

**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 Helpless   |
| AIDS   | - | 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 Virus  |
| IBBS   | - | Integrated Bio-Behavioral Survey   |
| ID     | - | Identification Number  |
| IDU    | - | Injecting Drug User  |
| IEC    | - | Information, Education and Communication                                       |
| INF    | - | International Fellowship Nepal   |
| MARPs  | - | Most at Risk populations   |
| MSM    | - | Men who have Sex with Men  |
| NCASC  | - | National Centre for AIDS and STD Control                                       |
| NGO    | - | Non-Governmental Organization  |
| NHRC   | - | 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 the Integrated Biological and Behavioral Survey (IBBS) among most at risk populations (MARPs). These surveillance studies at regular intervals help to assess health risk behaviors and measure the prevalence of HIV and Sexually Transmitted Infections (STIs) among MARPs and monitor trends in epidemic to inform the HIV response in Nepal.

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

This report details the findings of the second round of the IBBS conducted among 300 male IDUs in the Western and the Far-Western Terai. The primary objective of the study was to collect strategic information needed to analyze trend 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 fifth (43.7%) of IDUs were single and 51percent of IDUs were either living alone or without a co-habiting sex partner.



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/ethnicity 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 respondents was currently infected with syphilis.

The prevalence of HIV was significantly high ( $p < 0.05$ ) 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 injected with needle/ syringe left at 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 rate among the respondents.

### **Drug Injecting Practice**

On average, the respondents had been injecting drugs for five and 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 in 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 combination of different drugs.

### **Needle/Syringe Using Practice**

More IDUs have been avoiding risky injecting practices in 2007 than in 2005. Nevertheless high risk behaviors like using own/somebody else's used needle/ syringe, or those left at public places was reported by 10.3 percent respondents in most recent, 6.7 percent in second most recent and 7.7 percent in third most recent injections.

Ten percent of IDUs had used other's needle/syringe, 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 maintained sexual contact 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 of them had sexual contact in the month preceding the survey.

Nineteen percent respondents had sexual contact with non-regular female sex partners in the past year and 51.8 percent of them 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 in the past month 49.5 percent of them had maintained sexual contact with them.

Sixty seven percent of IDUs had used condom in last sex with sex worker, while 57.1 percent had used condom in last sex with non- regular partner and 25.2 had used it with regular partner.

In the past year 48.4 percent of IDUs had used condom 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 respondents had genital discharge and 10.3 percent had genital ulcer/sore in the past year. Almost 58 percent of those IDUs who had experienced STI symptom had never sought treatment.

In total 77.3 percent 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 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 mosquito bite - E and sharing meal with an HIV infected person do not transmit 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 respondents had ever tested 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 before.

Little over one-third (35.3%) 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 also estimated about 70,000 people (including children and adults above the age of 49 years) to be infected by HIV in Nepal. There is 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 had 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 the 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 also been found to be a major contributing factor to the spread of HIV among the non-injecting population (AIDS in Asia, MAP Report, 2004).

HIV prevalence among IDUs varies by location in Nepal. The first 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 designing timely intervention strategies and as well as monitoring the HIV prevalence situation among the targeted population.

This report focuses on the findings of the second round study in the Western and the Far- Western Terai and compares the results from 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 the study was also undertaken primarily to determine the prevalence of HIV/STI and to assess HIV/STI related risk behavior among IDUs in the Western and the Far-Western Terai.

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

### **2.2 Study Population**

The 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 the 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.

IDUs networking study in the Western and the 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 and that they share a weak or virtually anonymous relation with each other. They do not meet frequently and many of them share a very casual relation which is limited to occasional meeting at DICs, drug purchasing places and adjoining Indian market. It was further observed that inter-district networking of IDUs is very limited and has also been restricted due to long distance between districts. On this basis two stage cluster sampling methodology was used for this study.

Concerned stakeholders at district level and local governmental organizations (GOs) and non-governmental organizations (NGOs) representatives 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, both maximum and minimum number of IDUs was listed in all of the identified locations.

Based on the preliminary information collected during the mapping exercise, list of locations and estimated number of IDUs in each location was 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 and in the second stage from each selected clusters 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 in the 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 the 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 the referral cards were informally asked certain question in order to ensure that they met the inclusive criterion set for the study. Injecting 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. 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 the 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 before. Then 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 drugs behavior, some of the randomly selected IDUs were not easily accessible as they did not want to disclose their status. In such situations, community mobilizers and peer educators of on going HIV/AIDS programs, ex-IDUs, social workers, IDUs who successfully participated in the study or any other key people who could identify and approach the selected IDUs were mobilized 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 person 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 prior to the interview and collection of blood sample in the presence of a witness. The consent form was administered in a private setting. The verbal consent form used in the study is included in Annex 4. No personal identifiers were collected and the samples were labeled only with the ID number provided to the study participant.

#### *2.4.4 Clinical and Laboratory Procedure*

The study participants were clinically checked for any symptom of STIs by the health assistant who also filled in a checklist with the 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.

About 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 in every 10 days. The serum samples were stored at a temperature of -12 to -20°C at SACTS laboratory.

Syphilis was tested using *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 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 negative result then no further test was conducted and the test result was reported as non-reactive. But if the first test showed positive result then a second ELISA test was performed. If the second result too confirmed the first result then 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 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 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 to these, the training focused on providing a clear concept of informed consent to the research team.



Centrally located study centers were established at Bhairahawa and Butwal in Rupandehi district and Nepalgunj, Dhangadi and Mahendranagar in Banke, Kailali and Kanchanpur districts respectively for carrying out the survey (Annex 6). Individual interviews, clinical examination and blood collection were carried out in separate rooms in each 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 the test.

Post-test counseling and individual report dissemination was completed between 24 September and 7 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 the test results (Annex 7). This might be because there was no provision for reimbursement of transportation cost which would have otherwise prompted the IDUs to visit the VCT center and collect the 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 other 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. Adolescent aged 19 or younger made 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 were 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 a 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          | %            |
|--|------------|--------------|
| <b>Age</b>                               |            |              |
| <= 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          |
| <b>Median age</b>                        | <b>27</b>  | <b>-</b>     |
| <b>Marital status</b>                    |            |              |
| Married                                  | 152        | 50.7         |
| Never married                            | 131        | 43.7         |
| Divorced/Separated/Widower               | 17         | 5.7          |
| <b>Total</b>                             | <b>300</b> | <b>100.0</b> |
| <b>Age at first marriage</b>             |            |              |
| <=14                                     | 4          | 2.4          |
| 15-19                                    | 57         | 33.7         |
| 20-24                                    | 72         | 42.6         |
| 25-29                                    | 32         | 18.9         |
| 30-37                                    | 4          | 2.4          |
| <b>Median age</b>                        | <b>21</b>  | <b>-</b>     |
| <b>Total</b>                             | <b>169</b> | <b>100.0</b> |
| <b>Currently living with</b>             |            |              |
| Alone/ friend / without a sexual partner | 153        | 51.0         |
| Spouse                                   | 147        | 49.0         |
| <b>Total</b>                             | <b>300</b> | <b>100.0</b> |

#### 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/ethnicity 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 was 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**

| <b>Social Characteristics</b>                           | <b>N=300</b> | <b>%</b> |
|---|--------------|----------|
| <b>Education</b>  |              |          |
| SLC and above   | 60           | 20.0     |
| Secondary   | 106          | 35.3     |
| Primary   | 77           | 25.7     |
| Literate only   | 15           | 5        |
| Illiterate  | 42           | 14.0     |
| <b>Ethnicity</b>  |              |          |
| 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      |
| <b>Duration of stay in Western to Far-Western Terai</b> |              |          |
| 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  $\leq 1:8$  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 history of syphilis, none of the study participant was 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 demographic and social characteristics of the respondents. HIV prevalence was 11.8 percent among IDUs aged 20 or more whereas no respondents younger than 20 was HIV-positive. The difference however was not large enough to be statistically significant.

Similarly no statistical significance was observed between the 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 neither. 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 |
|-----------------------------------|------------|-----------|-------------|---------|
| <b>Age</b>                        |            |           |             |         |
| Below 20 years                    | 20         | 0         | 0.0         | >0.05   |
| 20 years and above                | 280        | 33        | 11.8        |         |
| <b>Marital status</b>             |            |           |             |         |
| Ever married                      | 169        | 20        | 11.8        | >0.05   |
| Never married                     | 131        | 13        | 9.9         |         |
| <b>Literacy</b>                   |            |           |             |         |
| Illiterate                        | 42         | 3         | 7.1         | >0.05   |
| Literate/formal school            | 258        | 30        | 11.6        |         |
| <b>Total</b>                      | <b>300</b> | <b>33</b> | <b>11.0</b> |         |

### 4.3 Relation between Drug Injection Behavior and HIV

Relationship between HIV prevalence and drug injection such as how long respondents had been injecting, frequency of injections during the past week, 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 those who injected every day (Table 4.3).

Data indicates that sharing syringes puts IDUs at a greater risk of contracting HIV. HIV infection rate was almost three times higher among those IDUs who ever shared needles/syringe with others (22.6%) than those who 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 ever 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 |
|--|------------|-----------|-------------|---------|
| <b>Injecting drugs since</b>   |            |           |             |         |
| Less than 2 year   | 56         | 1         | 1.8         | <0.01   |
| 2-5 Years  | 112        | 9         | 8.0         |         |
| More than 5 years  | 132        | 23        | 17.4        |         |
| <b>Frequency of injected drugs in the past week</b>                    |            |           |             |         |
| Not Injected   | 30         | 2         | 6.7         | >0.05   |
| 1-6 times a week   | 142        | 18        | 12.7        |         |
| Everyday   | 69         | 6         | 8.7         |         |
| 2 or more times a day  | 59         | 7         | 11.9        |         |
| <b>Used a previously used needle/syringe during the past week</b>      |            |           |             |         |
| Not injected/Never   | 269        | 26        | 9.7         | <0.05   |
| Every Injected   | 31         | 7         | 22.6        |         |
| <b>Used a needle/syringe kept in public place during the past week</b> |            |           |             |         |
| Not injected/Never   | 287        | 28        | 9.8         | <0.01   |
| Every Injected   | 13         | 5         | 38.5        |         |
| <b>Total</b>   | <b>300</b> | <b>33</b> | <b>11.0</b> |         |

### 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 |
|--|------------|-----------|-------------|---------|
| <b>With regular partner</b>                                |            |           |             | >0.05   |
| Yes  | 143        | 18        | 12.6        |         |
| No   | 151        | 15        | 9.9         |         |
| Never had sexual experience                                | 6          | 0         | 0           |         |
| <b>With Non-regular partners</b>                           |            |           |             | >0.05   |
| Yes  | 56         | 3         | 5.4         |         |
| No   | 238        | 30        | 12.6        |         |
| Never had sexual experience                                | 6          | 0         | 0           |         |
| <b>With sex worker</b>                                     |            |           |             | >0.05   |
| Yes  | 91         | 7         | 7.7         |         |
| No   | 203        | 26        | 12.8        |         |
| Never had sexual experience                                | 6          | 0         | 0           |         |
| <b>Number of regular partner in the past 12 months</b>     |            |           |             | >0.05   |
| 0 Partner  | 157        | 15        | 9.6         |         |
| 1 partner  | 143        | 18        | 12.6        |         |
| <b>Number of non-regular partner in the past 12 months</b> |            |           |             | >0.05   |
| 0 Partner  | 244        | 30        | 12.3        |         |
| 1 partner  | 29         | 3         | 10.3        |         |
| <b>Number of sex workers in the past 12 months</b>         |            |           |             | >0.05   |
| 0 Partners   | 209        | 26        | 12.4        |         |
| 1 sex worker   | 25         | 2         | 8.0         |         |
| 2 or more sex workers                                      | 66         | 5         | 7.6         |         |
| <b>Total</b>   | <b>300</b> | <b>33</b> | <b>11.0</b> |         |

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 those who did not (9.9%). As for the non-regular partners and sex workers, IDUs who abstained from having sex with had higher HIV prevalence (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 other's previously used needle/syringe in the past week were 2.73 times more at risk of HIV infection than those who had not done so. Likewise, an IDU who used needles/syringes kept in public was 5.78 times more likely to get HIV than those who did not. Notably the estimated risk for using needles/syringes kept in public 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 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 |
|---|-----------|-------------|-------------------------|
| <b>Education</b>  |           |             |                         |
| Illiterate  | -         | 42          | (0.47,7.40)             |
| Literate  | 1.71      | 258         |                         |
| <b>Marital Status</b>   |           |             |                         |
| Never married   | -         | 131         | (1.52,21.35)            |
| Ever married  | 1.22      | 169         |                         |
| <b>Injected with another's previously used syringe during past week</b> |           |             |                         |
| Yes   | 2.73      | 31          | (0.96,7.49)             |
| No  | -         | 287         |                         |
| <b>Injected with a syringe kept in public place</b>                     |           |             |                         |
| Yes   | 5.78      | 13          | (1.52,21.35)            |
| No  | -         | 287         |                         |
| <b>Injected with a pre-filled syringe</b>                               |           |             |                         |
| Yes   | -         | 12          | (0.17,29.41)            |
| No  | 1.38      | 288         |                         |
| <b>Injected in another part of the country or in another country</b>    |           |             |                         |
| Yes   | 1.44      | 158         | (0.65,3.21)             |
| No  | -         | 142         |                         |

