below)	NFCC 5	
		LALS 6	
		Naulo Ghumti 7	
		WATCH 8	
		GWP9	
		NRCS 10	
		NSARC11	
		AHH 12	
		Recovery Nepal	
		SAHARA 14	
		CSG 15	
		Others (Specify)96	
		Don't know98	
1120	How many times have you participated in such	Once1	†
,	activities in the last 12 months?	2-3 times	
		4-6 times	
		7-12 times4	
		More than 12 times5	
1121	Have you heard of any Community Home	Yes	
	Based Care (CHBC) services that are provided	No2	
	for HIV positive people?		
1122	Have you heard of care and support program	Yes1	
1122	that provide information regarding ART and	No2	
	ART services necessary for HIV infected	1102	
	people?		
	people:	<u>l</u>	<u> </u>

## 12.0 Stigma and Discrimination

Q. N.	Questions	Coding Categories	Skip to Q.N.
1201	If a male relative of yours gets HIV, would	Yes 1	
	you be willing to take care of him in your	No2	
	household?	Don't know98	
1202	If a female relative of yours gets HIV,	Yes1	
	would you be willing to take care of her in	No2	
	your household?	Don't know98	
1203	If a member of your family gets HIV,	Yes1	
	would you want it to remain a secret?	No2	
		Don't know98	
1204	If you knew a shopkeeper or food seller	Yes1	
	had HIV, would you buy food from them?	No2	
		Don't know 98	
		No response 99	
1205	Do you think a person with HIV should	Same 1	
	get the same, more or less health care than	More2	
	someone with any other chronic disease?	Less3	
		Don't know 98	
		No response	
1206	If a colleague who is working with you has	Yes1	
	HIV but he is not sick, should he be	No2	
	allowed to continue working?	Don't know 98	
		No response	

## ™ Thank You ∞

## **ANNEX – 2: Basic Equation Used in Sample Design**

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

- n= required minimum sample size per survey round or comparison groups
- D = design effect (assumed in the following equations to be the default value of 2
- $P_1$  = the estimated number of an indicator measured as a proportion at the time of the first survey or for the control area
- $P_2$  = the expected level of the indicator either at some future date or for the project area such that the quantity  $(P_2-P_1)$  is the size of the magnitude of change it is desired to be able to detect
- $Z_{\alpha}$  = the Z-score corresponding to the degree of confidence with which it is desired to be able to conclude that an observed change of size ( $P_2$ - $P_1$ ) would not have occurred by chance ( $\alpha$  the level of statistical significance), and
- $Z_{\beta}$  = the Z-score corresponding to the degree of confidence with which it is desired to be certain of detecting a change of size (P<sub>1</sub>-P<sub>2</sub>) if one actually occurred ( $\beta$  statistical power).

#### **ANNEX – 3: Oral Informed Consent**

Title: Integrated Bio-behavioral Survey among Injecting Drug Users in

Kathmandu Valley, Pokhara Valley, Eastern *terai* Highway Districts, and Western to Far Western *terai* Highway Districts.

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

Principal Investigator/s: Jacqueline McPherson, FHI/Nepal

Dr. Laxmi Bilas Acharya, FHI/Nepal

Address: GPO Box 8803

Gopal Bhawan, Anamika Galli, Ward No4,

Baluwatar, Kathmandu, Nepal Phone: +977 1 4437173 FAX: +977 1 4417475

#### Introduction

We are asking you to take part in research study to collect information on knowledge of HIV/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.

#### **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. 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.

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 due to bleeding bruising during blood drawing. Providing blood sample does not put you at any risk. Some of the questions we ask might put you in trouble or make you feel uncomfortable to answer them. You are free not to answer such questions and also to withdraw yourself from participating in the research process at any time you like to do so. You might feel some mental stress after getting your test results. But you will get proper pre and posttest counseling on HIV and STI through a qualified counselor.

There may be some risk that people may see you associated with the study, either now or when you return for your test results.

#### **Possible Benefits**

You will be provided with free treatment, if currently you have any STI symptoms. You will be given lab test results and made aware of how STI/HIV is transmitted and how it can be prevented and controlled. If your STI tests are positive for the curable sexual infection such as syphilis and you are not treated for this, you will be offered free treatment. You will also be provided with information on safe sex. The information we obtain from this research will

help to plan and formulate strategies to control and prevent further spread of HIV/AIDS and other sexually transmitted diseases.

