# Integrated Biological and Behavioral Surveillance Survey (IBBS) among Male Injecting Drug Users (IDUs) in Western to Far-Western Terai of Nepal

## Round III- 2009

**ASHA Project**
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USAID | NEPAL
FROM THE AMERICAN PEOPLE

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

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~ Study Team New ERA ~

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# ABBREVIATIONS

| | | |
|---|---|---|
| AHH | - | Association for Helping the Helpless |
| AIDS | - | Acquired Immuno-Deficiency Syndrome |
| ASHA | - | Advancing Surveillance, Policies, Prevention, Care & Support to Fight HIV/AIDS |
| CMs | - | Community Mobilizers |
| DIC | - | Drop-in-Centre |
| FHI | - | Family Health International |
| FSW | - | Female Sex Worker |
| GOs | - | Governmental Organizations |
| HIV | - | Human Immuno-Deficiency Virus |
| IBBS | - | Integrated Biological and Behavioral Surveillance Survey |
| ID | - | Identification Number |
| IDU | - | Injecting Drug User |
| IEC | - | Information, Education and Communication |
| INF | - | International Fellowship Nepal |
| MARPs | - | Most at Risk Populations |
| MSM | - | Men who have Sex with Men |
| NCASC | - | The National Center for AIDS and STD Control |
| NGO | - | Non-Governmental Organization |
| NHRC | - | Nepal Health Research Council |
| NNSWA | - | Nepal National Social Welfare Association |
| NPHL | - | National Public Health Laboratory |
| 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 |
| TPPA | - | Treponema Pallidum Particle Agglutination |
| USAID | - | United States Agency for International Development |
| VCT | - | Voluntary Counseling and Testing |
| WATCH | - | Women Acting Together for Change |
| WHO | - | World Health Organization |

# EXECUTIVE SUMMARY

The National Center for AIDS and STD Control (NCASC), Nepal, has developed a comprehensive National Surveillance Plan for HIV and AIDS that includes a regular schedule for conducting an Integrated Biological and Behavioral Survey (IBBS) among most at risk populations (MARPs). These surveillance studies, conducted at regular intervals, help to assess health risk behaviors and measure the prevalence of HIV and sexually transmitted infections (STIs) among MARPs, as well as monitor trends in the epidemic to inform the HIV response in Nepal. The IBBS is conducted by NCASC with technical and financial support from Family Health International/Nepal (FHI/Nepal) and the United States Agency for International Development (USAID).

This report details the findings of the third round of the IBBS conducted among 300 male IDUs in the Western to Far-Western Terai of Nepal. The study was conducted with the primary objective of measuring HIV and syphilis prevalence among the study population and assessing their HIV/STI related risk behaviours including their sexual and drug using habits. It also aimed to assess their exposure to the HIV/AIDS/STI awareness and prevention programs targeting IDUs in the Western to Far- Western Terai of Nepal

## Study Methodology

**T**he study covered seven districts of the Western to Far-Western Terai in Nepal (Rupandehi, Kapilbastu, Dang, Banke, Bardia, Kailali and Kanchanpur). Two-stage cluster sampling was used to draw the sample of the 300 male IDUs. The first stage was to develop the sampling frame and select the clusters, while the second stage entailed selecting 300 IDUs from the chosen clusters. The study team visited the study districts and collected information regarding IDUs from concerned stakeholders, including key informants from government, non-governmental organizations and the local population. At each location, information on population size was collected by direct and indirect counting. After estimating the IDU population size in different locations, these locations were divided into clusters. A location with at least 20 IDUs was defined as a cluster. Thirty clusters were selected using the probability proportional to size (PPS) method. In the next stage, 10 respondents were randomly selected from each cluster.

Study centers with laboratories/clinics were set up at easily accessible locations in six sites covering five study districts. Structured questionnaires were used to collect behavioral data and information on STI/HIV/AIDS awareness among respondents. The questionnaire was administered after obtaining each participant's informed consent. In order to conduct a comparative analysis of the behavioral trends over the years, questions asked during the previous rounds were repeated. Strict confidentiality was maintained throughout the study process. The respondents were provided unique ID numbers. The same ID number was used on the questionnaire, medical records and blood specimens of the respondents.

All respondents participated voluntarily in the study. Those who did not meet the study criteria and those who were not willing to participate were not involved in the study. 'Ethical' as well as 'technical' approval was obtained from FHI's ethical review body, the Protection of Human Subject committee (PHSC) and the Nepal Health Research Council (NHRC) prior to the commencement of the fieldwork. Informed consent was obtained in the presence of a witness from all participants prior to the interview and the collection of blood samples. 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. Study participants were provided symptomatic treatment for STI symptoms. HIV and syphilis test results were provided later at locally established VCT centers, along with post-test counseling from experienced counselors.

***Laboratory Methods***

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

HIV antibody screening was performed using a serial testing approach. All the serum samples were tested using Determine HIV 1/2 (Abbott Japan Co. Ltd.) as a first test to detect antibodies against HIV. If the first test was negative, no further test was conducted, but if the first test was positive, a second test was performed using Uni-Gold (Trinity Biotech, Dublin, Ireland). In case of a tie between the first two tests, a third test was performed using SD Bioline HIV 1/2 (Standard Diagnostics, Inc., Kyonggi-do, South Korea) as a tiebreaker.

## Key Findings

### Socio Demographic Characteristics

The age of the IDUs ranged from 16 to 50 years, with a median age of 27. Overall, 54 percent of respondents were between 20 to 29 years; while adolescents of 19 years or younger made up eight percent of the respondents.

Forty-two percent of the IDUs were currently married. Forty one percent of IDUs were living with their spouse or with a female sexual partner at the time of survey.

The majority of the IDUs (93.6%) could read and write, however, 5.3 percent had no formal schooling; while 18 percent had completed SLC or above.

### STI/HIV/AIDS Prevalence

HIV prevalence among IDUs in the West and Far-West Terai was eight percent. Three percent of them had a history of syphilis, while 1.7 percent had active syphilis.

A significant association has been seen between the prevalence of HIV and the marital status of the IDUs as well as the length of time the respondents had been

injecting drugs. Married IDUs had a high prevalence of HIV (12.2%) compared to unmarried ones (3.9%); likewise, those IDUs who had been injecting drugs for more than five years had significantly higher HIV prevalence (12.3%) than those who had injected for a shorter span of time (less than 2 years - 1.6%; 2-5 years - 4.9%).

Sexual behavior or the type and number of sexual partners of the IDUs in the past year did not show a significant relationship with HIV prevalence. However, those IDUs who did not have sex with non-regular partners in the past year had a higher HIV prevalence (10.4%) than those who have had such sexual encounters (2.4%).

**Drug Injecting Practices**

The IDUs had been injecting drugs for 5.9 years on average. Over half (51.3%) had been injecting for five years or more. The IDUs started injecting drugs at the median age of 21 years. Most of them (70.7%) injected a combination of different drugs.

Over 90 percent of IDUs had avoided risky injecting practices in the last three injections. Likewise, the past week's injecting practice also showed that the majority of the IDUs had avoided risky injecting behaviors such as injecting with a used needle/syringe (88.3%); injecting with a syringe kept at a public place (92.3%); and sharing needles/syringes with others (88.7%).

Around eight in ten IDUs (81.7%) had injected in places outside their district or in other countries. Among these, 17.6 percent had used a pre-used needle/syringe and 19.6 percent had given their needle/syringe to someone else after use.

**Sexual Behavior**

Ninety-eight percent of IDUs reported sexual contact before the date of survey. Around 87 percent were below age 20 when they had their first sexual encounter.

Over one half of IDUs (52.8%) had sexual contact with two or more female partners in the past year.

Among 300 IDUs, 42.9 percent had sex with regular partners, 28.2 percent with non-regular female sex partners and 32.7 with female sex workers in the past year. Consistent use of condoms was high with female sex workers compared to regular and non-regular partners. Fifty-one percent had used condoms consistently with female sex workers, compared to 37.3 percent with non-regular female sex partners and 8.7 percent with regular female sex partners in the past year.

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

Seven percent of IDUs had not heard about STIs before. Overall, 12.3 percent of respondents had genital discharge and 9.7 percent had a genital ulcer/sore in the past year. Among those respondents who had STI symptoms last year, 32.4 percent had genital discharge and 31 percent had a genital ulcer/sore at the time of the survey also.

In total, 73.3 percent of IDUs knew about all three major HIV/AIDS preventive measures, such as abstinence from sexual contact, 'A'; being faithful to one partner, 'B'; and condom use during each sexual contact, 'C'. 56 percent of IDUs were aware of 'B,C,D,E,F' (a healthy looking person can be infected with HIV, 'D'; a person cannot get the HIV virus from a mosquito bite, 'E'; and sharing meal with an HIV-infected person does not transmit the HIV virus, 'F').