Other selected variables presented in Table 4.5 did not have 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 and 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 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      | %        |
|---|------------|----------|
| <b>Alcohol Intake during the past month</b> |            |          |
| 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     |
| <b>Duration of drug use</b>                 |            |          |
| Less than 2 years                           | 14         | 4.7      |
| 2 – 5 years                                 | 80         | 26.7     |
| More than 5 years                           | 206        | 68.7     |
| <b>Average duration in years</b>            | <b>8.0</b> | <b>-</b> |

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 | %    |
|---|-------|------|
| Gaja  | 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 Practice 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 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 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 Practice of IDUs**

| Drug Injecting Practice                                  | N=300      | %        |
|--|------------|----------|
| <b>Duration of drug Injection habit</b>                  |            |          |
| Less than 2 years  | 56         | 18.7     |
| 2 – 5 years  | 112        | 37.3     |
| More than 60 months                                      | 132        | 44.0     |
| <b>Average duration years</b>                            | <b>5.5</b> | <b>-</b> |
| <b>Age at first drug injection</b>                       |            |          |
| Up to 20 years   | 116        | 38.7     |
| 21 + years   | 184        | 61.3     |
| <b>Median age</b>  | <b>22</b>  | <b>-</b> |
| <b>Frequency of drug injections within the past week</b> |            |          |
| 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      |
| <b>Frequency of drug injections on the last day</b>      |            |          |
| 1 time   | 212        | 70.7     |
| 2 times  | 65         | 21.7     |
| 3 or more times  | 23         | 7.7      |
| <b>Mean</b>  | <b>1.4</b> | <b>-</b> |

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

The respondents gathered at different sites to inject drugs. Around 45 percent met at forest/bush. Some crossed the border and injected at 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 combination of various drugs. In this regard the most common combination drugs were 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 main reasons 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, 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**

| Needle/syringe use during recent drug injections                  | Drug injecting acts N=300 |              |                    |              |                   |              |
|---|---------------------------|--------------|--------------------|--------------|-------------------|--------------|
|   | Most Recent               |              | Second Most Recent |              | Third Most Recent |              |
|   | n                         | %            | n                  | %            | n                 | %            |
| <b>Low Risk injecting Behavior</b>                                |                           |              |                    |              |                   |              |
| Used a purchased new needle/syringe                               | 218                       | 72.7         | 230                | 76.7         | 211               | 70.3         |
| Used new needle/syringe given by NGO staff/volunteers/friend      | 51                        | 17.0         | 50                 | 16.7         | 66                | 22.0         |
| <b>Low Risk Behavior Total</b>                                    | <b>269</b>                | <b>89.7</b>  | <b>280</b>         | <b>93.3</b>  | <b>277</b>        | <b>92.3</b>  |
| <b>High Risk Injecting Behavior</b>                               |                           |              |                    |              |                   |              |
| 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 public place by himself | 0                         | 0.0          | 2                  | 0.7          | 2                 | 0.7          |
| Used needle/syringe that had been kept in public place by someone | 4                         | 1.3          | 2                  | 0.7          | 1                 | 0.3          |
| Others  | 2                         | 0.7          | 2                  | 0.7          | 3                 | 1.0          |
| <b>High Risk Behavior Total</b>                                   | <b>31</b>                 | <b>10.3</b>  | <b>20</b>          | <b>6.7</b>   | <b>23</b>         | <b>7.7</b>   |
| <b>Persons in the group using the same needle/syringe</b>         |                           |              |                    |              |                   |              |
| 2 person  | 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         |
| <b>Total</b>  | <b>300</b>                | <b>100.0</b> | <b>300</b>         | <b>100.0</b> | <b>300</b>        | <b>100.0</b> |

As reflected in the above table, most of the IDUs had adopted low risk behavior in their last three injections. Around 90 percent in most recent, 93.3 percent in second most recent and 92.3 in third most recent injection 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 the last three injections.

On the other hand, 10.3 percent of IDUs in the most recent, 6.7 percent in second most recent and 7.7 percent in the third most recent injections had chosen to adopt high risk injecting behavior. They had injected with a previously used needle/syringe used by themselves, given by friends or that left at 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 had avoided high-risk behavior in the week preceding the survey.

Nevertheless 10.3 percent of IDUs had used an old needle/syringe, 4.3 percent had injected with a syringe left at a public place and nine percent had given their used needle/syringe to others at least once each 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 shared with unknown person and one respondent had used the same needle with the drug seller.

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

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

\* 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 at least once injected 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 like spoon, cooker, vial/container and cotton at least once in the past week.

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

| Drug sharing practice during past week   | N=300 | %    |
|--|-------|------|
| <b>Injected with a pre-filled syringe</b>  |       |      |
| Yes  | 12    | 4.0  |
| No   | 288   | 96.0 |
| <b>Injected with a syringe after drugs were transferred into it from another's syringe</b> |       |      |
| Never injected   | 274   | 91.3 |
| Injected   | 26    | 8.7  |
| <b>Shared a bottle, spoon, cooker, vial/container, cotton/filter and rinse water</b>       |       |      |
| Never shared   | 263   | 87.7 |
| Shared   | 37    | 12.3 |
| <b>Drew drug solution from a common container used by others</b>                           |       |      |
| 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 Country**

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

## 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 respondents had cleaned a used syringe in the past week before re-using them. 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          | %            |
|---|------------|--------------|
| <b>Cleaned a pre-used needle/syringe in the past week</b> |            |              |
| Yes   | 66         | 22.0         |
| No  | 234        | 78.0         |
| <b>Total</b>  | <b>300</b> | <b>100.0</b> |
| <b>Ways of cleaning needle/syringe</b>                    |            |              |
| Bleach  | 9          | 13.6         |
| Without Bleach  | 57         | 86.4         |
| <b>Total</b>  | <b>66</b>  | <b>100.0</b> |

## 5.6 Knowledge of and Access to New Needle/Syringe

The majority (97.3%) said that they could obtain a new syringe whenever necessary. Drugstore (95%) and needle exchange program (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 | %    |
|---------------------------------|-------|------|
| <b>Can obtain new syringe</b>   |       |      |
| Yes                             | 292   | 97.3 |
| No                              | 8     | 2.7  |
| <b>Can obtain syringe from*</b> |       |      |
| 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  |

\*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          | %            |
|------------------------------------|------------|--------------|
| <b>Treatment status</b>            |            |              |
| Ever treated                       | 83         | 27.7         |
| Never treated                      | 217        | 72.3         |
| <b>Total</b>                       | <b>300</b> | <b>100.0</b> |
| <b>Last treatment received</b>     |            |              |
| 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          |
| <b>Total</b>                       | <b>83</b>  | <b>100.0</b> |
| <b>Types of treatment received</b> |            |              |
| Residential Rehabilitation         | 71         | 85.5         |
| Out Patient Counseling             | 6          | 7.2          |
| Detoxification With/without drug   | 4          | 4.8          |
| Other treatment/help               | 4          | 4.8          |
| <b>Total</b>                       | <b>83</b>  | <b>*</b>     |

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

The sex partners of the study population were categorized as regular, non regular partners and female sex workers. Regular female sex partner were defined as spouse or any sexual partner living together with the respondent. Among those respondents who had maintained sexual contact, 48.6 percent had sex with a regular female sex partner during the past year. Most of them (91.6%) had sex with their regular female sex partner in the month preceding the survey. Around 80 percent of them had at least five sexual contacts with their regular partner during the course of the last month.

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

| Sexual practice  | N          | %            |
|--|------------|--------------|
| <b>Sex with a regular partner during the past 12 months</b>                          |            |              |
| Yes  | 143        | 48.6         |
| No   | 151        | 51.4         |
| <b>Total</b>   | <b>294</b> | <b>100.0</b> |
| <b>Sex with a regular partner during the last month</b>                              |            |              |
| Yes  | 131        | 91.6         |
| No   | 12         | 8.4          |
| <b>Total</b>   | <b>143</b> | <b>100.0</b> |
| <b>Frequency of sex with a last regular female sex partner during the last month</b> |            |              |
| 1-4  | 26         | 19.8         |
| 5+   | 105        | 80.2         |
| <b>Total</b>   | <b>131</b> | <b>100.0</b> |

The IDUs with sexual experience were also asked whether they ever had sex with non-regular female partners in the past year. "Non-regular female sex partners" were defined as those with whom the participants were not married or living together. Non-regular female sex partners were defined as being distinct and 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 have had two or more non-regular female sex partners. A little over a half (51.8%) had sexual contact with their non-regular female sex partners in the month preceding the survey. Thirty one percent of them have had at least five sexual contacts in the past month.

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

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

The IDUs were further asked if they had maintained sexual relationship 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 female sex worker in the past year. Among them, the majority (72.5%) had sex with two or more FSWs. Almost a half (49.5%) had sexual encounter 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 worker**

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

## 6.2 Knowledge and Use of Condom

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

**Table 6.5: Knowledge and Use of Condoms among IDUs**

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

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

**Table 6.6: Consistent Use of Condom in the Past Year**

| Consistent use of condom  | N          | %            |
|---|------------|--------------|
| <b>Use of condom with regular female sex partners during past 12 months</b>     |            |              |
| Every time  | 10         | 7.0          |
| Sometimes or Never  | 133        | 93.0         |
| <b>Total</b>  | <b>143</b> | <b>100.0</b> |
| <b>Use of condom with non-regular female sex partners during past 12 months</b> |            |              |
| Every time  | 22         | 39.3         |
| Sometimes or Never  | 34         | 60.7         |
| <b>Total</b>  | <b>56</b>  | <b>100.0</b> |
| <b>Use of condom with female sex workers during past 12 months</b>              |            |              |
| Every time  | 44         | 48.4         |
| Sometimes or Never  | 47         | 51.6         |
| <b>Total</b>  | <b>91</b>  | <b>100.0</b> |



All the respondents reporting not using condom in their last sexual contact with different partners were further asked reasons for not using one. Data obtained from the study participants as shown in Annex 14 indicate the reasons for not using condoms differ according to the type of partners

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

As for the other reasons for not using condoms with non-regular partners, 33.3 percent each said that condoms were not available at the time and that they did not like to use them. Notably one third (33.3%) did not consider using condoms necessary during the last sexual contact with sex workers. Another 41.7 percent said they could not use condom when they last had sex with 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 condom as mentioned by the IDUs were shop (57.7%), hospital (46.3%), and peer/outreach educators (45.3%). 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 | %    |
|--|-------|------|
| <b>Place/person from where condom can be obtained*</b> |       |      |
| 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  |
| <b>Time taken to obtain condom</b>                     |       |      |
| 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 Condom

IDUs in the study districts had heard about condoms from different sources. The most common sources of information for more than 90 percent 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 of condom | 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 the 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 poster, pamphlets, and billboards or aired on radio/television. The survey asked the respondents about certain specific messages about 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 Jhanjhat Manna Hunna | 238   | 79.3 |
| 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 the 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 the 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          | %          |
|--------------------------|------------|------------|
| <b>Heard of STIs</b>     |            |            |
| Yes                      | 283        | 94.3       |
| No                       | 17         | 5.7        |
| <b>Total Respondents</b> | <b>300</b> | <b>100</b> |

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

**Table 7.2: STI Understanding among IDUs**

| STI symptoms as mentioned by IDUs | STIs Symptoms as mentioned by respondent |      |                    |      |
|-----------------------------------|--|------|--------------------|------|
|                                   | 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 at the time of 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 symptom like genital discharges and genital ulcer/sore in the past year. Nine percent (8.7%) had genital discharges while 10.3 percent had genital ulcer/sore in the past year.

**Table 7.3: STI Symptom/s Experienced by IDUs**

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

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

Overall, 12.7 percent of respondents reportedly had ever experienced at least one STI symptoms. More than a half (57.9%) had not sought any medical aid to treat the symptom before, over a quarter had been to a private doctor (26.3%) and very few to hospital/health post (5.3%) to seek treatment (Table 7.4).