At the time of sample collection the study team members will give you the detail 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. Someone from FHI might want to ask you questions about being in the research, but you do not have to answer them. A court of law could order medical records shown to other people, but that is unlikely.

#### **Payment**

We will not pay you for your participation but you will be given, 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.

#### **Leaving the Research**

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

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

If you have any questions about the research, call:

Jacqueline McPherson, ASHA project - FHI/Nepal, Baluwatar, Kathmandu, Phone: 01-4437173; **OR** 

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

#### Your Rights as a Participant

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

## **VOLUNTEER AGREEMENT**

I was present while the benefits, risks and procedures were requestions were answered and the volunteer has agreed to take part	
Signature of witness	Date
I certify that the nature and purpose, the potential benefits, and poparticipating in this research have been explained to the above ind	
Signature of Person Who Obtained Consent	 Date

**ANNEX – 4: HIV Prevalence by Study Centers** 

District	Second Round (2007)			
District	Total sample	HIV+	%	
Study centers (Districts)				
Bhaurahawa/Butawal (Rupandehi)	140	14	10.0	
Nepalgunj (Banke)	60	19	31.7	
Dhanagadi (Kailali)	50	0	0.0	
Mahendra Nagar (Kanchanpur)	50	0	0.0	
Total	300	33	11.0	

## **ANNEX – 5: Clinical/Lab Checklist**

## **CONFIDENTIAL**

# INTEGRATED BIO- BEHAVIORAL SURVEY (IBSS) AMONG INJECTING DRUG USERS IN SELECTED SITES OF NEPAL FHI/NEW ERA/SACTS – 2007

#### Clinical/Lab Checklist

		T   1		
Respo	nden		Date: 2064/_	/
Name	of Clinician:		_	
Name	of Lab Technician:			
(A)	Clinical TEST	(B) Specime	n collection	
			Yes	<u>No</u>
Weigh	nt :Kg	Pre-test counseled	1	2
B.P.		g Blood Collected for HIV & Syphilis	1	2
Pulse Temp	: erature :° F	Date & place for post-test results given	1	2
Chip	- Tature 1	Condom given	1	2
		IEC materials given	1	2
1.0	<b>Syndromic Treatment</b>	<u>Information</u>		
101.	• •	enital discharge/burning unididymis in the past one m		ing and
	1. Yes 2. [If yes, give urethral dis	No scharge/scrotal swelling s	syndrome tre	atment]
102.	Have you had genital ulc	eer/sore blister in the past of	one month?	
	1. Yes 2. [If yes, give genital ulce	No r syndrome treatment ar	nd time for fo	ollow-up]
103.	in the past one month? 1. Yes 2.	r non-tender/solid or flucto No swelling (bubo) syndron		_

## **ANNEX – 6: Study Centers**

District	Study centers	No. of Centers	Sample Covered	Total
Kanchanpur	Mahendranagar		50	
Kailali	Dhangadhi		50	
Banke	Nepalgunj	5	60	300
Dunandahi	Bhairahawa		57	
Rupandehi	Butwal		83	

## **ANNEX – 7: Participation in Post Test Counseling**

Date	Counseling Center	Expected Client	Client Counseled		Client with	Client with
	Center	Chefit	N	%	HIV+	HIV-
October 7-17,2007	Mahendranagar	50	6	12.0	0	6
October 29-November 7, 2007	Dhangadhi	50	19	38.0	0	19
September 24-October 3, 2007	Nepalgunj	60	7	11.7	2	5
September 24-October 5, 2007	Bhairahawa	57	12	21.1	1	11
October 3-17,2007	Butwal	83	6	7.2	0	6
	Total	300	50	16.7	3	47

**ANNEX – 8:** Reasons for Not Injecting Drugs on the Previous Day

Injecting practice	First rou	First round (2005)		und (2007)
injecting practice	n = 144	%	n = 134	%
Reasons for not injected on the Previous day*				
Lack of money	74	51.4	74	55.2
To quite slowly	47	32.6	32	23.9
Unavailability/ Lack of drugs	11	7.6	4	3.0
Busy in house work/lack of time	7	4.9	13	9.7
Taking other medicines	2	1.4	14	10.4
Nepal Band	0	0.0	2	1.5
Illness	0	0.0	3	2.2
Guardian not allowed to go outside	0	0.0	1	0.7
Not a regular User (Use Sometimes only)	0	0.0	1	0.7
Others	5	3.5	2	1.5

<sup>\*</sup> Note: Because of multiple answers, percentages add up to more than 100.