## HIV Test

Ninety-four percent of IDUs knew that a confidential HIV testing facility was available in their community. However, 37.3 percent of respondents had never been tested for HIV. Among those who had been tested, most (93.1%) had taken up the test voluntarily. 80.9 percent had received their test result.

## Exposure to HIV/AIDS-Related Programs

81.7 percent of IDUs had met peer/outreach educators at least once in the past year; while 77.3 percent had visited a drop-in center (DIC), and 28.3 percent had visited a VCT (Voluntary Counseling and Testing) center in the past year. However, only 6.3 percent of IDUs had been to an STI clinic before.

29.7 percent of respondents had participated in at least one HIV/AIDS-related program or similar community event in the past year.

# CHAPTER – 1.0: INTRODUCTION

## 1.1 Background

According to the National Center for AIDS and STD Control (NCASC), the national estimation of HIV infection in Nepal in 2007 was approximately 70,000. As of May 2009 a cumulative total of 13,885 HIV infections, including 2,384 cases of AIDS, had been reported in Nepal (NCASC, May 14, 2009). There is a large gap between the estimated number of HIV infections and the number of people who have been tested and know their status. The HIV epidemic in Nepal is currently concentrated in MARPs. IDUs are one of the core risk groups who practice the high-risk behaviors 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 in the spread of HIV among the non-injecting population (AIDS in Asia, MAP Report, 2004).

The previous rounds of IBBS conducted among IDUs as per the National Surveillance Plan of NCASC have shown that HIV prevalence among IDUs varies by study sites. The first round of the IBBS among IDUs revealed an HIV prevalence of 68 percent among IDUs in the Kathmandu Valley (2002 New ERA/SACTS/FHI); 22 percent among IDUs in the Pokhara Valley (2003 New ERA/SACTS/FHI); and 35.1 percent in the Eastern Terai (2003 New ERA/SACTS/FHI). A similar study conducted in the Western to Far-Western Terai in 2005 found an HIV prevalence of 11.7 percent among IDUs in the region (New ERA/SACTS/FHI 2005). The second round of the IBBS conducted in 2007 found an 11 percent HIV prevalence rate among IDUs in the Western to Far-Western Terai.

This report documents the findings from the third round of IBBS conducted in 2009 among IDUs from the Western to the Far-Western Terai.

## 1.2 Objectives of the Study

In line with the objectives of the first two rounds, the third round of the survey has also been undertaken to measure HIV and syphilis prevalence among the study population and to assess their HIV/STI related risk behaviors including their sexual and drug using habits. It also aims to provide information regarding this population's exposure to ongoing interventions related to HIV/AIDS/STIs awareness and prevention. At the same time it has sought to analyze trends through the comparison of data on selected variables obtained from the first, the second and the third round of the IBBS.

The information in this report is aimed to help design timely intervention strategies and monitor HIV prevalence among the target population.

# CHAPTER – 2.0: DESIGN AND METHODOLOGY

## 2.1 Study Site and Population

The cross-sectional study covered seven districts of the West to Far-West Terai (Rupandehi, Kapilbastu, Dang, Banke, Bardia, Kailali and Kanchanpur).

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

## 2.2 Sampling Size and Sampling Design

This is the third round of the IBBS conducted among IDUs in the West to Far-West Terai districts of Nepal. The sample size used in the previous rounds of IBBS in Western to Far Western Terai was used in this round also. Based on the statistical formula (Annex - 2), 300 current IDUs took part in the survey. This included 120 IDUs from Rupandehi, 30 from Kapilbastu, 60 from Banke, 50 from Kailali and 40 from the district of Kanchanpur.

A preliminary field survey was first conducted to understand the actual field situation and to map out the sites where IDUs were concentrated in the study districts. The concerned stakeholders at district level, local governmental organizations’ (GOs), and non-governmental organizations’ (NGOs) were consulted to collect information on IDUs and their injecting practices. A rapid list of the IDUs and their gathering/injecting locations was made. Both the maximum and minimum number of IDUs at the different locations was noted in all of the identified locations in the seven districts.

Two-stage cluster sampling was used to draw up 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 a minimum size of 20 IDUs. In the first stage, 30 clusters were selected using the probability proportional to the size (PPS) method and in the second stage 10 respondents were selected randomly from each selected cluster.

**The fieldwork started on January 21, 2009, and was completed on February 28, 2009.**

## 2.3 Study Process

### *2.3.1 Research Instruments*

A quantitative research approach was adopted for the study. A structured questionnaire was used to collect behavioral data relating to drug injection, syringe/needle sharing and sexual behavior among the IDUs (Annex - 3). Additionally, information on some demographic and social characteristics and on

program exposure was collected. In order to conduct a comparative analysis of the behavioral trends over the years, questions asked during the first and the second rounds were repeated. The questionnaires were developed based on the "Guidelines for Repeated Behavioral Surveys in Populations at Risk of HIV" (FHI, 2000).

### *2.3.2 Recruitment and Training of Research Team*

When selecting field researchers, priority was given to those who had been involved in similar studies of HIV prevalence in the past. Their commitment to respect respondents' privacy was also considered important.

Before data collection started, a one-week intensive training course was organized for the study team. The training session familiarized the team with the study objectives, the characteristics of the target groups, rapport-building techniques, the contents of the questionnaire and the study process. The training session also included theory and practical classes on pre-test counseling and questionnaire administration. Role-plays that attempted to be as true to the actual field situation as possible were carried out. This allowed for the discussion of potential problems that could be faced while approaching IDUs, and possible methods for overcoming such problems. A person from Youth Vision, an organization that works with IDUs helped familiarize the study team with general behavior of IDUs and the skills required to deal with them. The training also focused on providing a clear concept of informed consent to the research team.

### *2.3.3 Recruitment of Respondents in the Sample*

As mentioned earlier, using the information about locations and the estimated number of IDUs in those locations, first stage clusters were defined and 30 such clusters were selected using PPS method. Then from each of the first-stage clusters selected, 10 respondents were randomly selected in the sample. After careful observation of different sites within the clusters, the respondents were selected randomly and were approached and informed about the study. In this process if some of the selected IDUs were not easily identified, key people were used for the identification of the selected IDUs in those localities.

Because of the social stigma and discrimination associated with injecting drugs, 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 had successfully participated in the study, or other key people who could identify and approach the selected IDUs were mobilized. At least three attempts were made to contact and include the person randomly selected. If, after three attempts, such attempts were unsuccessful, that person was replaced by the next IDU in the cluster.

Before starting the actual interview, all those participating were asked certain screening questions relating in general to their injecting habits, duration of drug injections and names of drug used to ensure that they met the definitions of IDUs prescribed for the survey. Injecting marks were also observed to confirm their injecting behavior.

The study team also asked each participant several questions to make sure this was the first time they had participated in the study. Such questions included queries relating to their experience of having undergone any blood tests, the part of the body from where the blood was taken, their experience of HIV testing or testing for other

diseases, meeting with New ERA staff and peer educators, and possession of an ID card with the study number.

### *2.3.4 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 27 cases of refusal, 18 did not meet the study criteria, seven were not interested in taking part in the study, one IDU was too scared to give a blood sample for the HIV/syphilis test, and one did not have time to take part in the interview. However, those IDUs who did not take part in the study were also offered free health check-up at the study clinic.

### *2.3.5 Ethical review*

The research was conducted in compliance with both ethical and human rights standards. These standards included participants' anonymity as well as pre- and post-test counseling. As this study focused on individuals who are highly stigmatized, and as injecting drugs is illegal in Nepal, 'ethical' as well as 'technical' approval was obtained from Family Health International's ethical review body, the Protection of Human Subject Committee (PHSC), and the Nepal Health Research Council (NHRC) prior to the start of the fieldwork. The study protocols were carefully reviewed and approved by these organizations. Moreover, verbal informed consent was obtained from all the participants prior to the interview and collection of blood samples occurred 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. All the respondents were provided with a unique ID number written on a plastic-coated card. The same number was marked on the questionnaire, the medical records, and on the blood specimen of that particular respondent. This card was also used for the distribution of the test results. Only those participants who produced the card were provided HIV and syphilis test results verbally with post-test counseling.

Moreover, the study team maintained the confidentiality of the data collected throughout the survey. The interviewer regularly submitted the completed questionnaires to the field supervisor on the day of each interview. The supervisor kept these questionnaires in separate locked cabinets where no one else had access to the information collected. The supervisor then transported the questionnaires to New ERA at regular intervals. In the New ERA office, the questionnaires were kept in a locked coding room where absolutely no one except authorized data coding and data entry staff had access to individual questionnaires.