**Table 7.4: STI Symptom Experienced and Treatment Sought by IDUs**

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

## 7.2 Knowledge about HIV/AIDS

All the IDUs had heard of the 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 that they shared with them, 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          | %            |
|--|------------|--------------|
| <b>Know anyone who is living with HIV/AIDS or has died due to AIDS</b> |            |              |
| Yes  | 251        | 83.7         |
| No   | 49         | 16.3         |
| <b>Total</b>   | <b>300</b> | <b>100.0</b> |
| <b>Nature of relationship with the person</b>                          |            |              |
| Close friend   | 98         | 39.0         |
| No relation  | 136        | 54.2         |
| Close relative   | 17         | 6.8          |
| <b>Total</b>   | <b>251</b> | <b>100.0</b> |

The respondents' knowledge regarding the ways in which is transmitted was analyzed with the help of some questions regarding HIV/AIDS preventive measures asked to them. 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 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 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 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 HIV virus from mosquito bite. In total 57 percent of IDUs were aware of all the five major indicators (BCDEF) that assessed the awareness level of HIV preventive measures of the respondents.

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

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

IDUs' understanding of HIV/AIDS and its different modes of transmission was 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 previously used needle/syringe (99.3%), 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 women with HIV can transmit the virus to their 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 (38.1%) and take medicine (5.1%) (Table 7.7).

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

| <b>Statements Related to HIV/AIDS</b>  | <b>N=300</b> | <b>%</b> |
|--|--------------|----------|
| A person can get HIV by using previously used needle 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     |
| <b>Ways by which a pregnant woman can reduce the risk of transmission of HIV to her unborn child</b> | <b>N=273</b> | <b>%</b> |
| Take medicine  | 14           | 5.1      |
| Treatment/ consultation with doctor  | 104          | 38.1     |
| Others   | 2            | 0.7      |
| Don't Know   | 155          | 56.8     |

\* 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 provision allows people to undertake such tests promptly and without the fear of getting 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 respondents had never tested themselves for HIV while the rest (54%) had at least once tested for HIV. Among them, 83.3 percent had taken up the test voluntarily, 79 percent had received the 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          | %            |
|--|------------|--------------|
| <b>A confidential HIV testing facility is available in the community</b> |            |              |
| Yes  | 284        | 94.7         |
| No   | 2          | 0.7          |
| Don't know   | 14         | 4.7          |
| <b>Ever had an HIV test</b>  |            |              |
| Yes  | 162        | 54.0         |
| No   | 138        | 46.0         |
| <b>Total</b>   | <b>300</b> | <b>100.0</b> |
| <b>Type of test taken</b>  |            |              |
| Required HIV test  | 27         | 16.7         |
| Voluntary HIV test   | 135        | 83.3         |
| <b>Test result received</b>  |            |              |
| Yes  | 128        | 79.0         |
| No   | 34         | 21.0         |
| <b>Timing of last HIV test</b>   |            |              |
| 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          |
| <b>Total</b>   | <b>162</b> | <b>100.0</b> |

### 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/signboard (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 | %    |
|----------------------------------|-------|------|
| Radio                            | 294   | 98.0 |
| Television                       | 287   | 95.7 |
| NGO workers                      | 283   | 94.3 |
| Pamphlets/Posters                | 267   | 89.0 |
| Bill board/sign board            | 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/booklet/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, caps with HIV/AIDS messages (Table 7.10).

**Table 7.10: Information/Materials Received During the Past Year**

| Informative materials received                 | N=300 | %    |
|--|-------|------|
| <b>Condoms / information on condom</b>         |       |      |
| Yes  | 223   | 74.3 |
| No   | 77    | 25.7 |
| <b>Brochure/booklets/pamphlets on HIV/AIDS</b> |       |      |
| Yes  | 228   | 76.0 |
| No   | 72    | 24.0 |
| <b>Received Information on HIV/AIDS</b>        |       |      |
| Yes  | 257   | 85.7 |
| No   | 43    | 14.3 |
| <b>Others IEC materials</b>                    |       |      |
| 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 most at risk population. The perception of the IDUs regarding HIV-infected person and stigma associated with the disease was examined with the help of series of questions.

The majority of the respondents were ready to take care of a HIV positive male relative (98.3%) or a HIV-positive female relative (97.3%) at their homes if such needs 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 the respondents (93%) said that they would readily buy food from a HIV infected vendor. Ninety six percent agreed unless very sick, people with HIV/AIDS should be allowed to continue his/her job. When asked about the health care needs of HIV infected persons, 58.7 percent of IDUs maintained that they should be provided same care and

treatment as necessary for chronic disease patients while 36.7 percent believed that the health care needs of a HIV infected person was more than people suffering from chronic disease.

**Table 7.11: Attitude of IDUs Towards HIV/AIDS**

| <b>Individual Perception</b>   | <b>N=300</b> | <b>%</b> |
|--|--------------|----------|
| <b>Would readily take care of HIV positive male relative in the household</b>  |              |          |
| Yes  | 295          | 98.3     |
| No   | 5            | 1.7      |
| <b>Would readily take care of HIV positive female relative in the household</b>  |              |          |
| Yes  | 292          | 97.3     |
| No   | 8            | 2.7      |
| <b>Would prefer not to talk about a family member being HIV positive</b>   |              |          |
| Yes  | 173          | 57.7     |
| No   | 127          | 42.3     |
| <b>Would readily buy food from HIV infected shopkeeper</b>   |              |          |
| Yes  | 279          | 93.0     |
| No   | 21           | 7.0      |
| <b>Believe that the health care needs of a HIV infected person is same, more or less than those required by someone with other chronic disease</b> |              |          |
| Same   | 176          | 58.7     |
| More   | 110          | 36.7     |
| Less   | 14           | 4.7      |
| <b>Believe that HIV infected person should be allowed to continue working unless very sick</b>   |              |          |
| 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 the IDUs to the 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 different 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 and safe injecting practices, safe sex and other related topics. They also distribute IEC materials, condoms, and refer the target group to drop-in center and STI treatment services. Some also carry new needle/syringe 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          | %            |
|---|------------|--------------|
| <b>Met or discussed or interacted with PE or OE in the Last 12 months</b> |            |              |
| Yes   | 241        | 80.3         |
| No  | 59         | 19.7         |
| <b>Total</b>  | <b>300</b> | <b>100.0</b> |
| <b>Activities carried out with PE/OEs</b>                                 |            |              |
| 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          |
| <b>Total</b>  | <b>241</b> | <b>*</b>     |
| <b>Organizations Represented by PE/OEs</b>                                |            |              |
| AHH   | 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          |
| <b>Total</b>  | <b>241</b> | <b>*</b>     |
| <b>Number of Meeting with PE or OE</b>                                    |            |              |
| 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         |
| <b>Total</b>  | <b>241</b> | <b>100.0</b> |

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

The majority (80.3%) of the study population had at least once met PE/OEs representing various organizations. 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 other. The study participants had also been informed about STI and how it is/is not transmitted (35.3%) and provided demonstration on using condom (30.3%) during their meetings with PE/OEs.

Over a third had met PE/OEs from 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 further evident from Table 8.1 that the IDUs meet PE/OEs quite often as 41.9 percent of IDUs had met 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 program 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          | %            |
|---|------------|--------------|
| <b>Visited a DIC in the Last 12 months</b>            |            |              |
| Yes   | 207        | 69.0         |
| No  | 93         | 31.0         |
| <b>Total</b>  | <b>300</b> | <b>100.0</b> |
| <b>Participated Activities at DIC</b>                 |            |              |
| 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          |
| <b>Total</b>  | <b>207</b> | <b>*</b>     |
| <b>Name of Organizations that Run the visited DIC</b> |            |              |
| AHH   | 77         | 37.2         |
| Naulo Ghumti  | 57         | 27.5         |
| Namuna  | 44         | 21.3         |
| INF Nepalgunj   | 37         | 17.9         |
| Others  | 8          | 3.9          |
| <b>Total</b>  | <b>207</b> | <b>*</b>     |
| <b>Number of Visits to the DICs</b>                   |            |              |
| 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         |
| <b>Total</b>  | <b>207</b> | <b>100.0</b> |

\* 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 been to a DIC to get a new syringe. The respondents had been informed about safe injecting behavior at the DIC (59.4%) and had collected condoms (53.1%). Moreover, IDUs had watched film on HIV/AIDS (44%) and had participated in discussion on HIV transmission (28.5%).

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 a month on average in the course of the year preceding the survey.

### 8.3 STI Clinic

The IDUs who get engaged in unsafe sexual encounters fall at the 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 different 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 received physical examination for STI detection (70%) and had given their blood sample for STI identification (50%) at the clinic. Some were also informed about use of condom (20%) and STI transmission there (10%). The majority of respondents (80%) who had visited an STI clinic, had only been to the clinic once in the past year.

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

| STI Clinic Visiting Practices                                   | N          | %            |
|---|------------|--------------|
| <b>Visited any STI Clinic in the Last 12 Months</b>             |            |              |
| Yes   | 10         | 3.3          |
| No  | 290        | 96.7         |
| <b>Total</b>  | <b>300</b> | <b>100.0</b> |
| <b>Participated Activities at STI Clinic</b>                    |            |              |
| 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         |
| <b>Total</b>  | <b>10</b>  | <b>*</b>     |
| <b>Name of Organizations that Run the visited STI Clinic</b>    |            |              |
| N-SARC  | 2          | 20.0         |
| FPAN  | 2          | 20.0         |
| Others  | 6          | 60.0         |
| <b>Total</b>  | <b>10</b>  | <b>*</b>     |
| <b>Number of Visits to STI Clinics</b>                          |            |              |
| Once  | 8          | 80.0         |
| 2-3 times   | 2          | 20.0         |
| <b>Total</b>  | <b>10</b>  | <b>100.0</b> |

\* 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), 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%), 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 fifth IDUs had visited the VCT center run by Namuna (45.2%). 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 in the past year (Table 8.4).

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

| VCT Visiting Practices   | N          | %            |
|--|------------|--------------|
| <b>Visited VCT Center in the Last 12 months</b>                          |            |              |
| Yes  | 42         | 14.0         |
| No   | 258        | 86.0         |
| <b>Total</b>   | <b>300</b> | <b>100.0</b> |
| <b>Participated Activities at VCT</b>                                    |            |              |
| 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 condom correctly in each sexual intercourse | 11         | 26.2         |
| Took a friend  | 1          | 2.4          |
| <b>Total</b>   | <b>42</b>  | <b>*</b>     |
| <b>Name of the Organization that Run the Visited VCTs</b>                |            |              |
| 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         |
| <b>Total</b>   | <b>42</b>  | <b>*</b>     |
| <b>Number of Visits to VCTs</b>  |            |              |
| Once   | 34         | 80.9         |
| 2-3 times  | 8          | 19.0         |
| <b>Total</b>   | <b>42</b>  | <b>100.0</b> |

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

## 8.5 Participation in HIV/AIDS Awareness Program

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 general population.

Table 8.5 deals with the participation of the 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 condom or AIDS day celebration. Some IDUs participated in HIV/AIDS related group discussions (44.3%) and in training (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).

These 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**

| <b>Participations in HIV/AIDS Awareness Programs</b>                               | <b>N</b>   | <b>%</b>     |
|--|------------|--------------|
| <b>Ever Participated in HIV/AIDS Awareness Raising Program or Community Events</b> |            |              |
| Yes  | 106        | 35.3         |
| No   | 194        | 64.7         |
| <b>Total</b>   | <b>300</b> | <b>100.0</b> |
| <b>Participated Activities</b>   |            |              |
| 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          |
| <b>Total</b>   | <b>106</b> | <b>*</b>     |
| <b>Name of the Organizations that Organized Such Activities</b>                    |            |              |
| AHH  | 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         |
| <b>Total</b>   | <b>106</b> | <b>*</b>     |
| <b>Frequency of Such Participation in past 12 months</b>                           |            |              |
| 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          |
| <b>Total</b>   | <b>106</b> | <b>100.0</b> |

\* 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 changes between the first and the second round of studies through comparison of data obtained from both rounds. It specifically deals with the socio-demographic characteristics, drug injecting behavior, needle/syringe using practices, and condom use among study participants. Trend in HIV prevalence also is 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 first and the second round. Over one in ten was illiterate in both rounds (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 higher level of studies in both rounds (20.3% in 2005 and 20% in 2007).