**ANNEX – 9: Part of the Body for Injecting Drugs** 

Typical injection points	First rou	ınd (2005)	Second round (2007)		
Typical injection points	N=300	%	N=300	%	
Thigh	179	59.7	2	0.7	
Upper arm	46	15.3	38	12.7	
Wrist	36	12.0	54	18.0	
Forearm	23	7.7	7	2.3	
Armpit	7	2.3	11	3.7	
Finger	3	1.0	0	0.0	
Calf	3	1.0	188	62.7	
Others	3	1.0	0	0.0	

## **ANNEX – 10:** Gathering Place of IDUs to Inject Drugs

G 3.7	Gathering places of IDUs to inject drugs	First round (2005)		Second round (2007)	
S.N.		N=300	%	N=300	%
1.	Forest/Bushes/Farm/Chaur/Bansghari	116	38.7	134	44.7
2.	Own room/Friends room/ Drug Seller's/ User's House	44	14.7	48	16.0
3.	River bank/Slum area/Pond	18	6.0	14	4.7
4.	Toilet/Public toilet	16	5.3	22	7.3
5.	Around school/Campus	7	2.3	1	0.3
6.	Chowk/Tole/Galli/Road	2	0.7	0	0.0
7.	Garage	1	0.3	1	0.3
8.	Others	1	0.3	2	0.7
9.	Sunauli (India)	57	19.0	77	25.7
10.	Banbasa (India)	23	7.7	0	0.0
11.	Belhiya (India)	6	2.0	0	0.0
12.	Gaurifanta (India)	6	2.0	0	0.0
13.	Rupaidiya (India)	2	0.7	1	0.3
14.	Nautanuwa (India)	1	0.3	0	0.0

**ANNEX – 11: Combination of Different Drugs Injected by IDUs** 

S.N.	Down Constitution	Second round (2007)		
5.N.	Drugs Combination	N=213		
1.	Lubrigesic + Phenargan	80		
2.	Norphin + Diazepam + Phenargan	29		
3.	Tidigesic + Diazepam + Phenargan	22		
4.	Lubrigesic + Diazepam + Phenargan	16		
5.	Norphin + Diazepam + Hydrocole	13		
6.	Lubrigesic + Avil	10		
7.	Norphin + Phenargan	8		
8.	Norphin + Diazepam	6		
9.	Lubrigesic + Diazepam + Hydrocole	5		
10.	Tidigesic + Diazepam	2		
11.	Norphin + Diazepam + Avil	2		
12.	Tidigesic + Diazepam + Hydrocole	2		
13.	Norphin + Calmpose + Hydrocole	2		
14.	Norphin + Avil	1		
15.	Tidigesic + Phenargan	1		
16.	Fortwin + Diazepam	1		
17.	Diazepam + Phenargan	1		
18.	Lubrigesic + Calmpose	1		
19.	Brown Sugar + Diazepam	1		
20.	Diazepam + Avil	1		
21.	Norphin + Lubrigesic + Phenargan	1		
22.	Lubrigesic + Phenargan + Hydrocole	1		
23.	Lubrigesic + Diazepam + Prophemaiz	1		
24.	Norphin + Lubrigesic + Diazepam	1		
25.	Norphin + Diazepam + Phenargan + Avil	1		
26.	Norphin + Diazepam + Phenargan + Hydrocole	1		
27.	Lubrigesic + Diazepam + Phenargan + Avil	1		