## 2.4 Field Operation Procedure

### *2.4.1 Study Centers*

Centrally-located study centers were established at Bhairahawa and Butwal (Rupandehi); Taulihawa (Kapilvastu); Nepalgunj (Banke); Dhangadi (Kailali); and Bhim Dutta Nagar (Kanchanpur) to carry out the survey (Annex - 5). At each established site there were four or five rooms in total, allowing for a separate room

for each activity, such as individual interviews, clinical examinations and blood sample collection.

### *2.4.2 Clinical and Laboratory Procedure*

The study participants were clinically checked for any symptoms of STIs by the health assistant, who also filled in a checklist with the information provided by the respondents (Annex 7). The clinical examination also included a simple health check up which measured blood pressure, body temperature, weight and pulse. The respondents with STI symptoms were provided symptomatic treatment 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.

***Collection, Storage and Transportation of Blood Samples***

After pre-test counseling, the lab technician briefed the respondents about the HIV/STI testing process and sought their consent to take blood. Blood samples for testing HIV/syphilis were drawn from a vein from each of the study participants using a 5ml disposable syringe and were stored in a sterile glass tube labeled with the respondent's ID number. The blood sample was placed in a centrifuge to separate the blood cells from the serum. Serum samples were stored in the deep fridge compartment of the refrigerator at the study site at 2°C to 8°C. The survey period witnessed long hours of power cuts. However, sufficient numbers of ice packs were stored in the deep fridge compartment to ensure that proper temperature was maintained for storing the samples. The health assistant as well as the team leader constantly monitored the temperature in the thermometer kept in the compartment and recorded them in the log book. Each sample was labeled with the ID number of the study participant. The specimens were transported to the SACTS laboratories in Kathmandu in a cold box within 10 days of collection. The serum samples were stored at a temperature of -12°C to -20°C at the SACTS laboratory.

***Laboratory Methods***

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

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

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

HIV antibody screening was performed using serial testing approach. All the serum samples were tested using Determine HIV 1/2 (Abbott Japan Co. Ltd.) as a first test to detect antibodies against HIV. If the first test was negative, no further test was

conducted, but if the first test was positive, a second test was performed using Uni-Gold (Trinity Biotech, Dublin, Ireland). In case of a tie between the first two tests, a third test was performed using SD Bioline HIV 1/2 (Standard Diagnostics, Inc., Kyonggi-do, South Korea) as a tiebreaker test. The testing protocol is based on the National VCT Guidelines of Nepal revised by NCASC in 2007. The interpretation of the test results was as follows:

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

### *2.4.3 Quality Control*

Quality control was maintained strictly throughout the process of specimen collection, handling, and testing. All the tests were performed using internal controls. These controls were recorded with all the laboratory data. For quality control assurance, a 10 percent sample of the total serum collected (all positive samples and randomly selected negative samples to make 10% of total sample) was submitted to the NPHL to test for HIV and syphilis. The same test kit and testing protocols were used in NPHL for quality assurance.

To ensure the quality of data, New ERA and FHI officials supervised the fieldwork regularly. Research Assistants and Field Supervisors were responsible for ensuring that the project was carried out according to protocol on a day-to-day basis. Field supervisors reviewed all the completed questionnaires. Any inconsistencies in the responses were clarified through discussions with the concerned interviewer later the same day.

## 2.5 Study Management

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

The New ERA study team was made up of a team leader, a research coordinator, two research officers, two research assistants, a senior counselor and field teams.

Each of the field teams consisted of one research assistant, five supervisors/interviewers, one health assistant, one lab technician, one runner and local motivator/s (as necessary).

## 2.6 Constraints to the Fieldwork

The long hours of load shedding scheduled during fieldwork posed some problem in maintaining the required temperature for storing the blood samples as well as in using the electronic centrifuge machine to separate the serum from the sample in the lab. To overcome this problem, both auto and manual centrifuge machines were installed for the purpose of separating the serum. Likewise, a sufficient amount of icepacks were kept in the fridge in the study site as well as in the SACTS laboratory for proper storage of the serum even during power cut-offs.

The recruitment process was also difficult as many randomly selected IDUs were not willing to participate in the study as they did not find the 'transportation cost' provided to them adequate. As an incentive for their participation, many demanded that the amount be raised.

## 2.7 HIV/STI Pre- and Post-Test Counseling and Test Result Distribution

After the collection of the blood samples, all the study participants were informed of the date, location, and place where they could get their test results. They were also informed that they could have their test results only by showing the ID card bearing their study number that was provided to them by the study team. Additionally, they were informed of the importance of obtaining their results. Pre- and post-HIV/STI test counseling was provided to the study participants. Each study participant was also informed during the pre-test counseling session that he had the choice of receiving only the HIV result, only the syphilis result, or both.

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 local VCT centers. These centers included Namuna (Bhairawa); Naulo Ghumti (Butwal); Family Planning Association of Nepal/FPAN (Kapilbastu); NSARC (Banke); Ekikrit Swastha Sewa (Kailali); Nepal National Social Welfare Association (Kanchanpur).

Post-test counseling and individual report dissemination was completed between 10 February and 22 March 2009 at the VCT centers in the study districts. Of the 300 IDUs tested for HIV, only 35 (11.7%) turned up for the test results (Annex - 8). This could have been because there was no provision for reimbursement of transportation costs. The availability of confidential HIV testing facilities at local VCT centers could also have been a reason for such a low turn-out. For those who came to know their test results, trained counselors gave the results 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 STIs and HIV. Some participants were also referred to other health facilities for health services.

## 2.8 Data Management and Analysis

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

# CHAPTER – 3.0: SOCIO-DEMOGRAPHIC CHARACTERISTICS OF IDUs

This chapter discusses the demographic and social characteristics of the male IDUs in the West and the Far-West Terai regions of Nepal.

## 3.1 Demographic Characteristics

The demographic characteristics of the IDUs are presented in Table 3.1. Their age ranged between 16-50 years, with a median age of 27 years. Fifty-four percent of respondents were between 20 to 29 years of age; while adolescent of 19 years or younger made up eight percent of the respondents. IDUs 40 years or older made up 3.7 percent of the respondents.

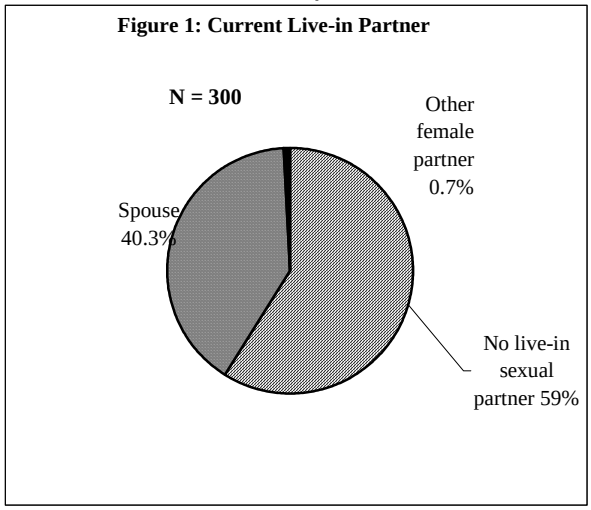
**Table 3.1: Demographic Characteristics**

| Demographic Characteristics | N | % |
|---|---|---|
| **Age** | | |
| < = 19 Yrs | 24 | 8.0 |
| 20-24 | 85 | 28.3 |
| 25-29 | 77 | 25.7 |
| 30-34 | 75 | 25.0 |
| 35-39 | 28 | 9.3 |
| 40 + | 11 | 3.7 |
| **Median age** | **27** | |
| **Marital status** | | |
| Married | 126 | 42.0 |
| Never married | 153 | 51.0 |
| Divorced/Separated/Widower | 21 | 7.0 |
| **Total** | **300** | **100.0** |
| **Age at first marriage** | | |
| <=14 | 10 | 6.8 |
| 15-19 | 54 | 36.7 |
| 20-24 | 60 | 40.8 |
| 25-31 | 23 | 15.7 |
| **Median age** | **20** | |
| **Total** | **147** | **100.0** |

Forty-two percent of the IDUs were married at the time of the survey. More than half (51%) were single, and seven percent were either divorced/separated from their wives or were widowers. The median age at the respondents' first marriage was 20 years and the majority (84.3%) of those who were currently married or had previously been married had been married before they turned 25.

Fifty nine percent of the IDUs were living alone or without a sexual partner at the time of the survey. Two fifths of them (40.3 %) were living with their spouses. Only two IDUs (0.7%) had been living with other female sex partners at the time of the survey (Figure 1).

**Figure 1: Current Live-in Partner**



## 3.2 Social Characteristics

As Table 3.2 shows, 6.3 percent of the 300 respondents were illiterate. A similar proportion (5.3%) had never been to a formal school but could read and write. Four in ten (43.3%) had completed secondary level schooling, and 18 percent had passed SLC or a higher level of studies; while a little over a quarter (27%) had attended primary school.