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

| Socio-Demographic characteristics | First round (2005) |      | Second round (2007) |      |
|-----------------------------------|--------------------|------|---------------------|------|
|                                   | N                  | %    | N                   | %    |
| <b>Age</b>                        |                    |      |                     |      |
| < 25Yrs.                          | 124                | 41.3 | 98                  | 32.7 |
| >25 years                         | 176                | 58.7 | 202                 | 67.3 |
| <b>Median age</b>                 | <b>25</b>          | -    | <b>27</b>           | -    |
| <b>Education</b>                  |                    |      |                     |      |
| 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  |
| <b>Ethnicity</b>                  |                    |      |                     |      |
| 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 the IDUs did not change significantly since 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 difference was statistically significant.

## 9.2 Drug Injecting Practices

Most of the study participants had been injecting drugs since 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 since less than a year made around 10 percent of the respondents in both rounds (9.7% in 2005 and 10.7% in 2007). At the same time 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 the 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 Practice                 | First round (2005) |          | Second round (2007) |          |
|---|--------------------|----------|---------------------|----------|
|   | N=300              | %        | N=300               | %        |
| <b>Duration of drug Injection habit</b> |                    |          |                     |          |
| 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     |
| <b>Average duration years</b>           | <b>4.3</b>         | <b>-</b> | <b>5.5</b>          | <b>-</b> |
| <b>Age at first drug injection</b>      |                    |          |                     |          |
| Up to 20 years                          | 126                | 42.0     | 116                 | 38.7     |
| 21 + years                              | 174                | 58.0     | 184                 | 61.3     |
| <b>Median age</b>                       | <b>21</b>          | <b>-</b> | <b>22</b>           | <b>-</b> |

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

Data relating to injecting practices of the study population in both the rounds show that a higher proportion of IDUs avoided unsafe injecting behavior like injecting with others' previously used needle/syringe (81 percent in 2005/89.7% in 2007), and using a needle/syringe kept in 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 past week before the survey while 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 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 in the first round 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 a 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 round (2005) |      | Second round (2007) |      |
|---|--------------------|------|---------------------|------|
|   | N=300              | %    | N=300               | %    |
| <b>Used a needle/syringe that had been used by another</b>      |                    |      |                     |      |
| Never Used  | 243                | 81.0 | 269                 | 89.7 |
| Ever Used   | 57                 | 19.0 | 31                  | 10.3 |
| <b>Used a needle/syringe that had been kept in public place</b> |                    |      |                     |      |
| Never Used  | 254                | 84.7 | 287                 | 95.7 |
| Ever Used   | 46                 | 15.3 | 13                  | 4.3  |
| <b>Number of needle/syringe shared partners</b>                 |                    |      |                     |      |
| None  | 212                | 70.7 | 265                 | 88.3 |
| Two or more partners  | 88                 | 29.3 | 35                  | 11.7 |
| <b>Re-used needle/syringe in the past week</b>                  |                    |      |                     |      |
| 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 regards to regular, non-regular partners and FSWs were similar in both rounds.

Even though, the 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 the 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) |              |
|---|--------------------|--------------|---------------------|--------------|
|   | N                  | %            | N                   | %            |
| <b>Use of condom with regular female sex partners during past 12 months</b>     |                    |              |                     |              |
| Every time  | 5                  | 3.9          | 10                  | 7.0          |
| Sometime – Never  | 123                | 96.1         | 133                 | 93.0         |
| <b>Total</b>  | <b>128</b>         | <b>100.0</b> | <b>143</b>          | <b>100.0</b> |
| <b>Use of condom with non-regular female sex partners during past 12 months</b> |                    |              |                     |              |
| Every time  | 17                 | 31.5         | 22                  | 39.3         |
| Sometime – Never  | 37                 | 68.5         | 34                  | 60.7         |
| <b>Total</b>  | <b>54</b>          | <b>100.0</b> | <b>56</b>           | <b>100.0</b> |
| <b>Use of condom with female sex workers during past 12 months</b>              |                    |              |                     |              |
| Every time  | 47                 | 46.5         | 44                  | 48.4         |
| Sometime – Never  | 54                 | 53.5         | 47                  | 51.6         |
| <b>Total</b>  | <b>101</b>         | <b>100.0</b> | <b>91</b>           | <b>100.0</b> |

#### 9.5 HIV Prevalence among IDUs

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

**Table 9.5: Study Center wise HIV Prevalence among IDUs**

| District                       | First round (2005) |           |             | Second round (2007) |           |             |
|--------------------------------|--------------------|-----------|-------------|---------------------|-----------|-------------|
|                                | 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         |
| <b>Total</b>                   | <b>300</b>         | <b>35</b> | <b>11.7</b> | <b>300</b>          | <b>33</b> | <b>11.0</b> |



Banke study center is still the 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 was 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 were tested HIV positive. Syphilis history was found among 1.3 percent of IDUs while none of the study participant currently had high titre syphilis. The HIV prevalence did not change significantly since 2005.
- The prevalence of HIV was significantly high ( $p < 0.05$ ) among those who had been injecting drugs for more than five years (17.4%) and those who had injected with a previously used needle (22.6%) and injected with needle/syringe left at public place (38.5%).
- The IDUs consisted predominantly of young population with 63.4 percent 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 in the last two years.
- Past week injecting practice of the respondents indicated that 10.3 percent of respondents had used other's needle/syringe, 4.3 percent had used a needle/syringe kept in a public place 11.7 had shared their needle/syringe with others at least once. These indicators point towards an increased level of awareness about 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 respondents with sex workers, 39.3 percent with non regular partners and seven percent with regular sex partners.
- There were 5.7 percent of IDUs who had not heard about STIs before this survey.
- Thirteen percent of IDUs had 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 up HIV testing.
- Overall, 80.3 percent of IDUs had met 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 events.

## **10.2 Recommendations**

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

- Data from the study indicate that basically youth and adolescents fall into 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 HIV/AIDS awareness and sex education
- A significant relation was noticed between HIV prevalence and drug injecting practices. HIV prevalence was significantly high among IDUs who injected with previously used syringe and those who had injected with syringes left at public place in the past week. Ongoing HIV/AIDS awareness activities should continue and be expanded geographically to cover more IDUs. Advocacy, behavioral change activities, health promotion intervention should be further scaled up. Harm reduction initiatives like wider dissemination of information on safe injecting behavior and needle exchange program should also be continued and expanded further.
- Consistent use of condom was reported by only 7 percent of IDUs with regular partners, 39.3 percent with non regular partner 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 general population as well 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 also supported for providing necessary services to the IDUs especially to those belonging to economically deprived families. Rehabilitation program should also incorporate family counseling services
- While 46 percent had never taken up HIV testing. Around 58 percent of those IDUs who had ever experienced one or the other STI symptom had never sought any treatment. HIV/AIDS awareness campaigns should also focus on STI education. Client friendly STI testing and treatment facilities, 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 them at least once in the past year. One to one education for behavioral change and safe injecting and sexual practices through wider mobilization of PE/OEs could yield positive results.
- A good number of IDUs visit DICs, 69 percent 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 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 target population.
- Monitoring and evaluation of HIV prevalence and risk behaviors of IDUs to design and implement timely intervention strategies are needed at regular time intervals.

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# **ANNEXES**







**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?<br><br>(Write current place of residence: Ward No. Tole, Lane etc.)                                | Ward ..... <input type="text"/> <input type="text"/><br>VDC/Municipality _____<br>District _____   |                   |
| 101.1 | How long have you been living continuously at this location?   | Month ..... <input type="text"/> <input type="text"/> <input type="text"/><br>Always (since birth) .....0<br>Others (Specify) ..... 96                     |                   |
| 102   | In the last 12 months have you been away from your home for more than one-month altogether?<br>(Left home, village/district) | Yes.....1<br>No .....2<br>Don't know .....98<br>No response .....99  |                   |
| 103   | How old are you?   | Age ..... <input type="text"/> <input type="text"/><br>(write the completed years)   |                   |
| 104   | What is your educational status?   | Illiterate .....0<br>Literate.....19<br>Grade ..... <input type="text"/> <input type="text"/><br>(write the completed grade)                               |                   |
| 105   | What is your caste?<br>(Specify Ethnic Group/Caste)  | Ethnicity/Caste _____  |                   |
| 106   | What is your current marital status?   | Never married.....1<br>Married .....2<br>Divorced/Permanently separated.....3<br>Widow .....4<br>Other (Specify).....96                                    | 108               |
| 107   | How old were you when you first married?   | Age ..... <input type="text"/> <input type="text"/><br>(write the completed years)   |                   |
| 10 8  | With whom you are living now?  | Living with wife .....1<br>Living with female sexual partner.....2<br>Living without sexual partner....3<br>Others (Specify).....96<br>No response .....99 | 110<br>110<br>110 |
| 10 9  | Do you think your wife/female sexual partner has any other sexual partners?  | Yes.....1<br>No .....2<br>Don't know .....98<br>No response .....99  | 110<br>110<br>110 |

| Q. N.  | Questions  | Coding Categories   | Skip to Q.N. |
|--------|--|---|--------------|
| 10 9.1 | If yes, what is the sex of the partner?  | Male.....1<br>Female .....2   |              |
| 110    | During the past one-month how often have you had drinks containing alcohol?<br><br>(Such as beer, local beer etc.) | Every day.....1<br>More than once a week.....2<br>Less than once a week .....3<br>Never drink.....4<br>Others (Specify)_____ .....96<br>No response .....99 |              |

## 2.0 DRUG USE

| Q. N. | Questions  | Coding Categories  | Skip to Q.N. |           |           |                              |           |           |           |
|-------|--|--|--------------|-----------|-----------|------------------------------|-----------|-----------|-----------|
| 201.  | How long have you been using drugs?<br><br>(Drug means medicine not used for treatment purpose rather used for Intoxication)                 | Years..... <input type="text"/> <input type="text"/><br>Months..... <input type="text"/> <input type="text"/><br>No response .....99 |              |           |           |                              |           |           |           |
| 202.  | How old were you when you first injected drugs?<br>(Include self-injection or injection by another)  | Years ..... <input type="text"/> <input type="text"/><br>(write the completed years)   |              |           |           |                              |           |           |           |
| 203   | How long have you been injecting drugs?<br><br>(Include self-injection or injection by another)  | Years..... <input type="text"/> <input type="text"/><br>Months..... <input type="text"/> <input type="text"/><br>No response .....99 |              |           |           |                              |           |           |           |
| 203.1 | Have you injected drugs in the last month?   | Yes.....1<br>No .....2   | 204          |           |           |                              |           |           |           |
| 203.2 | If Yes, have you used non-sterile injecting equipment at any time in the last month?   | Yes.....1<br>No .....2   |              |           |           |                              |           |           |           |
| 204.  | Which of the following types of drugs have you used and/or injected in the past one-week? ( <i>Read the list, multiple answer possible</i> ) |  |              |           |           |                              |           |           |           |
|       | <b>Description</b>   | <b>Used in Last-Week</b>   |              |           |           | <b>Injected in Last-Week</b> |           |           |           |
|       |  | <b>YES</b>   | <b>NO</b>    | <b>DK</b> | <b>NR</b> | <b>YES</b>                   | <b>NO</b> | <b>DK</b> | <b>NR</b> |
|       | 1. Tidigesic   | 1  | 2            | 98        | 99        | 1                            | 2         | 98        | 99        |
|       | 2. Brown Sugar   | 1  | 2            | 98        | 99        | 1                            | 2         | 98        | 99        |
|       | 3. Nitrosun  | 1  | 2            | 98        | 99        | 1                            | 2         | 98        | 99        |
|       | 4. Ganja   | 1  | 2            | 98        | 99        | 1                            | 2         | 98        | 99        |
|       | 5. Chares  | 1  | 2            | 98        | 99        | 1                            | 2         | 98        | 99        |
|       | 6. White Sugar   | 1  | 2            | 98        | 99        | 1                            | 2         | 98        | 99        |
|       | 7. Phensydyl   | 1  | 2            | 98        | 99        | 1                            | 2         | 98        | 99        |
|       | 8. Calmpose  | 1  | 2            | 98        | 99        | 1                            | 2         | 98        | 99        |
|       | 9. Diazepam  | 1  | 2            | 98        | 99        | 1                            | 2         | 98        | 99        |
|       | 10. Codeine  | 1  | 2            | 98        | 99        | 1                            | 2         | 98        | 99        |
|       | 11. Phenergan  | 1  | 2            | 98        | 99        | 1                            | 2         | 98        | 99        |
|       | 12. Cocaine  | 1  | 2            | 98        | 99        | 1                            | 2         | 98        | 99        |
|       | 13. Proxygin   | 1  | 2            | 98        | 99        | 1                            | 2         | 98        | 99        |
|       | 14. Effidin  | 1  | 2            | 98        | 99        | 1                            | 2         | 98        | 99        |
|       | 15. Velium 10  | 1  | 2            | 98        | 99        | 1                            | 2         | 98        | 99        |
|       | 16. Lysergic Acid<br>Dithylamide(LSD)  | 1  | 2            | 98        | 99        | 1                            | 2         | 98        | 99        |
|       | 17. Nitrovate  | 1  | 2            | 98        | 99        | 1                            | 2         | 98        | 99        |
|       | 18. Combination (Specify) __   | 1  | 2            | 98        | 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 drug to another?           | Yes.....1<br>No .....2   | 205          |
| 204.1.1 | If yes   | From _____ drug<br>To _____ drug   |              |
| 204.1.2 | What is the reason for switching?                                    | _____  |              |
| 205.    | How many times would you say you injected drugs yesterday?           | Times ..... <input type="checkbox"/><br>Not injected .....0  | 209          |
| 206.    | Would you like to tell me why you did not injected yesterday?        | _____  |              |
| 207.    | How many days ago did you get injected?                              | Days ago ..... <input type="checkbox"/> <input type="checkbox"/>   |              |
| 208.    | How many times would you say you injected drugs on the last day?     | Times ..... <input type="checkbox"/> <input type="checkbox"/>  |              |
| 209.    | During the past one-week how often would you say you injected drugs? | Once a week .....1<br>2-3 times a week .....2<br>4-6 times a week .....3<br>Once a day .....4<br>2-3 times a day .....5<br>4 or more times a day .....6<br>Not injected in the last week .....7<br>Don't know .....98<br>No response..... 99 |              |