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

ANNEX – 12: Drug Switching Practice of IDUs and Reasons for it

Drug switching behavior of IDUs	First rou	and (2005)	Second round (2007)	
Drug switching behavior of IDOs	N	%	N	%
Switched from one drugs to another drugs in past month				
Yes	13	4.3	4	1.3
No	287	95.7	296	98.7
Total	300	100.0	300	100.0
Switched from				
Diazepam + Tidigesic + Hydrocole to Brown Sugar	7	53.8	0	0.0
Tidigesic to Brown Sugar	2	15.4	0	0.0
Tidigesic + Hydrocole to Brown Sugar	1	7.7	0	0.0
Norphin + Phenargan to Phenargan + Neurophin	1	7.7	0	0.0
Diazepam + Tidigesic + Phenargan to Proxyvon + Spasmo	1	7.7	0	0.0
Diazepam + Tidigesic + Calmpose to Brown Sugar	1	7.7	0	0.0
Norphin to Tidigesic	0	0.0	1	25.0
Brown Sugar to Norphin	0	0.0	1	25.0
Proxyvon to Brown Sugar	0	0.0	1	25.0
Norphin + Diazepam to Brown Sugar	0	0.0	1	25.0
Total	13	100.0	4	100.0
Reasons for switching				
Lack of money	9	69.2	1	25.0
To reduce Tidigesic/Leave slowly	3	23.0	0	0.0
Not Available/Scarcity of drugs	0	0.0	3	75.0
Others	1	7.7	0	0.0
Total	13	*	4	*

<sup>\*</sup>Note: Because of multiple answers percentages may add up to more than 100.

ANNEX – 13: Name of the Institution and Types of Treatment Received

Types of treatments  Types of institutions	Residential Rehabilitation	Forced for Cold turkey	Without drug	With other drug	Out Patient Counseling	Other treatment/ help
n=83	%	%	%	%	%	%
Naulo Ghumti	9.6	-	1	-	-	-
Youth Vision	7.2	-	ı	-	1.2	-
Navajeevan Punarsthapana	1.2	-	ı	-	-	-
Lumbini Punarsthapana	18.0	-	-	-	-	-
Sahara Treatment Center	14.4	-	ı	-	-	-
Nirman Nasha Kendra	1.2	-	1	-	-	-
Seren Foundation	2.4	-	ı	-	-	-
Richmond Fellowship	10.8	-	ı	-	-	-
Punarjeewan Kendra	2.4	-	ı	-	-	-
Ashara Sudhar Kendra	1.2	-	1	-	-	-
International Nepal Fellowship	4.8	-	-	1.2	6.0	3.6
Family Members	-	-	2.4	1.2	-	-
Support and Care Centre	1.2	-	-	-	-	-
Mukti Kendra	1.2	-	-	-	-	-
Care Foundation	1.2	-	-	-	-	-
Others	8.4	1.2	-	-	-	-
Total	85.5	1.2	2.4	2.4	7.2	3.6

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

ANNEX – 14: Reasons for not Using Condom in the Last Sex with Different Sex Partners

Reasons of not using condom	First round (2005)		Second round (2007)	
Reasons of not using condom	N	%	N	%
Reasons of not using condom with regular partner in the last				
sexual intercourse				
Not available	0	0.0	2	1.9
Partner objected	7	6.7	3	2.8
Don't like them	33	31.7	13	12.1
Used other contraceptive	33	31.7	62	57.9
Didn't think it was necessary	79	76.0	41	38.3
Didn't think of it	4	3.8	2	1.9
Willing to have baby	5	4.8	9	8.4
Trust on partner	0	0.0	1	0.9
Wife is pregnant	5	4.8	2	1.9
Sexual Unsatisfaction	0	0.0	5	4.7
Others	5	4.8	1	0.9
Total	104	*	107	*
Reasons of not using condom with sex worker in the last				
sexual intercourse				
Not available	31	75.6	10	33.3
Partner objected	0	0.0	6	20.0
Don't like them	9	21.6	10	33.3
Didn't think it was necessary	0	0.0	1	3.3
Didn't think of it	4	9.8	6	20.0
Sexual Unsatisfaction	0	0.0	6	20.0
Willing to have baby	0	0.0	1	3.3
Used other contraceptives	0	0.0	1	3.3
Others	1	2.4	0	0.0
Total	41	*	30	*
Reasons of not using condom with non- regular partner in the				
last sexual intercourse				
Not available	15	60.0	10	41.7
Partner objected	0	0.0	1	4.2
Don't like them	8	32.0	6	25.0
Used other contraceptive	0	0.0	1	4.2
Didn't think it was necessary	4	16.0	8	33.3
Didn't think of it	5	20.0	3	12.5
Trust on partner	2	8.0	0	0.0
Sexual Unsatisfaction	1	4.0	5	20.8
Others	1	4.0	0	0.0
Total	25	*	24	*

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

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