IDUs from various castes/ethnicities were represented in this study. Twenty-four percent belonged to the Chhetri/Thakuri caste while 14.7 percent were Brahmin. The Muslim community was represented by 11.7 percent of the respondents; and a similar proportion of the respondents belonged to occupational castes (11%) and indigenous groups such as Tamang/Magar/Sherpa (10.3%).

A large majority (82.3%) of the IDUs were born in the districts covered by the study. Twelve percent had been living in the study districts for more than five years, while 5.7 percent had moved into the region in recent years (Table 3.2).

**Table 3.2: Social Characteristics**

| Social Characteristics | N = 300 | % |
|---|---|---|
| **Education** | | |
| SLC and above | 54 | 18.0 |
| Secondary | 130 | 43.3 |
| Primary | 81 | 27.0 |
| Literate only | 16 | 5.3 |
| Illiterate | 19 | 6.3 |
| **Ethnicity** | | |
| Chhetri/Thakuri | 72 | 24.0 |
| Brahmin | 44 | 14.7 |
| Muslim | 35 | 11.7 |
| Occupational caste | 33 | 11.0 |
| Tamang/Magar/Sherpa | 31 | 10.3 |
| Terai caste | 29 | 9.7 |
| Newar | 22 | 7.3 |
| Gurung/Rai/Limbu | 22 | 7.3 |
| Chaudhary/Tharu | 7 | 2.3 |
| Giri/Puri/Sanyasi | 5 | 1.7 |
| **Duration of stay in Western to Far-Western Terai** | | |
| Since birth | 247 | 82.3 |
| Since 5 years | 17 | 5.7 |
| More than 5 years | 36 | 12.0 |

# CHAPTER – 4.0: PREVALENCE OF HIV AND STI

## 4.1 HIV/STI Prevalence

As seen in the following table, among the 300 IDUs taking part in the survey, eight percent were HIV-positive while three percent had a history of syphilis, with 1.7 percent having active syphilis.

**Table 4.1: HIV and STI Prevalence**

| HIV and STI Prevalence | N = 300 | % |
|---|---|---|
| HIV | 24 | 8.0 |
| Active Syphilis | 5 | 1.7 |
| Syphilis History | 9 | 3.0 |
| | | |

HIV prevalence was highest in Banke district with 23.3 percent. At the same time 8.3 percent of IDUs in Rupandehi district were HIV positive. No HIV prevalence was found in other study districts of Kapilbastu, Kailali and Kanchanpur (Annex 6).

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

Table 4.2 shows the relationships between HIV infection and selected demographic and social characteristics of the respondents. The age difference of the IDUs and difference in their educational status show a small association with HIV prevalence. However, in both cases the differences are not large enough to be statistically significant.

On the other hand, a significant difference (p=<0.01) was observed between HIV prevalence and marital status of the respondents. IDUs who were married were more likely to be HIV- positive (12.2%) than unmarried IDUs (3.9%).

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

| Socio-Demographic Characteristics | N = 300 | HIV+ | % | P Value |
|---|---|---|---|---|
| **Age** | | | | |
| Below 20 years | 24 | 0 | 0.0 | >0.05 |
| 20 years and above | 276 | 24 | 8.7 | |
| **Marital status** | | | | |
| Ever married | 147 | 18 | 12.2 | <0.01 |
| Never married | 153 | 6 | 3.9 | |
| **Literacy** | | | | |
| Illiterate | 19 | 2 | 10.5 | >0.05 |
| Literate/formal school | 281 | 22 | 7.8 | |

## 4.3 Relationship between Drug Injection Behavior and HIV

The relationship between HIV prevalence and the drug injecting practices of the respondents such as the length of time they had been injecting drugs, frequency of injections during the past week, and the type of syringes they used have been reviewed in this section. A significant relationship was seen between duration of injecting drugs and HIV prevalence. The infection rate was 12.3 percent among those respondents who had been injecting drugs for more than five years. The rate

dropped to 4.9 percent among those who had been injecting drugs for two to five years, and to 1.6 percent among those who had been injecting drugs for less than two years.

Other variables such as the frequency of injections during the past week and the kind of needle/syringes used in the past week did not have a significant association with HIV infection, even though a higher HIV prevalence was found among those IDUs who had injected at least once with a previously used needle/syringe or a needle/syringe kept in a public place in the past week than those who had avoided such risky practices (Table 4.3).

**Table 4.3: Relation between Drug Injecting Behavior and HIV Infection**

| Drug Injecting Behavior | N = 300 | HIV+ | % | P value |
|---|---|---|---|---|
| **Injecting drugs since** | | | | |
| Less than 2 year | 64 | 1 | 1.6 | <0.01 |
| 2-5 Years | 82 | 4 | 4.9 | |
| More than 5 years | 154 | 19 | 12.3 | |
| **Frequency of drugs injection in the past week** | | | | |
| Not Injected | 65 | 3 | 4.6 | >0.05 |
| 1-6 times a week | 144 | 14 | 9.7 | |
| Everyday | 32 | 5 | 15.6 | |
| 2 or more times a day | 59 | 2 | 3.4 | |
| **Injected with a previously used needle/syringe during the past week** | | | | |
| Not injected/Never | 265 | 21 | 7.9 | >0.05 |
| Ever Injected | 35 | 3 | 8.6 | |
| **Injected with a needle/syringe kept in public place during the past week** | | | | |
| Not injected/Never | 277 | 21 | 7.6 | >0.05 |
| Ever Injected | 23 | 3 | 13.0 | |

## 4.4 Relationship 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.

**Table 4.4: Relation between Sexual Behavior and HIV Infection**

| Sex with Different Partners in the Past 12 Months | N = 300 | HIV+ | % | P value |
|---|---|---|---|---|
| **With regular partner** | | | | |
| Yes | 126 | 14 | 11.1 | >0.05 |
| No | 168 | 10 | 6.0 | |
| Never had sexual contact | 6 | 0 | 0.0 | |
| **With Non-regular partners** | | | | |
| Yes | 83 | 2 | 2.4 | <0.05 |
| No | 211 | 22 | 10.4 | |
| Never had sexual contact | 6 | 0 | 0.0 | |
| **With sex worker** | | | | |
| Yes | 96 | 7 | 7.3 | >0.05 |
| No | 198 | 17 | 8.6 | |
| Never had sexual contact | 6 | 0 | 0.0 | |
| **Number of regular partner in the past 12 months** | | | | |
| 0 Partner | 174 | 10 | 5.7 | >0.05 |
| 1 partner | 125 | 14 | 11.2 | |
| 2 partners | 1 | 0 | 0.0 | |
| **Number of non-regular partner in the past 12 months** | | | | |
| 0 Partner | 217 | 22 | 10.1 | >0.05 |
| 1 partner | 39 | 2 | 5.1 | |
| 2 or more partners | 44 | 0 | 0.0 | |

| | | | | |
|---|---|---|---|---|
| **Number of sex workers in the past 12 months** | | | | |
| 0 sex workers | 204 | 17 | 8.3 | >0.05 |
| 1 sex worker | 26 | 2 | 7.7 | |
| 2 or more sex workers | 70 | 5 | 7.1 | |

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

Similarly, IDUs who are not sexually active may share drugs/needles with others and be infected with HIV in this manner. Therefore current sexual behaviors may not be responsible for HIV status.

The association between HIV prevalence and type of sexual partner/s of IDUs is not as expected. IDUs who had abstained from having sex with non-regular partners, had a higher HIV prevalence (10.4%) than IDUs who had maintained such sexual relations in the last year (2.4%). Statistically, this is a significant difference. Additionally, IDUs who had sexual contact with regular partners had a higher prevalence of HIV (11.1%) than those who had not had such relations (6%) in the past year. On the other hand, IDUs who had sexual contact with FSWs in the past year had a lower HIV prevalence (7.3%) than those who had abstained from such sexual contact (8.6%). This difference however is not statistically significant. As mentioned above, it is important to note here that this trend reflects the IDUs current sexual behavior, which may have been different before. It is also possible that those IDUs who were not currently practicing unsafe sexual behavior may have practiced unsafe injecting behavior.

The number of different types of partners that the IDUs had in the year preceding the survey did not have a statistical impact on the HIV prevalence among IDUs in the West and Far-West Terai.

The odds ratio of HIV infection with certain characteristics was also calculated to analyze the risk associated with the infection. Although IDUs who had practiced unsafe injecting behavior such as using others' previously used needles/syringes, injecting with a syringe kept in a public place and injecting with a pre-filled syringe were more at risk of HIV infection than those who had not done so, though the relation between such behavior and HIV infection was not found to be significant. Likewise, an IDU who had injected in places outside his district/city or in other countries was 1.63 times more likely to get HIV than those who did not do so. However, this relation is not statistically significant either.