### 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?<br>(Fill the number from answer to Q. 205 or 208 and verify by asking the respondent) | Times ..... <input type="checkbox"/> <input type="checkbox"/>  |              |
| 302.  | The last time you injected, how did you get that syringe/needle?<br><br>(Public place means places other than the IDU's home that are used to hide syringe/needle)                                     | My friend/relative gave it to me after his use ..... 1<br>Unknown person gave it to me ..... 2<br>I picked it up from a public place which was left there by others <sup>+</sup> ..... 3<br>I picked it up from a public place which was left there by myself <sup>+</sup> ..... 4<br>I used a new needle/syringe given by NGO staff/volunteer .. 5<br>I used a needle/syringe which I purchased..... 6<br>I reused my own needle/syringe .. 7<br>Others (Specify) _____ 96<br>Don't know ..... 98<br>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. .... <input type="text"/> <input type="text"/><br>Injected alone..... 96  |              |
| 303.  | Think about the time before the last time you injected, how did you get that syringe/needle?<br><br><b>(Public place means places other than the IDU's home that are used to hide syringe/needle)</b>  | My friend/relative gave it to me after his use ..... 1<br>Unknown person gave it to me 2<br>I picked it up from a public place which was left there by others <sup>+</sup> ..... 3<br>I picked it up from a public place which was left there by myself ..... 4<br>I used a new needle/syringe given by NGO staff/volunteer.... 5<br>I used a needle/syringe which I purchased ..... 6<br>I reused my own needle/syringe .. 7<br>Others (Specify) ____ ..... 96<br>Don't know ..... 98<br>No response..... 99                  |              |
| 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..... <input type="text"/> <input type="text"/><br>Injected alone ..... 96  |              |
| 304.  | Now think about the time before <b>(before Q. 303)</b> , how did you get that syringe/needle?<br><br><b>(Public place means places other than the IDU's home that are used to hide syringe/needle)</b> | My friend/relative gave it to me after his use ..... 1<br>Unknown person gave it to me ..... 2<br>I picked it up from a public place which was left there by others <sup>+</sup> ..... 3<br>I picked it up from a public place which was left there by myself <sup>+</sup> ..... 4<br>I used a new needle/syringe given by NGO staff/volunteer..... 5<br>I used a needle/syringe which I purchased..... 6<br>I reused my own needle/sy..... 7<br>Others (Specify) ____ ..... 96<br>Don't know ..... 98<br>No response ..... 99 |              |
| 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..... <input type="text"/> <input type="text"/><br>Injected alone ..... 96  |              |
| 305.  | Think about the times, you have injected drugs during the past one-week. How often was it with a needle or syringe that had previously been used by someone else?                                      | Every times ..... 1<br>Almost every-times ..... 2<br>Sometimes..... 3<br>Never used ..... 4<br>Not injected in the last week .... 5<br>Don't know ..... 98<br>No response..... 99  | 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?<br><br><b>(Public place means places other than the IDU's home that are used to hide syringe/needle)</b> | Every times ..... 1<br>Almost every-times..... 2<br>Sometimes..... 3<br>Never..... 4<br>Don't know ..... 98<br>No response..... 99 |              |
| 306.                      | In the past one-week, did you ever share needles and syringes with any of the following?   |  |              |
|                           | <b>Read out list. Multiple answers possible</b>  | <b>Yes</b> <b>No</b> <b>DK</b> <b>NR</b>   |              |
|                           | 1. Your usual sexual partner   | 1   2   98   99  |              |
|                           | 2. A sexual partner who you did not know   | 1   2   98   99  |              |
|                           | 3. A friend  | 1   2   98   99  |              |
|                           | 4. A drugs seller  | 1   2   98   99  |              |
|                           | 5. Unknown Person  | 1   2   98   99  |              |
| 96. Other (Specify) _____ | 1   2   98   99  |  |              |
| 307.                      | With how many different injecting partners did you share needles or syringes in the past one-week?<br><br><b>(Count everyone who injected from the same syringe)</b>   | Number of partners ..... <input type="text"/> <input type="text"/><br>Don't know ..... 98<br>No response..... 99                   |              |
| 308.                      | In the past one-week, how often did you give a needle or syringe to someone else, after you had already used it?   | Every times ..... 1<br>Almost every-times..... 2<br>Sometimes..... 3<br>Never..... 4<br>Don't know ..... 98<br>No response..... 99 |              |
| 309.                      | In the past-week, did you ever inject with a pre-filled syringe?<br><br><b>(By that I mean a syringe that was filled without you witnessing it)</b>  | Yes ..... 1<br>No ..... 2<br>Don't know ..... 98<br>No response..... 99  |              |
| 310.                      | In the past one-week, how often did you inject drugs using a syringe after someone else had squirted drugs into it from his/her used syringe?<br><br><b>(front-loading/back-loading/ splitting)</b>                              | Every times ..... 1<br>Almost every-times..... 2<br>Sometimes..... 3<br>Never..... 4<br>Don't know ..... 98<br>No response..... 99 |              |
| 311.                      | In the past one-week, when you injected drugs, how often did you share a cooker/ vial/container, cotton/filter, or rise water?   | Every times ..... 1<br>Almost every-times..... 2<br>Sometimes..... 3<br>Never..... 4<br>Don't know ..... 98<br>No response..... 99 |              |
| 312.                      | In the past one-week, how often you draw up your drug solution from a common container used by others?   | Every times ..... 1<br>Almost every-times..... 2<br>Sometimes..... 3<br>Never..... 4<br>Don't know ..... 98<br>No response..... 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 time..... 1<br>Almost every-times..... 2<br>Sometimes..... 3<br>Never..... 4<br>Never reused ..... 5<br>Others (Specify)_____ 96<br>Don't know..... 98<br>No response..... 99   | 314<br>314<br>314<br>314<br>314 |
| 313.1 | If cleaned, how did you usually clean them?  | With water ..... 1<br>With urine ..... 2<br>With saliva ..... 3<br>Boil the syringe in water ..... 4<br>With bleach ..... 5<br>Burning the needle with<br>matchstick ..... 6<br>Others (Specify)_____ 96<br>Don't know ..... 98<br>No response..... 99  |                                 |
| 314.  | Can you obtain new, unused needles and syringes when you need them?  | Yes ..... 1<br>No ..... 2<br>Don't know ..... 98<br>No response..... 99   | 316<br>316<br>316               |
| 315.  | Where can you obtain new unused needles and syringes?<br><br><b>(Do not read out list. Multiple answers possible. Probe only with "Anywhere Else?" )</b>                   | Drugstore ..... 1<br>Other shop..... 2<br>Health worker ..... 3<br>Hospital..... 4<br>Drug wholesaler/drug<br>agency ..... 5<br>Family/relatives ..... 6<br>Sexual partner ..... 7<br>Friends ..... 8<br>Other drugs users ..... 9<br>Drugs seller ..... 10<br>Needle exchange program<br>of _____ ..... 11<br>Theft from legitimate<br>source ..... 12<br>Buy on streets..... 13<br>Other (Specify) _____ 96 |                                 |
| 316.  | In the past one-year, did you ever inject drug in another city/district?   | Yes ..... 1<br>No ..... 2<br>Don't remember ..... 98<br>No response..... 99   | 317<br>317<br>317               |
| 316.1 | If yes, in which other cities/districts did you inject, including cities in other countries?   | Cities _____<br>Districts _____<br>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<br>Almost every-times..... 2<br>Sometimes..... 3<br>Never..... 4<br>Don't know ..... 98<br>No response..... 99  |                                 |

| Q. N. | Questions  | Coding Categories   | Skip to Q.N. |
|-------|--|---|--------------|
| 316.3 | When you injected drugs in another city, how often did you gave a syringe/needle to some one else?   | Every times ..... 1<br>Almost every-times..... 2<br>Sometimes..... 3<br>Never..... 4<br>Don't know..... 98<br>No response..... 99     |              |
| 317.  | Are you currently under treatment (or receiving help) or have you ever received treatment (or help) because of your drug use?  | Currently under treatment ..... 1<br>Was in treatment but not now2<br>Have never received<br>treatment ..... 3<br>No response..... 99 | 401<br>401   |
| 318.  | How many months ago did you last receive treatment or help for your drug use?  | Months ..... <input type="text"/> <input type="text"/><br>Don't know..... 98<br>No response..... 99                                   |              |
| 319.  | What kind of treatment or help have you received?<br><b>(Do not read out the responses, probe asking, "Are there any other kinds of treatment that you've received?" Multiple Answers Possible.)</b> |   |              |
|       | <b>Types of Treatments</b>   | <b>Name of Institutions</b>   |              |
|       | 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 ..... <input type="text"/> <input type="text"/><br><b>(Write completed years)</b><br>Never had sexual<br>intercourse .....2<br>Don't know .....98<br>No response .....99 | 601          |
| 402.  | Have you had sexual intercourse in the last 12 months | Yes..... 1<br>No .....2<br>No response .....99   | 404<br>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 ..... <input type="text"/> <input type="text"/>   |              |
| 403.1 | How many were female "regular partners"?<br><br>(Your wife or live-in sexual partners)   | Number ..... <input type="text"/> <input type="text"/><br>Don't know .....98<br>No response .....99                                    |              |
| 403.2 | How many were female "sex worker"?<br><br>(Partners to whom you bought or sold sex in exchange for money or drug)  | Number ..... <input type="text"/> <input type="text"/><br>Don't know .....98<br>No response .....99                                    |              |
| 403.3 | How many were female "non-regular partners"?<br><br>(Sexual partners, you are not married to and have never lived with and did not have sex in exchange for money) | Number ..... <input type="text"/> <input type="text"/><br>Don't know .....98<br>No response .....99                                    |              |
| 404.  | We have just talked about your female sexual partners? Have you ever had any male sexual partners also?  | Yes ..... 1<br>No ..... 2<br>No response .....99   | 501<br>501   |
| 404.1 | If yes, have you had anal sex with any of your male partners in the last 12 months?  | Yes ..... 1<br>No ..... 2<br>No response .....99   | 501<br>501   |
| 404.2 | With how many different male partners have you had anal sex in the last 12 months?   | Number ..... <input type="text"/> <input type="text"/><br>Don't know .....98<br>No response .....99                                    |              |
| 404.3 | The last time you had anal sex with a male sex partner did you and your partner use a condom?  | Yes .....1<br>No .....2<br>Don't Know .....98<br>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<br>Almost Every Times .....2<br>Some Times .....3<br>Never Used .....4<br>Don't Know .....98<br>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?   | Yes .....1<br>No .....2  | 502                     |
| 501.1 | Think about your most recent female regular sexual partner. How many times did you have sex with her during last one-month? | Times ..... <input type="text"/> <input type="text"/><br>Don't know .....98<br>No response .....99 |                         |
| 501.2 | The last time you had sex with a female regular partner did you and your partner use a condom?                              | Yes .....1<br>No .....2<br>Don't know .....98<br>No response .....99                               | 501.4<br>501.4<br>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?<br><br>(Do not read the possible answers, multiple answer possible)  | Not available..... 1<br>Too expensive..... 2<br>Partner objected ..... 3<br>Don't like them..... 4<br>Used other contraceptive ..... 5<br>Didn't think it was necessary.....6<br>Didn't think of it..... 7<br>Other (Specify) _____ ..... 96<br>Don't know..... 98<br>No response ..... 99 |                   |
| 501.4   | How often have you used a condom with female regular partners in the past year?  | Every times ..... 1<br>Almost every-times..... 2<br>Sometimes..... 3<br>Never used ..... 4<br>Don't know..... 98<br>No response ..... 99   |                   |
| 501.5   | Did your female regular partner also inject drugs?   | Yes ..... 1<br>No ..... 2<br>Don't know..... 98<br>No response ..... 99  |                   |
| 501.6   | Have you had ever-anal sex with your female regular partners?  | Yes ..... 1<br>No ..... 2<br>Don't know..... 98<br>No response ..... 99  | 502<br>502<br>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<br>No ..... 2<br>Don't know..... 98<br>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<br>Almost every-times..... 2<br>Sometimes..... 3<br>Never used ..... 4<br>Don't know..... 98<br>No response ..... 99   |                   |
| 502.    | Did you have a sexual intercourse with a female sex worker in last 12 months?<br>(Check 403.2 and circle the response of Q. 502)   | Yes ..... 1<br>No ..... 2  | 503               |
| 502.1   | <b>Think about the female sex workers that you have had sex in the past one-month.</b><br><br>In total how to many female sex workers you sold sex in exchange for money or drugs? | No.. ..... <input type="text"/> <input type="text"/><br>Don't know..... 98<br>No response ..... 99   |                   |
| 502.1.1 | With how many sex workers you had sex in last month by paying them money or drugs?.  | No.. ..... <input type="text"/> <input type="text"/><br>Don't know ..... 98<br>No response ..... 99  |                   |
| 502.2   | Think about your most recent female sex worker. How many times did you have sexual intercourse with her in the past one-month?   | Times ..... <input type="text"/> <input type="text"/><br>Don't know..... 98<br>No response ..... 99  |                   |

| 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<br>No ..... 2<br>Don't know ..... 98<br>No response ..... 99  | 502.5<br><br>502.5<br>502.5 |
| 502.4 | Why did not you and your partner use a condom that time?<br><br><b>(Do not read the possible answers, multiple answer possible)</b>                      | Not available ..... 1<br>Too expensive ..... 2<br>Partner objected ..... 3<br>Don't like them ..... 4<br>Used other contraceptive ..... 5<br>Didn't think it was necessary...6<br>Didn't think of it ..... 7<br>Other (Specify) _____ 96<br>Don't know ..... 98<br>No response ..... 99 |                             |
| 502.5 | How often have you used a condom with female sex workers in the past year?   | Every times ..... 1<br>Almost every-times ..... 2<br>Sometimes ..... 3<br>Never used ..... 4<br>Don't know ..... 98<br>No response ..... 99   |                             |
| 502.6 | Do you know whether female sex worker with whom you had sex also inject drugs?   | Yes ..... 1<br>No ..... 2<br>Don't know ..... 98<br>No response ..... 99  |                             |
| 502.7 | Have you ever had anal sex with your female sex workers?   | Yes ..... 1<br>No ..... 2<br>Don't know ..... 98<br>No response ..... 99  | 503<br>503<br>503           |
| 502.8 | The last time you had anal-sex with a female sex worker did you use a condom?  | Yes ..... 1<br>No ..... 2<br>Don't know ..... 98<br>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<br>Almost every-times ..... 2<br>Sometimes ..... 3<br>Never used ..... 4<br>Don't know ..... 98<br>No response ..... 99   |                             |
| 503.  | Did you have a sexual intercourse with a female non-regular sex partner during last 12 months?<br><b>(Check 403.3 and circle the response of Q. 503)</b> | Yes ..... 1<br>No ..... 2   | 504                         |
| 503.1 | Think about your most recent female non-regular sexual partner. How many times did you have sexual intercourse with her over the past one-month?         | Times ..... <input type="text"/> <input type="text"/><br>Don't know ..... 98<br>No response ..... 99  |                             |
| 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<br>No ..... 2<br>Don't know ..... 98<br>No response ..... 99  | 503.4<br>503.4<br>503.4     |

| Q. N. | Questions  | Coding Categories  | Skip to Q.N.            |
|-------|--|--|-------------------------|
| 503.3 | Why did not you and your partner use a condom that time?<br><br>(Don't read the possible answers, multiple answer possible)      | Not available..... 1<br>Too expensive..... 2<br>Partner objected ..... 3<br>Don't like them..... 4<br>Used other contraceptive ..... 5<br>Didn't think it was necessary .... 6<br>Didn't think of it..... 7<br>Other (Specify) _____ .. 96<br>Don't know..... 98<br>No response ..... 99 |                         |
| 503.4 | How often have you used a condom with a female non-regular partner in the past year?   | Every times ..... 1<br>Almost every-times..... 2<br>Sometimes..... 3<br>Never used ..... 4<br>Don't know ..... 98<br>No response ..... 99  |                         |
| 503.5 | Did you know whether your female non-regular partners also inject drugs?   | Yes ..... 1<br>No ..... 2<br>Don't know..... 98<br>No response ..... 99  |                         |
| 503.6 | Have you ever had anal sex with your female non-regular partners?  | Yes ..... 1<br>No ..... 2<br>Don't know ..... 98<br>No response ..... 99   | 504<br>504<br>504       |
| 503.7 | The last time you had an anal sex with a female non-regular partner, did you and your partner use a condom?                      | Yes ..... 1<br>No ..... 2<br>Don't know..... 98<br>No response ..... 99  |                         |
| 503.8 | How often have you used a condom in an anal-sex with female non-regular partners in the past year?                               | Every times ..... 1<br>Almost every-times..... 2<br>Sometimes..... 3<br>Never used ..... 4<br>Don't know ..... 98<br>No response ..... 99  |                         |
| 504   | Have you had anal sex with a male partner in the past one year?<br>(See the response in Q. 404.1 and circle Q. 504 response)     | Yes ..... 1<br>No ..... 2  | 505                     |
| 504.1 | Think of your last male sex partner with whom you had anal sex: in the last one month, how many times you had anal sex with him? | Times ..... <input type="text"/><br>Don't know ..... 98<br>No response ..... 99  |                         |
| 504.2 | The last time you had anal sex with him; did you use condom?   | Yes ..... 1<br>No ..... 2<br>Don't know ..... 98<br>No response ..... 99   | 504.4<br>504.4<br>504.4 |

| Q. N. | Questions   | Coding Categories  | Skip to Q.N. |
|-------|---|--|--------------|
| 504.3 | Why didn't you use condom at that time?<br><br>(Don't read possible answer, multiple answer possible) | Not available..... 1<br>Too expensive..... 2<br>Partner objected ..... 3<br>Don't like them..... 4<br>Used other contraceptive ..... 5<br>Didn't think it was necessary .... 6<br>Didn't think of it..... 7<br>Other (Specify) _____96<br>Don't know..... 98<br>No response ..... 99 |              |
| 504.4 | How often have you used a condom is an anal sex with a male partner is the past year?                 | Every times ..... 1<br>Almost every-times..... 2<br>Sometimes..... 3<br>Never used ..... 4<br>Don't know..... 98<br>No response ..... 99   |              |
| 504.5 | Do you know if your male partner with whom you had anal sex also injects drugs?                       | Yes ..... 1<br>No ..... 2<br>Don't know..... 98<br>No response ..... 99  |              |
| 505.  | Have you had sexual intercourse in the last month?  | Yes ..... 1<br>No ..... 2  | 507          |
| 506.  | If yes, did you or your partner use a condom when you had sex last month?                             | Every times ..... 1<br>Almost every-times..... 2<br>Sometimes..... 3<br>Never used ..... 4<br>Don't know..... 98<br>No response.....99   |              |
| 507.  | With whom did you have the last sexual intercourse?   | FSW ..... 1<br>Regular partner ..... 2<br><b>(Wife or live in sexual partner)</b><br>Other female friend..... 4<br>Male friend..... 5<br>Don't Know ..... 98<br>No response ..... 99   |              |
| 508.  | Did you use condom in the last sexual intercourse   | Yes ..... 1<br>No ..... 2  |              |

## 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?<br><br>(Show picture or sample of condom)   | Yes.....1<br>No .....2<br>Don't know .....98<br>No response .....99   | 701<br>701<br>701 |
| 602.  | Have you ever used a condom?  | Yes.....1<br>No .....2  |                   |
| 603.  | Do you know of any place or person from which you can obtain condom?  | Yes.....1<br>Don't know .....98<br>No response .....99  | 701<br>701        |
| 604.  | From which place or people, you can obtain condoms?<br><br>(Multiple answer possible. Don't read the list but should probe) | Shop.....1<br>Pharmacy .....2<br>Clinic .....3<br>Hospital .....4<br>Family planning center .....5<br>Bar/Guest house/Hotel .....6<br>Health worker .....7<br>Peer Educator/outreach educator .....8<br>Friend .....9<br><i>Pan Pasa</i> .....10<br>Others (Specify) _____ .96<br>No response .....99 |                   |
| 605.  | How long would it take ( <i>from your house or the place where you work</i> ) to obtain a condom?                           | Less than 30 minutes .....1<br>More than 30 minutes .....2<br>Don't know .....98<br>No response .....99   |                   |

## 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 be transmitted through sexual intercourse?                                      | Yes.....1<br>No .....2<br>No response .....99  | 704<br>704        |
| 702.  | Can you describe any symptoms of STIs in women?<br><br>(Do not read possible answers, multiple answers possible.)        | Abdominal pain .....1<br>Genital discharge.....2<br>Foul smelling .....3<br>Burning pain on urination.....4<br>Genital ulcers/sore .....5<br>Swelling in groin area.....6<br>Itching.....7<br>Other (Specify) .....96<br>Don't know .....98<br>No response .....99 |                   |
| 703.  | Can you describe any symptoms of STIs in men?<br><br>(Do not read possible answers, multiple answer possible)            | Genital discharge.....1<br>Burning pain on urination.....2<br>Genital ulcers/sore blister .....3<br>Swellings in groin area .....4<br>Others (Specify) .....96<br>Don't know .....98<br>No response .....99  |                   |
| 704.  | Have you had a genital discharge/burning urination during the last 12 months?  | Yes.....1<br>No .....2<br>Don't know .....98<br>No response .....99  | 705<br>705<br>705 |
| 704.1 | Currently, do you have a genital discharge/burning urination problem?  | Yes.....1<br>No .....2<br>Don't know .....98<br>No response .....99  |                   |
| 705   | Have you had a genital ulcer/sore blister during the last 12 months?   | Yes.....1<br>No .....2<br>Don't know .....98<br>No response .....99  | 706<br>706<br>706 |
| 705.1 | Currently, do you have a genital ulcer/sore blister problem?   | Yes.....1<br>No .....2<br>Don't know .....98<br>No response .....99  |                   |
| 706.  | Last time you had a genital discharge/burning urination or a genital ulcer/sore blister, where did you go for treatment? | Did not seek treatment.....1<br>With private doctor.....2<br>In hospital .....3<br>No Symptoms .....4<br>Others (Specify) .....96  |                   |