The risk of HIV infection was significantly higher for IDUs who had been or were currently married. These IDUs had an approximately 3.42 times higher odds ratio of HIV compared to the unmarried (Table 4.5).

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

| Characteristics | Odd Ratio | # Cases (n) | 95% Confidence Interval |
|---|---|---|---|
| **Education** | | | |
| Illiterate | 1.39 | 19 | 0.0, 6.88 |
| Literate | - | 281 | |
| **Marital status** | | | |
| Never married | - | 153 | 1.23, 9.96 |
| Ever married | 3.42 | 147 | |
| **Injected with someone else's previously used syringe during past week** | | | |
| Yes | 1.09 | 35 | 0.24, 4.16 |
| No | - | 265 | |

| | | | |
|---|---|---|---|
| **Injected with a syringe kept in public place** | | | |
| Yes | 1.83 | 23 | 0.40, 7.27 |
| No | - | 277 | |
| **Injected with a pre-filled syringe** | | | |
| Yes | 1.67 | 8 | * |
| No | - | 292 | |
| **Injected in another part of the country or in another country** | | | |
| Yes | 1.63 | 245 | 0.44, 7.12 |
| No | - | 55 | |

* Epi Info did not calculate CI

# CHATPER – 5.0: DRUG USE, NEEDLE SHARING AND TREATMENT

The injecting practices and drug sharing behavior of IDUs is associated closely with their HIV risk and vulnerability. This chapter deals with the drug and needle using/sharing behavior of IDUs and their alcohol consumption. It also assesses the kind of treatment sought, if any, by the respondents in order to quit drugs.

## 5.1 Alcohol Consumption and Oral Drug Use among IDUs

The majority of IDUs (85.6%) had consumed alcohol at least once in the last month. Twenty-eight percent had consumed alcohol every day, while 37.3 percent had had an alcoholic drink more than once a week in the previous month. On the other hand, 14.3 percent of IDUs had refrained from alcohol in the past month.

**Table 5.1: Alcohol Intake and Oral Drug Use**

| Alcohol and Oral Drug Use | N = 300 | % |
|---|---|---|
| **Alcohol intake during the past month** | | |
| Every day | 84 | 28.0 |
| More than once a week | 112 | 37.3 |
| Less than once a week | 61 | 20.3 |
| Never | 43 | 14.3 |
| **Duration of drug use** | | |
| Less than 2 years | 15 | 5.0 |
| 2 – 5 years | 76 | 25.3 |
| More than 5 years | 209 | 69.7 |
| **Average duration in years** | **8.3** | **-** |

The average duration of oral drug use among IDUs was 8.3 years. Overall, 69.7 percent of IDUs had been using drugs orally for over five years and 25.3 percent had been doing so for the last two to five years; few IDUs (5%) had started less than two years ago.

Among several oral drugs, marijuana, locally known as *ganja*, was the most popular with 63.3 percent of respondents using in the past week. Around two-fifths of them (40.3%) had used *charas*. Other IDUs had used Nitrosun (33.7%), brown sugar (31.7%), and Nitrovate (23.7%).

**Table 5.2: Types of Orally Used Drugs**

| Types of Orally Used Drugs in the Last Week | N = 300 | % |
|---|---|---|
| Ganja | 190 | 63.3 |
| Chares | 121 | 40.3 |
| Nitrosun | 101 | 33.7 |
| Brown Sugar | 95 | 31.7 |
| Nitrovate | 71 | 23.7 |
| Phensydyl | 46 | 15.3 |
| Proxygin | 40 | 13.3 |
| Codeine | 11 | 3.7 |
| Velium 10 | 10 | 3.3 |
| Calmpose | 8 | 2.7 |
| White Sugar | 8 | 2.7 |
| Diazepam | 5 | 1.7 |
| Cocaine | 3 | 1.0 |
| Combination | 9 | 3.0 |
| Others | 75 | 25.0 |

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

## 5.2 Drug Injecting Practices of IDUs

Over half of respondents (51.3%) had been injecting drugs for five years or more; 27.3 percent had been doing so for the past two to five years; while 21.3 percent of respondents had started injecting in the last two years. On average, the respondents had been injecting drugs for 5.9 years.

The median age of the IDUs at the time of first injection was 21 years, and 46.3 percent had injected drugs for the first time when they were under 21. Drug injecting practice in the week preceding the survey showed that 21.7 percent of IDUs had not injected even once, while almost same proportion (21.3%) had injected 4-6 times in the past week. While 10.7 percent had injected once a day, 19 percent of IDUs had injected 2-3 times a day in the previous week. There were a few IDUs (0.7%) who had injected four or more times a day in the week preceding the survey.

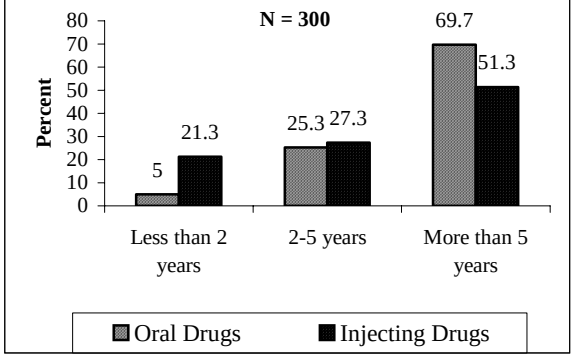
As for number of shots on the last day respondents injected drugs, 27 percent had injected twice and 10.7 percent had injected three or more times on the last day of use. The majority (62.3%) had injected only once.

**Table 5.3: Drug Injecting Practices**

| Drug Injecting Practice | N = 300 | % |
|---|---|---|
| **Duration of drug injection** | | |
| Less than 2 years | 64 | 21.3 |
| 2 – 5 years | 82 | 27.3 |
| More than 5 years | 154 | 51.3 |
| **Average duration years** | **5.9** | |
| **Age at the time of injecting drug for first time** | | |
| Up to 20 years | 139 | 46.3 |
| 21 + years | 161 | 53.7 |
| **Median age** | **21** | |
| **Frequency of drug injections within the past week** | | |
| Not injected | 65 | 21.7 |
| Once a week | 26 | 8.7 |
| 2-3 times a week | 54 | 18.0 |
| 4-6 times a week | 64 | 21.3 |
| Once a day | 32 | 10.7 |
| 2-3 times a day | 57 | 19.0 |
| 4 or more times a day | 2 | 0.7 |
| **Frequency of drug injections on the last injected day** | | |
| 1 time | 187 | 62.3 |
| 2 times | 81 | 27.0 |
| 3 or more times | 32 | 10.7 |
| **Mean** | **1.5** | |

The duration of oral and injecting drug use among IDUs has been illustrated in Figure 2. 69.7 percent of IDUs had been using oral drugs for more than five years while 51.3 percent had been injecting for that long. Five percent of IDUs had been doing drugs orally for less than 2 years while 21.3 percent had been injecting drugs for the same span of time.

**Figure 2: Duration of Drug Use**



Fifty percent of IDUs had not injected on the day prior to the interview. Among these IDUs, 51.3 percent mentioned lack of money as one of the main reasons for not injecting drugs on the previous day (Annex 9)

IDUs reported injecting drugs on different parts of the body according to ease in locating veins. Fifty-seven percent of them mentioned that they injected into their calves. Fifteen percent each had injected into their upper arm and thigh (Annex - 10).

The respondents gathered at different sites to inject drugs. Around two-fifths (42.3%) met in forests/bush/farmland. Some crossed the border and injected at the nearby Indian town of Sunauli (18.3%). Seventeen percent injected in their own/friend's room or at a drug seller's house. (Annex - 11).

As for the types of drugs injected by the respondents during the past week, 70.7 percent of them had used a combination of various drugs (Table 5.4). The most common combination was Phenargan and Lubrigesic, followed by Diazepam, Tidigesic and Hydrocole (for other types of combinations see Annex - 12). Eleven percent of the respondents had injected brown sugar in the week preceding the survey; a few had injected other types of drugs as listed in Table 5.4.

**Table 5.4: Types of Drugs Injected in Past Week**

| Types of Drugs Injected | N = 300 | % |
|---|---|---|
| Combination | 212 | 70.7 |
| Brown sugar | 33 | 11.0 |
| Tidigesic | 10 | 3.3 |
| Phenergan | 4 | 1.3 |
| Diazepam | 3 | 1.0 |
| Calmpose | 3 | 1.0 |
| Others | 9 | 3.0 |

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

In the past month only eight IDUs (2.7%) had switched from one drug to another. Most of them had switched to brown sugar and unavailability of the previous drugs in the market was cited as the main reason for this change (Annex 13).

## 5.3 Syringe Use and Sharing Behavior

The drug injecting/sharing habits of the IDUs were assessed in terms of their last three injections. The respondents were asked how they had obtained the needles/syringes used in the last three injections. Answers provided by the IDUs have been categorized as low- or high-risk injecting behaviors in Table 5.5. Low-risk injection behaviors were considered to be the use of new needles and syringes obtained from different places, and high-risk behaviors were the use of own previously used syringe, use of needles and syringes given by friends or relatives, and the use of needles and syringes kept in public places by the IDU himself or by others.

The majority of the respondents had adopted low-risk behaviors in their last three injections. Overall, 96.3 percent in most recent injection, 94.7 percent in second most recent injection and 95.7 in third most recent injection used a new syringe/needle, either self-purchased or given to them by an NGO staff or a friend.

Around six in ten of these IDUs had used a self-purchased needle/syringe during the last three injections (Table 5.5).

However, some IDUs had adopted high-risk injecting behavior in the most recent injection (3.7%), second most recent injection (5.3%), and third most recent injection (4.3%). They had injected with a previously used needle/syringe used by themselves, given by friends or left at a public place (Table 5.5).

Additionally, over 90 percent of IDUs had also avoided the high-risk behavior of sharing a needle/syringe to inject drugs with other people when in a group in the last three injections.

**Table 5.5: Injecting Practice during Last Three Injections**

| Injecting Behavior | Drug injecting acts N = 300 | | | | | |
|---|---|---|---|---|---|---|
| | Most Recent | | Second Most Recent | | Third Most Recent | |
| | N | % | N | % | N | % |
| Low risk injecting behavior | | | | | | |
| Used a new needle/syringe that was purchased | 198 | 66.0 | 189 | 63.0 | 196 | 65.3 |
| Used new needle/syringe given by NGO staff/volunteers/friend | 91 | 30.3 | 95 | 31.7 | 91 | 30.3 |
| **Low risk behavior total** | **289** | **96.3** | **284** | **94.7** | **287** | **95.7** |
| High risk injecting behavior | | | | | | |
| Used own previously used needle/syringe | 4 | 1.3 | 8 | 2.7 | 7 | 2.3 |
| Used needle/syringe given by friend/relative after his/her use | 5 | 1.7 | 7 | 2.3 | 4 | 1.3 |
| Used needle/syringe that had been kept in public place by self | 1 | 0.3 | 1 | 0.3 | 2 | 0.7 |
| Used needle/syringe that had been kept in public place by someone else | 1 | 0.3 | 0 | 0.0 | 0 | 0.0 |
| **High risk behavior total** | **11** | **3.7** | **16** | **5.3** | **13** | **4.3** |
| Persons in the group using the same needle/syringe | | | | | | |
| 2 persons | 17 | 5.7 | 22 | 7.3 | 20 | 6.7 |
| 3 or more persons | 8 | 2.7 | 6 | 2.0 | 7 | 2.3 |
| None/Alone | 275 | 91.7 | 272 | 90.7 | 273 | 91.0 |
| **Total** | **300** | **100.0** | **300** | **100.0** | **300** | **100.0** |

Nevertheless, the injecting practice of the IDUs in the past week showed that 11.7 percent of IDUs had used an old needle/syringe; 7.7 percent had injected with a syringe left at a public place; and 10.3 percent had given their used needle/syringe to others at least once (Table 5.6). Moreover, 11.4 percent of IDUs had shared their syringe with one or more injecting partners in the week preceding the survey. While all of these had shared their needle/syringe with their friends, one IDU each (2.9%) had also shared with an unknown person and with a regular sex partner respectively.

**Table 5.6: Injecting Practice in the Past Week**

| Needle/Syringe Use in the Past Week | N | % |
|---|---|---|
| **Used a needle/syringe that had been used by others** | | |
| Never Used | 265 | 88.3 |
| Used | 35 | 11.7 |
| **Used a needle/syringe that had been kept in public place** | | |
| Never Used | 277 | 92.3 |
| Used | 23 | 7.7 |
| **Gave a needle/syringe to some one else** | | |
| Yes | 31 | 10.3 |
| No | 269 | 89.7 |
| **Number of needle/syringe shared partners** | | |
| None | 266 | 88.7 |
| 1 – 2 partners | 23 | 7.7 |
| Three or more partners | 11 | 3.7 |
| **Total** | **300** | **100.0** |

| Types of needle/syringe sharing partner * | | |
|---|---|---|
| Friend | 34 | 100.0 |
| Unknown person | 1 | 2.9 |
| Usual Sex Partner | 1 | 2.9 |
| **Total** | **34** | ***** |

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

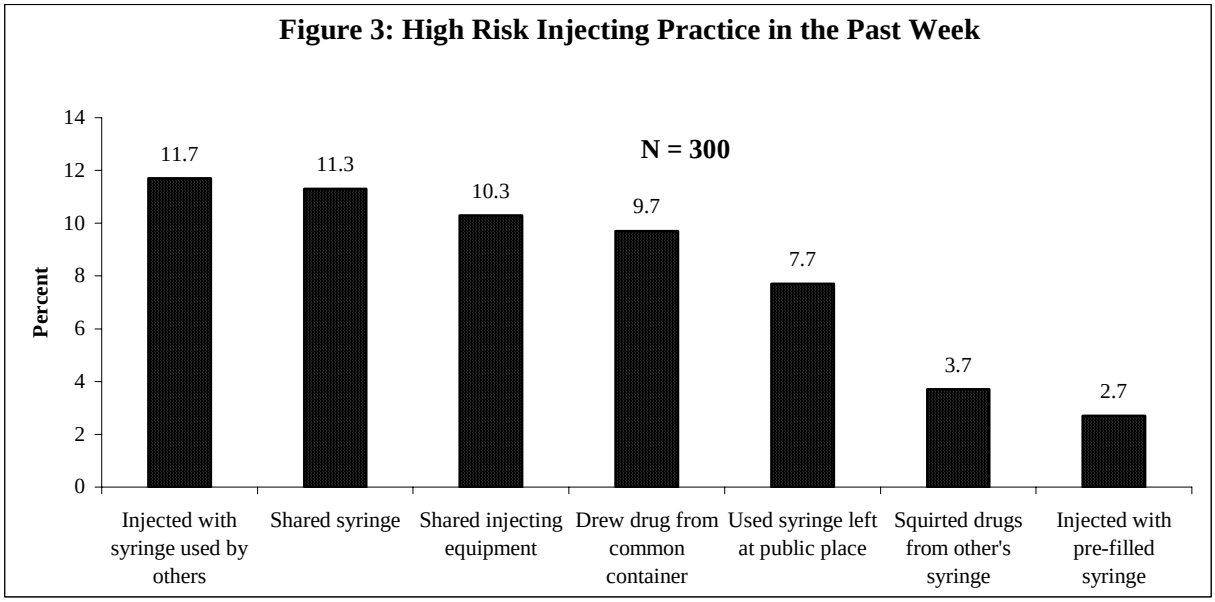
## 5.4 Drug Sharing Behavior

The majority of the respondents had avoided unsafe injecting practices in the week preceding the survey. However, 2.7 percent of IDUs had injected with a pre-filled syringe, and 3.7 percent had injected with a syringe filled from another syringe at least once. Additionally, 10.3 percent of respondents had shared injecting materials such as spoon, cooker, vial/container and cotton and 9.7 percent had drawn drug solutions from a common container in the past week at least once (Table 5.7).

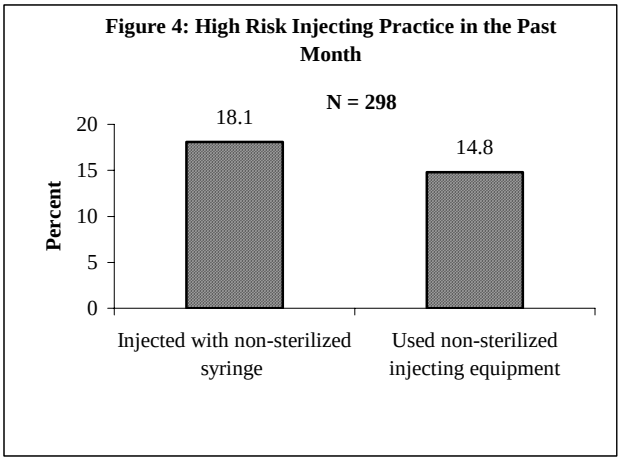
**Table 5.7: Syringe Using and Sharing Practice in The Past Week**

| Drug Sharing Practice in the Past Week | N = 300 | % |
|---|---|---|
| **Injected with a pre-filled syringe** | | |
| Yes | 8 | 2.7 |
| No | 292 | 97.3 |
| **Injected with a syringe after drugs were transferred into it from other's syringe** | | |
| Never injected | 289 | 96.3 |
| Injected | 11 | 3.7 |
| **Shared bottle, spoon, cooker, vial/container, cotton/filter and rinsing water with others** | | |
| Never shared | 269 | 89.7 |
| Shared | 31 | 10.3 |
| **Drew drug solution from a common container also used by others** | | |
| Never | 271 | 90.3 |
| Drew at least once | 29 | 9.7 |

Figure 3 below summarizes high risk injecting and drug sharing behavior practiced by IDUs in the past week.