## 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 called AIDS?  | Yes.....1<br>No .....2<br>No response .....99  | 804<br>804        |
| 802.  | Do you know anyone who is infected with HIV or who has died of AIDS?  | Yes.....1<br>No .....2<br>No response .....99  | 804               |
| 803.  | Do you have close relative or close friend who is infected with HIV or has died of AIDS?  | Yes, a close relative.....1<br>Yes, a close friend .....2<br>No .....3<br>No response .....99                        |                   |
| 804.  | Can a person protect himself/herself from HIV, the virus that causes AIDS, by using a condom correctly every time they have sex?                                | Yes.....1<br>No .....2<br>Don't know .....98<br>No response .....99  |                   |
| 805.  | Can a person get HIV, from mosquito bites?  | Yes.....1<br>No .....2<br>Don't know .....98<br>No response .....99  |                   |
| 806.  | Can a person protect himself/herself from HIV, by having one uninfected faithful sex partner?   | Yes.....1<br>No .....2<br>Don't know .....98<br>No response .....99  |                   |
| 807.  | Can a person protect himself/herself from HIV, by abstaining from sexual intercourse?   | Yes.....1<br>No .....2<br>Don't know .....98<br>No response .....99  |                   |
| 808.  | Can a person get HIV, by sharing a meal with someone who is infected?   | Yes.....1<br>No .....2<br>Don't know .....98<br>No response .....99  |                   |
| 809.  | Can a person get HIV, by getting injections with a needle that was already used by someone else?  | Yes.....1<br>No .....2<br>Don't know .....98<br>No response .....99  |                   |
| 810.  | Can a person who inject drug protect himself/herself from HIV, the virus that causes AIDS, by switching to non-injecting drugs?<br><br>(Oral or inhaling drugs) | Yes.....1<br>No .....2<br>Don't know .....98<br>No response .....99  |                   |
| 811.  | Can a pregnant woman infected with HIV transmit the virus to her unborn child?  | Yes.....1<br>No .....2<br>Don't know .....98<br>No response .....99  | 813<br>813<br>813 |
| 812.  | What can a pregnant woman do to reduce the risk of transmission of HIV to her unborn child?<br><br>(Do not read the possible answers, multiple answer possible) | Take medication<br>(Antiretrovirals) .....1<br>Others (Specify) .....96<br>Don't know .....98<br>No response .....99 |                   |

| 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<br>No .....2<br>Don't know .....98<br>No response .....99   |              |
| 813.1 | Do you think a healthy-looking person can be infected with HIV?   | Yes.....1<br>No .....2<br>Don't know .....98  |              |
| 813.2 | Can a person get HIV by shaking hand?   | Yes.....1<br>No .....2<br>Don't know .....98  |              |
| 813.3 | Can blood transfusion from an infected person to the other transmit HIV?  | Yes.....1<br>No .....2<br>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?<br>(By confidential, I mean that no one will know the result if you don't want him or her to know it.) | Yes.....1<br>No .....2<br>Don't know .....98<br>No response .....99   |              |
| 815   | I don't want to know the result, but have you ever had an HIV test?   | Yes.....1<br>No .....2<br>No response .....99   | 901<br>901   |
| 816.  | Did you voluntarily undergo the HIV test, or were you required to have the test?  | Voluntary.....1<br>Required .....2<br>No response .....99   |              |
| 817.  | Please do not tell me the result, but did you find out the result of your HIV test?   | Yes.....1<br>No .....2<br>No response .....99   | 818<br>818   |
| 817.1 | Why did you not receive the test result?  | Sure of not being infected .....1<br>Afraid of result .....2<br>Felt unnecessary .....3<br>Forgot it .....4<br>Others (Specify) .....96                                 |              |
| 818.  | When did you have your most recent HIV test?  | Within the past 12 months.....1<br>Between 13-24 months .....2<br>Between 25-48 months .....3<br>More than 49 months.....4<br>Don't know .....98<br>No response .....99 |              |



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

| Q. N.                      | Questions   | Coding Categories |           | Skip to Q.N. |
|----------------------------|---|-------------------|-----------|--------------|
| 901.                       | Of the following sources of information, from which sources have you learned about HIV/AIDS?<br><i>(Read the following list, multiple answers possible)</i> |                   |           |              |
|                            | <b>Source of Information</b>  | <b>Yes</b>        | <b>No</b> |              |
|                            | 1. Radio  | 1                 | 2         |              |
|                            | 2. Television   | 1                 | 2         |              |
|                            | 3. Newspapers/Magazines   | 1                 | 2         |              |
|                            | 4. Pamphlets/Posters  | 1                 | 2         |              |
|                            | 5. School/Teachers  | 1                 | 2         |              |
|                            | 6. Health Worker/Volunteer  | 1                 | 2         |              |
|                            | 7. Friends/Relatives  | 1                 | 2         |              |
|                            | 8. Work Place   | 1                 | 2         |              |
|                            | 9. People from NGO  | 1                 | 2         |              |
|                            | 10. Video Van   | 1                 | 2         |              |
|                            | 11. Street Drama  | 1                 | 2         |              |
|                            | 12. Cinema Hall   | 1                 | 2         |              |
|                            | 13. Community Event/Training  | 1                 | 2         |              |
|                            | 14. Bill Board/Sign Board   | 1                 | 2         |              |
|                            | 15. Comic Book  | 1                 | 2         |              |
| 16. Community Workers      | 1   | 2                 |           |              |
| 96. Others (Specify) _____ | 1   | 2                 |           |              |
| 902.                       | Has anyone give you following information or items in the past year?<br><i>(Multiple answer possible, read the list)</i>                                    |                   |           |              |
|                            | <b>Items</b>  | <b>Yes</b>        | <b>No</b> |              |
|                            | 1. Condom   | 1                 | 2         |              |
|                            | 2. Brochure/Booklets/Pamphlets about HIV/AIDS   | 1                 | 2         |              |
|                            | 3. Information about HIV/AIDS   | 1                 | 2         |              |
| 96. Others (Specify) _____ | 1   | 2                 |           |              |

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

| Q. N.                      | Questions  | Coding Categories      |           | Skip to Q.N. |
|----------------------------|--|------------------------|-----------|--------------|
| 1001.                      | In the past one-year have you seen, read or heard any advertisements about condoms from the following sources?<br><i>(Read the following list, multiple answer possible)</i> |                        |           |              |
|                            | <b>Sources</b>   | <b>Yes</b>             | <b>No</b> |              |
|                            | 1. Radio   | 1                      | 2         |              |
|                            | 2. Television  | 1                      | 2         |              |
|                            | 3. Pharmacy  | 1                      | 2         |              |
|                            | 4. Health Post   | 1                      | 2         |              |
|                            | 5. Health Center   | 1                      | 2         |              |
|                            | 6. Hospital  | 1                      | 2         |              |
|                            | 7. Health Workers/Volunteers   | 1                      | 2         |              |
|                            | 8. Friends/Neighbors   | 1                      | 2         |              |
|                            | 9. NGOs  | 1                      | 2         |              |
|                            | 10. Newspapers/Posters   | 1                      | 2         |              |
|                            | 11. Video Van  | 1                      | 2         |              |
|                            | 12. Street Drama   | 1                      | 2         |              |
|                            | 13. Cinema Hall  | 1                      | 2         |              |
|                            | 14. Community Event/Training   | 1                      | 2         |              |
|                            | 15. Bill Board/Sign Board  | 1                      | 2         |              |
|                            | 16. Comic Book   | 1                      | 2         |              |
| 17. Community Workers      | 1  | 2                      |           |              |
| 96. Others (Specify) _____ | 1  | 2                      |           |              |
| 1002.                      | Have you ever seen, heard or read following messages/characters during past one year? <i>(Multiple answer possible)</i>  |                        |           |              |
|                            | <b>Message/characters</b>  | <b>Yes</b>             | <b>No</b> |              |
|                            | 1. Jhilke Dai Chha Chhaina Condom  | 1                      | 2         |              |
|                            | 2. Condom Kina Ma Bhaya Hunna Ra   | 1                      | 2         |              |
|                            | 3. Youn Rog Ra AIDS Bata Bachnalai<br>Rakhnu Parchha Sarbatra Paine Condom Lai   | 1                      | 2         |              |
|                            | 4. Ramro Sanga Prayog Gare Jokhim Huna<br>Dinna Bharpardo Chhu Santosh Dinchhu<br>Jhanjhat Manna Hunna   | 1                      | 2         |              |
|                            | 5. Condom Bata Surakchhya, Youn Swasthya<br>Ko Rakchhya AIDS Ra Younrog Bata<br>Bachna Sadhai Condom Ko Prayog Garau   | 1                      | 2         |              |
|                            | 6. HIV/AIDS Bare Aajai Dekhee Kura Garau   | 1                      | 2         |              |
|                            | 7. Ek Apas Ka Kura   | 1                      | 2         |              |
|                            | 8. Maya Garaun Sadbhav Badaun  | 1                      | 2         |              |
|                            | 9. Des Pardes  | 1                      | 2         |              |
|                            | 10. Manis Sanga Manis Mile hara Jeeta Kasko<br>Hunchha   | 1                      | 2         |              |
|                            | 96. Others (Specify) _____   | 1                      | 2         |              |
| 1003.                      | Have you ever heard/seen or read messages or materials other than mentioned above?   | Yes.....1<br>No .....2 |           | 1004         |

| Q. N.  | Questions  | Coding Categories  | Skip to Q.N. |
|--------|--|--|--------------|
| 1003.1 | What? Have you seen, read or heard of ?  | _____<br>_____   |              |
| 1004.  | Generally, where do you gather to inject drug?   | _____<br>_____   |              |
| 1005   | How many IDUs do you know who also know you?<br><br><b>Knowing someone is defined as being able to contact them, and having had contact with them in the past 12 months – knowing each other</b> | Total _____<br><br>Don't know .....98<br>No response .....99   | 1008<br>1008 |
| 1005.1 | Among them persons how many are male and female?   | Male _____<br>Female _____<br>Don't know .....98<br>No response .....99  |              |
| 1006   | Among those persons, please try to estimate the number of people by range of age:  | Less than 15 years old [____]<br>15-19 years old [____]<br>20-24 years old [____]<br>25-29 years old [____]<br>30-40 years old [____]<br>> 40 years old [____]<br>Don't know .....98<br>No response .....99<br>Not applicable.....97 |              |
| 1007   | Again, among those guys, please try to estimate the number of people by religion:  | Hindu [____]<br>Buddhist [____]<br>Muslim [____]<br>Christian [____]<br>Others (Specify) _____ [____]<br>Don't know .....98<br>No response .....99<br>Not applicable.....97  |              |
| 1008   | How is the person who gave you the coupon related to you ?   | A close friend .....1<br>A friend .....2<br>Your sexual partner .....3<br>A relative .....4<br>A stranger .....5<br>Others (Specify) _____ .....6<br>Don't know .....98<br>No response .....99                                       |              |

## 11.0 Knowledge and Participation in STI and HIV/AIDS Programs

| Q. N. | Questions   | Coding Categories   | Skip to Q.N. |
|-------|---|---|--------------|
| 1101  | Have you met or discussed or interacted with Peer Educators (PE) or Outreach Educators (OE) or Community Mobilizers (CM) or Community Educators (CE) in the last 12 months? | Yes.....1<br>No .....2<br>No response .....99   | 1105         |
| 1102  | When you met/discussed/interacted with PE or OE in what kind of activities were you involved?<br><br><b>(Multiple answers. DO NOT READ the possible answers)</b>            | Discussion on how HIV/AIDS is/isn't transmitted.. .....1<br>Discussion on how STI is/isn't transmitted..... 2<br>Discussion on safe injecting behavior..... 3<br>Regular/non-regular use of condom..... 4<br>Demonstration on using condom correctly.....5<br>Others (Specify)..... 96                                  |              |
| 1103  | Do you know from which organization were they?<br><br><b>(Multiple answers. DO NOT READ the possible answers)</b>   | KCC.....1<br>HELP.....2<br>KYC.....3<br>PSK .....4<br>LALS.....5<br>Youth Vision .....6<br>Naulo Ghumti .....7<br>CSG .....8<br>INF (Nepalgunj) .....9<br>SMF .....10<br>AHH .....11<br>RICHMOND .....12<br>Nav Kiran .....13<br>Jhapa Plus .....14<br>Namuna .....15<br>Others (Specify) .....96<br>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.....1<br>2-3 times .....2<br>4-6 times .....3<br>7-12 times .....4<br>More than 12 times.....5   |              |
| 1105  | Have you visited or been to any out reach center (DIC,IC or CC) in the last 12 months?<br><br><b>Drop-In Center (DIC), Information Center (IC), Counseling Center (CC)</b>  | Yes.....1<br>No .....2  | 1109         |

| Q. N. | Questions  | Coding Categories   | Skip to Q.N. |
|-------|--|---|--------------|
| 1106  | When you went to the out reach center (DIC,IC or CC), in which activities did you take part?<br><br>(Multiple answers. DO NOT READ the possible answers) | Went to collect condoms..... 1<br>Went to learn the correct way of using condom ..... 2<br>Went to learn about the safe injecting behavior..... 3<br>Went to watch film on HIV/AIDS ..... 4<br>Participated in discussion on HIV transmission ..... 5<br>Went to have new syringe..... 6<br>Other (Specify)_____96                    |              |
| 1107  | Do you know which organizations run those out reach center (DIC, IC or CC)?<br><br>(Multiple answers. DO NOT READ the possible answers)                  | KCC. .... 1<br>HELP. .... 2<br>KYC..... 3<br>PSK ..... 4<br>LALS. .... 5<br>Youth Vision..... 6<br>Naulo Ghumti ..... 7<br>CSG ..... 8<br>INF (Nepalgunj)..... 9<br>SMF ..... 10<br>AHH ..... 11<br>RICHMOND..... 12<br>Nav Kiran..... 13<br>Jhapa Plus ..... 14<br>Namuna..... 15<br>Others (Specify) _____ 96<br>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<br>2-3 times ..... 2<br>4-6 times ..... 3<br>7-12 times ..... 4<br>More than 12 times ..... 5   |              |
| 1109  | Have you visited any STI clinic in the last 12 months?   | Yes ..... 1<br>No ..... 2   | 1113         |
| 1110  | When you visited such STI clinic in what activities were you involved?<br><br>(Multiple answers. DO NOT READ the possible answers given below)           | Blood tested for STI..... 1<br>Physical examination conducted for STI identification..... 2<br>Discussion on how STI is/isn't transmitted..... 3<br>Discussion on safe injecting behavior ..... 4<br>Regular/non-regular use of Condom..... 5<br>Took a friend with me..... 6<br>Other (Specify)_____96                               |              |