Some IDUs had practiced high risk injecting behavior in the month preceding the survey. Overall, 99.3 percent of the IDUs had injected drugs in the past month. Among these IDUs, 18.1 percent had used non-sterile needle/syringe while 14.8 percent had used non-sterile injecting equipment at least once in the month prior to the survey (Figure 4).




The respondents were also asked if they had injected in other places outside their district/city or in other countries. Around eight in ten respondents (81.7%) had injected drugs elsewhere in Nepal or in other countries that they had visited in the past year. Among these IDUs, 17.6 percent had injected with somebody else's previously-used syringe and 19.6 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 in Other Parts of Country and Abroad**

| Injecting Practice in Other Parts of the Country and Out of the Country in the Past 12 Months | N | % |
|---|---|---|
| **Injected in other parts of country/out of country** | | |
| Yes | 245 | 81.7 |
| No | 55 | 18.3 |
| **Total** | **300** | **100.0** |
| **Used a needle/syringe that had been used by others** | | |
| Yes | 43 | 17.6 |
| No | 202 | 82.4 |
| **Gave a needle/syringe to someone else after use** | | |
| Sometimes – Always | 48 | 19.6 |
| Never | 197 | 80.4 |
| **Total** | **245** | **100.0** |

## 5.5 Needle/Syringe Cleaning Practice

Previous studies have shown that some IDUs consider it safe to inject with a previously used syringe/needle after washing it with water or certain substances. The respondents were asked if they had cleaned a used needle/syringe to re-use it in the past week. Although the majority of the respondents (84.7%) denied having done so, 15.3 percent of IDUs had cleaned a used needle/syringe before using it again. Among these, only two respondents (4.3%) had used bleach to clean such needles/syringes, while others had used other substances such as water, urine and saliva (Table 5.9).

**Table 5.9: Needle/Syringe Cleaning Practice**

| Needle/Syringe Cleaning Practice | N | % |
|---|---|---|
| **Cleaned used needle/syringe in the past week** | | |
| Yes | 46 | 15.3 |
| No | 254 | 84.7 |
| **Total** | **300** | **100.0** |
| **Cleaned a used needle/syringe with:** | | |
| Bleach | 2 | 4.3 |
| Without bleach | 44 | 95.7 |
| **Total** | **46** | **100.0** |

## 5.6 Knowledge of and Access to New Needles/Syringes

The majority (99.3%) of IDUs said that they could obtain a new syringe whenever necessary. Drug stores (97%) and needle exchange programs (82.7%) run by different NGOs were named as important sources. Other sources mentioned by the respondents have been listed in Table 5.10. Moreover, 67.7 percent of IDUs had received a new needle/syringe from an OE/PE or staff of a needle exchange program at least once in the past year.

**Table 5.10: Knowledge/Sources of New Syringes**

| New Syringe Accessibility | N = 300 | % |
|---|---|---|
| **Can obtain new syringe** | | |
| Yes | 298 | 99.3 |
| No | 2 | 0.7 |
| **Can obtain syringe from*** | | |
| Drugstore | 291 | 97.0 |
| Needle exchange program | 248 | 82.7 |
| Hospital | 68 | 22.7 |
| Drug seller | 50 | 16.7 |
| Friends | 39 | 13.0 |
| Other shop | 8 | 2.7 |
| Drug wholesaler | 7 | 2.3 |
| Health Worker | 7 | 2.3 |
| Drug User | 2 | 0.7 |
| Received new needle/syringe from OE/PE or staff of Needle Exchange program in past 12 months | | |
| Yes | 203 | 67.7 |
| No | 97 | 32.2 |

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

## 5.7 Treatment Practice

As seen in Table 5.11, 35 percent of IDUs had received de-addiction treatment before the date of survey. Among these, 50.5 percent had received such treatment less than a year ago. Most of these respondents (77.1%) had been provided with residential rehabilitation, while some had received detoxification treatment with or without the help of drugs (17.1%) and outpatient counseling (9.5%) For the types of services and organizations involved in de-addiction treatment, see Annex 14.

**Table 5.11: Treatment Received and Types of Such Treatment**

| Treatment for De-addiction | N | % |
|---|---|---|
| **Treatment Received** | | |
| Ever treated | 105 | 35.0 |
| Never treated | 195 | 65.0 |
| **Total** | **300** | **100.0** |
| **Last treatment received** | | |
| Less than 6 months before | 25 | 23.8 |
| 6-11 months before | 28 | 26.7 |
| 12-23 months before | 19 | 18.1 |
| 24-35 months before | 12 | 11.4 |

| | | |
|---|---|---|
| 36-47 months before | 9 | 8.6 |
| 48 or more months before | 9 | 8.6 |
| No Response | 3 | 2.9 |
| **Total** | **105** | **100.0** |
| **Types of treatment received** | | |
| Residential Rehabilitation | 81 | 77.1 |
| Detoxification with/without drug | 18 | 17.1 |
| Out Patient Counseling | 10 | 9.5 |
| Others | 3 | 2.9 |
| **Total** | **105** | ***** |

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

# CHAPTER – 6.0: SEXUAL BEHAVIOR AND CONDOM USE

Risky sexual behavior associated with drug use has also been associated with HIV transmission among drug users. This chapter deals with the sexual behavior of the IDUs and types of sex partners. It also explains the respondents' sexual behavior and knowledge and use of condoms.

## 6.1 Sexual Behavior of IDUs

Ninety-eight percent of the respondents had at least one sexual contact prior to the survey. The median age at the time of first sexual relations was 17 years. Among these respondents, 79.3 percent had been sexually active and were engaged in sexual intercourse in the past year. While 47.2 percent had one sex partner, the rest (52.8%) had sexual contact with two or more partners (Table 6.1).

**Table 6.1: Sexual Behavior**

| Sexual Behavior | N | % |
|---|---|---|
| **Sexual behavior** | | |
| Ever had sexual intercourse | 294 | 98.0 |
| Never had sexual intercourse | 6 | 2.0 |
| **Total** | **300** | **100.0** |
| **Age at first sexual intercourse** | | |
| Below 20 years | 256 | 87.1 |
| 20 years and above | 38 | 12.9 |
| **Median age** | **17.0** | |
| **Sexual intercourse in the past 12 months** | | |
| Yes | 233 | 79.3 |
| No | 61 | 20.7 |
| **Total** | **294** | **100.0** |
| **Numbers of female sexual partners in the past 12 months** | | |
| 1 partner | 110 | 47.2 |
| 2 or more partners | 123 | 52.8 |
| **Total** | **233** | **100.0** |

The sex partners of the IDUs were categorized as regular partners, non-regular partners and female sex workers. Regular female sex partners were defined as the spouse or any sexual partner living together with the respondents. Around 43 percent of those respondents who had ever had sexual contact had sex with regular female partners in the past year. Most of these (90.5%) had this sexual contact in the month preceding the survey and 76.3 percent of them had at least five sexual contacts during the last month (Table 6.2).

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

| Sexual Practice | N | % |
|---|---|---|
| **Sex with a regular partner during the past 12 months** | | |

| | | |
|---|---|---|
| Yes | 126 | 42.9 |
| No | 168 | 57.1 |
| **Total** | **294** | **100.0** |
| **Sex with a regular partner during the last month** | | |
| Yes | 114 | 90.5 |
| No | 12 | 9.5 |
| **Total** | **126** | **100.0** |
| **Frequency of sex with a last regular female sex partner during the last month** | | |
| 1-4 | 27 | 23.7 |
| 5+ | 87 | 76.3 |
| **Total** | **114** | **100.0** |

The IDUs with sexual experience were also asked whether they had sex with non-regular female partners in the past year. 'Non-regular female sex partners' were defined as those sex partners with whom the respondents were neither married, nor living together. However, such partners were defined as being distinct from sex workers. As seen in the following Table 6.3, 28.2 percent of IDUs had sex with non-regular female sex partners in the past 12 months. Of these, 53 percent have had two or more non-regular female sex partners while 47 percent had one such partner in the past year. Among these respondents, 55.4 percent had sexual contact with their non-regular female sex partners in the month preceding the survey. The majority (84.8%) had 1-4 such sexual contacts in the past month (Table 6.3).