| Q. N. | Questions  | Coding Categories   | Skip to Q.N. |
|-------|--|---|--------------|
| 1111  | Do you know which organizations run those STI clinics?<br><br>(Multiple answers. DO NOT READ the possible answers)                 | AMDA ..... 1<br>SACTS ..... 2<br>NFCC ..... 3<br>CAC ..... 4<br>Paluwa ..... 5<br>Siddhartha Club ..... 6<br>NRCS ..... 7<br>NSARC ..... 8<br>FPAN ..... 9<br>Others (Specify) _____ 96<br>Don't know ..... 98  |              |
| 1112  | How many times have you visited STI clinic in the last 12 months?  | Once ..... 1<br>2-3 times ..... 2<br>4-6 times ..... 3<br>7-12 times ..... 4<br>More than 12 times ..... 5  |              |
| 1113  | Have you visited any Voluntary Counseling and Testing (VCT) centers in the last 12 months?   | Yes ..... 1<br>No ..... 2   | 1117         |
| 1114  | When you visited such VCT center in what activities were you involved?<br><br>(Multiple answers. DO NOT READ the possible answers) | Received pre-HIV/AIDS test counseling ..... 1<br>Blood sample taken for HIV/AIDS test ..... 2<br>Received post HIV/AIDS test counseling ..... 3<br>Received information on safe injecting behavior ..... 4<br>Received HIV/AIDS test result .. 5<br>Received counseling on using condom correctly in each sexual intercourse ..... 6<br>Received information on HIV/AIDS window period..... 7<br>Took a friend with me..... 8<br>Other (Specify) _____ 96 |              |
| 1115  | Do you know which organizations run those VCT centers?<br><br>(Multiple answers. DO NOT READ the possible answers)                 | AMDA ..... 1<br>Youth Vision..... 2<br>SACTS ..... 3<br>NFCC ..... 4<br>CAC ..... 5<br>Naulo Ghumti ..... 6<br>NSARC ..... 7<br>NRCS ..... 8<br>FPAN ..... 9<br>WATCH ..... 10<br>Namuna ..... 11<br>Others (Specify) _____ 96<br>Don't know ..... 98   |              |

| Q. N. | Questions  | Coding Categories   | Skip to Q.N. |
|-------|--|---|--------------|
| 1116  | For how many times have you visited VCT center in the last 12 months?  | Once..... 1<br>2-3 times ..... 2<br>4-6 times ..... 3<br>7-12 times ..... 4<br>More than 12 times ..... 5   |              |
| 1117  | Have you ever participated in HIV/AIDS awareness raising program or community events in the last 12 months?                            | Yes ..... 1<br>No ..... 2   | 1121         |
| 1118  | When you participated in such events in what activities were you involved?<br><br>(Multiple answers. DO NOT READ the possible answers) | Street drama ..... 1<br>AIDS Day ..... 2<br>Condom Day ..... 3<br>Video Shows ..... 4<br>Group discussions ..... 5<br>Talk programs ..... 6<br>HIV/AIDS related training ..... 7<br>HIV/AIDS related Workshops.. 8<br>Condom use demonstrations..... 9<br>Others (Specify) _____ 96   |              |
| 1119  | Do you know which organizations organized those activities?<br><br>(Multiple answers. DO NOT READ the possible answers given below)    | AMDA ..... 1<br>HELP ..... 2<br>KYC ..... 3<br>Youth Vision ..... 4<br>NFCC ..... 5<br>LALS..... 6<br>Naulo Ghumti ..... 7<br>WATCH ..... 8<br>GWP..... 9<br>NRCS ..... 10<br>NSARC ..... 11<br>AHH ..... 12<br>Recovery Nepal..... 13<br>SAHARA ..... 14<br>CSG ..... 15<br>Others (Specify) _____ .96<br>Don't know .....98 |              |
| 1120  | How many times have you participated in such activities in the last 12 months?   | Once.....1<br>2-3 times .....2<br>4-6 times .....3<br>7-12 times .....4<br>More than 12 times .....5  |              |
| 1121  | Have you heard of any Community Home Based Care (CHBC) services that are provided for HIV positive people?                             | Yes.....1<br>No .....2  |              |
| 1122  | Have you heard of care and support program that provide information regarding ART and ART services necessary for HIV infected people?  | Yes.....1<br>No .....2  |              |

## 12.0 Stigma and Discrimination

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

☞ Thank You ☞



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

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

n = required minimum sample size per survey round or comparison groups

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

P<sub>1</sub> = the estimated number of an indicator measured as a proportion at the time of the first survey or for the control area

P<sub>2</sub> = the expected level of the indicator either at some future date or for the project area such that the quantity (P<sub>2</sub>-P<sub>1</sub>) is the size of the magnitude of change it is desired to be able to detect

Z<sub>α</sub> = the Z-score corresponding to the degree of confidence with which it is desired to be able to conclude that an observed change of size (P<sub>2</sub>-P<sub>1</sub>) would not have occurred by chance (α – the level of statistical significance), and

Z<sub>β</sub> = 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 (β – 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,  
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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](mailto:dborasky@fhi.org). ]**

## **VOLUNTEER AGREEMENT**

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

\_\_\_\_\_  
Signature of witness

\_\_\_\_\_  
Date

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

\_\_\_\_\_  
Signature of Person Who Obtained Consent

\_\_\_\_\_  
Date

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

| District                         | Second Round (2007) |           |             |
|----------------------------------|---------------------|-----------|-------------|
|                                  | Total sample        | HIV+      | %           |
| <b>Study centers (Districts)</b> |                     |           |             |
| 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         |
| <b>Total</b>                     | <b>300</b>          | <b>33</b> | <b>11.0</b> |

## 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

Respondent 

|  |  |  |  |  |  |
|--|--|--|--|--|--|
|  |  |  |  |  |  |
|--|--|--|--|--|--|

Date: 2064/\_\_\_/\_\_\_

Name of Clinician: \_\_\_\_\_

Name of Lab Technician: \_\_\_\_\_

(A) Clinical TEST

(B) Specimen collection

|                        |  | <u>Yes</u> | <u>No</u> |
|------------------------|--|------------|-----------|
| Weight : _____ Kg      | Pre-test counseled                       | 1          | 2         |
| B.P. : _____ mm of Hg  | Blood Collected for HIV & Syphilis       | 1          | 2         |
| Pulse : _____          | Date & place for post-test results given | 1          | 2         |
| Temperature : _____ °F | Condom given                             | 1          | 2         |
|                        | IEC materials given                      | 1          | 2         |

#### **1.0 Syndromic Treatment Information**

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

1. Yes                      2. No

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

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

1. Yes                      2. No

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

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

1. Yes                      2. No

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

### ANNEX – 6: Study Centers

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

## ANNEX – 7: Participation in Post Test Counseling

| Date                         | Counseling Center | Expected Client | Client Counseled |             | Client with HIV+ | Client with HIV- |
|------------------------------|-------------------|-----------------|------------------|-------------|------------------|------------------|
|                              |                   |                 | N                | %           |                  |                  |
| 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                |
| <b>Total</b>                 |                   | <b>300</b>      | <b>50</b>        | <b>16.7</b> | <b>3</b>         | <b>47</b>        |



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

| Injecting practice                                   | First round (2005) |      | Second round (2007) |      |
|--|--------------------|------|---------------------|------|
|  | n = 144            | %    | n = 134             | %    |
| <b>Reasons for not injected on the Previous day*</b> |                    |      |                     |      |
| 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  |

\* 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 round (2005) |      | Second round (2007) |      |
|--------------------------|--------------------|------|---------------------|------|
|                          | 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

| S.N. | Gathering places of IDUs to inject drugs           | First round (2005) |      | Second round (2007) |      |
|------|--|--------------------|------|---------------------|------|
|      |  | 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. | Drugs Combination                          | Second round (2007) |
|------|--|---------------------|
|      |  | 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 round (2005) |              | Second round (2007) |              |
|---|--------------------|--------------|---------------------|--------------|
|   | N                  | %            | N                   | %            |
| <b>Switched from one drugs to another drugs in past month</b> |                    |              |                     |              |
| Yes   | 13                 | 4.3          | 4                   | 1.3          |
| No  | 287                | 95.7         | 296                 | 98.7         |
| <b>Total</b>  | <b>300</b>         | <b>100.0</b> | <b>300</b>          | <b>100.0</b> |
| <b>Switched from</b>  |                    |              |                     |              |
| Diazepam + Tidigestic + Hydrocole to Brown Sugar              | 7                  | 53.8         | 0                   | 0.0          |
| Tidigestic to Brown Sugar                                     | 2                  | 15.4         | 0                   | 0.0          |
| Tidigestic + Hydrocole to Brown Sugar                         | 1                  | 7.7          | 0                   | 0.0          |
| Norphin + Phenargan to Phenargan + Neurophin                  | 1                  | 7.7          | 0                   | 0.0          |
| Diazepam + Tidigestic + Phenargan to Proxyvon + Spasmo        | 1                  | 7.7          | 0                   | 0.0          |
| Diazepam + Tidigestic + Calmpose to Brown Sugar               | 1                  | 7.7          | 0                   | 0.0          |
| Norphin to Tidigestic   | 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         |
| <b>Total</b>  | <b>13</b>          | <b>100.0</b> | <b>4</b>            | <b>100.0</b> |
| <b>Reasons for switching</b>                                  |                    |              |                     |              |
| Lack of money   | 9                  | 69.2         | 1                   | 25.0         |
| To reduce Tidigestic/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          |
| <b>Total</b>  | <b>13</b>          | <b>*</b>     | <b>4</b>            | <b>*</b>     |

\*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<br>Types of institutions | Residential<br>Rehabilitation | Forced<br>for Cold<br>turkey | Without<br>drug | With other<br>drug | Out<br>Patient<br>Counseling | Other<br>treatment/<br>help |
|--|-------------------------------|------------------------------|-----------------|--------------------|------------------------------|-----------------------------|
| n=83   | %                             | %                            | %               | %                  | %                            | %                           |
| Naulo Ghumti                                 | 9.6                           | -                            | -               | -                  | -                            | -                           |
| Youth Vision                                 | 7.2                           | -                            | -               | -                  | 1.2                          | -                           |
| Navajeevan Punarsthapana                     | 1.2                           | -                            | -               | -                  | -                            | -                           |
| Lumbini Punarsthapana                        | 18.0                          | -                            | -               | -                  | -                            | -                           |
| Sahara Treatment Center                      | 14.4                          | -                            | -               | -                  | -                            | -                           |
| Nirman Nasha Kendra                          | 1.2                           | -                            | -               | -                  | -                            | -                           |
| Seren Foundation                             | 2.4                           | -                            | -               | -                  | -                            | -                           |
| Richmond Fellowship                          | 10.8                          | -                            | -               | -                  | -                            | -                           |
| Punarjeevan Kendra                           | 2.4                           | -                            | -               | -                  | -                            | -                           |
| Ashara Sudhar Kendra                         | 1.2                           | -                            | -               | -                  | -                            | -                           |
| 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                          | -               | -                  | -                            | -                           |
| <b>Total</b>                                 | <b>85.5</b>                   | <b>1.2</b>                   | <b>2.4</b>      | <b>2.4</b>         | <b>7.2</b>                   | <b>3.6</b>                  |

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) |          |
|---|--------------------|----------|---------------------|----------|
|   | N                  | %        | N                   | %        |
| <b>Reasons of not using condom with regular partner in the last sexual intercourse</b>      |                    |          |                     |          |
| 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      |
| <b>Total</b>  | <b>104</b>         | <b>*</b> | <b>107</b>          | <b>*</b> |
| <b>Reasons of not using condom with sex worker in the last sexual intercourse</b>           |                    |          |                     |          |
| 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      |
| <b>Total</b>  | <b>41</b>          | <b>*</b> | <b>30</b>           | <b>*</b> |
| <b>Reasons of not using condom with non- regular partner in the last sexual intercourse</b> |                    |          |                     |          |
| 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      |
| <b>Total</b>  | <b>25</b>          | <b>*</b> | <b>24</b>           | <b>*</b> |

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