**Table 6.3: Sexual contact with Non-Regular Female Sex Partner**

| Sexual Practice | N | % |
|---|---|---|
| **Sex with non-regular female sex partner in the past 12 months** | | |
| Yes | 83 | 28.2 |
| No | 211 | 71.8 |
| **Total** | **294** | **100.0** |
| **Number of non-regular female sex partner in the past 12 months** | | |
| 1 partner | 39 | 47.0 |
| 2 or more partners | 44 | 53.0 |
| **Sex with non-regular female sex partner during past month** | | |
| Yes | 46 | 55.4 |
| No | 37 | 44.6 |
| **Total** | **83** | **100.0** |
| **Frequency of sex with last non-regular female sex partners during past month** | | |
| 1- 4 | 39 | 84.8 |
| 5+ | 7 | 15.2 |
| **Total** | **46** | **100.0** |

The IDUs were further asked if they had maintained a sexual relationship with female sex workers during the past year. 'Female sex workers' were defined as those who were paid in cash/commodities or drugs in exchange for sex. Nearly one-third (32.7%) of those IDUs who ever had sexual contact had sex with a female sex worker in the past year (Table 6.4). The majority (72.9%) had had sex with two or more FSWs in the past year. Almost 63 percent of the IDUs who had sex with sex workers in the last 12 months had sexual encounters with FSWs in the month preceding the survey. Among these, 95 percent had at least four instances of sexual contact in the last month, while others (5%) had more than five instances of sexual contact.

**Table 6.4: Sexual Intercourse with Female Sex worker**

| Sexual Practice | N | % |
|---|---|---|
| **Sex with female sex worker in the past 12 months** | | |
| Yes | 96 | 32.7 |
| No | 198 | 67.3 |
| **Total** | **294** | **100.0** |
| **Number of female sex workers visited in the past 12 months** | | |
| 1 FSW | 26 | 27.1 |
| 2 or more FSWs | 70 | 72.9 |
| **Sex with female sex worker during past month** | | |
| Yes | 60 | 62.5 |
| No | 36 | 37.5 |
| **Total** | **96** | **100.0** |
| **Frequency of sex with last female sex worker during the past month** | | |
| 1- 4 | 57 | 95.0 |
| 5+ | 3 | 5.0 |
| **Total** | **60** | **100.0** |

## 6.2 Knowledge and Use of Condoms

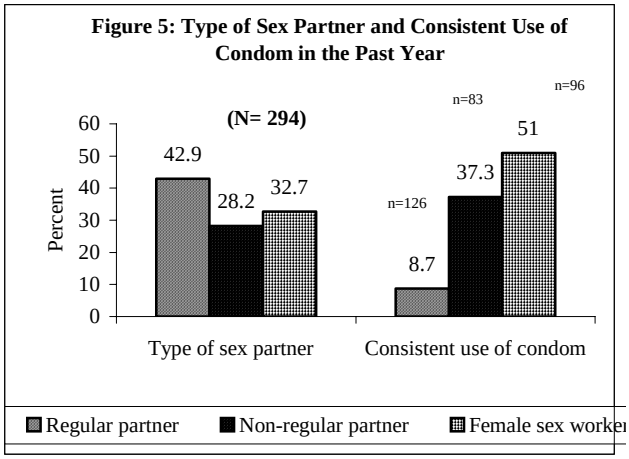
All the IDUs had heard of condoms before the survey. Table 6.5 compares the pattern of condom use by IDUs with different partners (Table 6.5). As seen in the table, a larger proportion of IDUs had used a condom the last time they had sexual contact with a female sex worker (67.7%) than with non regular partners (59%) and regular partners (23.8%).

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

| Use of Condom in the Last Sex | N | % |
|---|---|---|
| **Condom use with regular female sex partner during last sexual intercourse** | | |
| Yes | 30 | 23.8 |
| No | 96 | 76.2 |
| **Total** | **126** | **100.0** |
| **Condom use with non-regular female sex partner during last sexual intercourse** | | |
| Yes | 49 | 59.0 |
| No | 34 | 41.0 |
| **Total** | **83** | **100.0** |
| **Condom use with female sex worker during last sexual intercourse** | | |
| Yes | 65 | 67.7 |
| No | 31 | 32.3 |
| **Total** | **96** | **100.0** |

HIV/AIDS awareness campaigns focus on educating the target groups on the need to use a condom consistently in all sexual encounters. In this context, all the IDUs were asked how often they had used condoms with different female sex partners during the year preceding the survey.

Figure 5 shows the types of sex partners that the IDUs had in the past year and compares condom usage patterns during sexual contact with them. Ninety eight percent of IDUs had ever had sexual relations with a female partner. Over two-fifths (42.9%) of them have had sexual contact with regular partners followed by 32.7 percent with female sex workers and 28.2 percent with non-regular sex partners in the past year. The condom usage pattern was not uniform by type of partner; more IDUs had used condoms consistently with female sex workers (51%) than with non-regular partners (37.3%) and regular partners (8.7%) in the past year.




All the respondents reporting not having used a condom in their last sexual contact with different partners were further asked their reasons for not using a condom. Data obtained from the study participants as shown in Annex 15 indicate that the reasons for not using condoms differ according to the type of partner. IDUs did not consider it necessary to use condoms (40.6%) when they had sex with regular partners, while 35.4 percent did not use one because they had been using other contraceptive devices.

45.2 percent each had not used condom when they had last sex with female sex workers as condoms were not available at the time and because they did not like to use them. About one third (32.4%) of those IDUs who had sexual contact with sex workers had not used a condom during the last sexual act because it was not available. Another 26.5 percent each said that they did not use a condom when they last had sex with a sex worker because they did not like condoms and because they did not consider it necessary to use them (Annex 15).

## 6.3 Source of Condoms

All the IDUs knew at least one place where they could get condoms. While 88.3 percent said that they could get condoms from a pharmacy, 75.7 percent said that they could get condoms from peer and/or outreach educators. Other popular sources of condoms were shops (46.3%), hospitals (37.7%) and clinics (27%).

Seven in ten respondents (75.3%) had received condoms free of cost from an organization in the past 12 months.

Since 99.3 percent of IDUs said that they could get condoms if necessary in less than 30 minutes, it is clear that condoms are easily available to the respondents (Table 6.6).

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

| Sources of Condom and Time Needed to Obtain One | N = 300 | % |
|---|---|---|
| **Place/person from where condom can be obtained*** | | |
| Pharmacy | 265 | 88.3 |
| Peer Educator/Outreach Educator | 227 | 75.7 |
| Shop | 139 | 46.3 |
| Hospital | 113 | 37.7 |
| Clinic | 81 | 27.0 |
| Pan shop | 68 | 22.7 |
| International Nepal Fellowship | 27 | 9.0 |
| Health worker/Health Post | 25 | 8.3 |
| Friends | 21 | 7.0 |
| Family Planning Center | 19 | 6.3 |
| Association for Helping Helpless (AHH) | 12 | 4.0 |
| NAMUNA | 12 | 4.0 |
| Change Team | 9 | 3.0 |
| Naulo Ghumti | 8 | 2.7 |
| Bar/Guest house/Hotel | 7 | 2.3 |
| Paschim Tara | 6 | 2.0 |
| Krishi Evem Gram Bikash Sasthan (KEGVS) India | 4 | 1.3 |
| Others | 17 | 5.7 |
| Received condom (free of cost) from an organization in the past 12 months | | |
| Yes | 226 | 75.3 |
| No | 74 | 24.7 |
| **Time taken to obtain condom** | | |
| Less than 30 minutes | 298 | 99.3 |
| More than 30 minutes | 2 | 0.7 |

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

## 6.4 Sources of Information about Condoms

The IDUs in the study districts received information about condoms from different sources. The most common sources of information for more than 90 percent of respondents were radio (97%), television (96.3%) and NGO workers (90.7%). A considerable proportion of respondents had also heard about condoms from friends/neighbors (87%), newspapers/posters (82.7%) and the pharmacy (82.7%); as well as billboards/signboards (72.3%) and hospitals (66.7%) (Table 6.7).

**Table 6.7: Sources of Information about Condoms**

| Sources of Knowledge of Condom | N = 300 | % |
|---|---|---|
| Radio | 291 | 97.0 |
| Television | 289 | 96.3 |
| NGO people | 272 | 90.7 |
| Friends/neighbors | 261 | 87.0 |
| Pharmacy | 248 | 82.7 |
| Newspapers/posters | 248 | 82.7 |
| Bill board/sign board | 217 | 72.3 |
| Hospital | 200 | 66.7 |
| Health workers/volunteers | 155 | 51.7 |
| Health Post | 140 | 46.7 |
| Street drama | 120 | 40.0 |
| Health Center | 120 | 40.0 |
| Cinema hall | 111 | 37.0 |
| Community worker | 91 | 30.3 |
| Community event/training | 81 | 27.0 |
| Comic books | 67 | 20.3 |
| Video van | 33 | 11.0 |
| Others | 1 | 0.3 |

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, such as posters, pamphlets, and billboards or messages aired on radio/television. The survey asked the respondents about certain specific messages about condoms and HIV/STI prevention. Among the different messages listed in Table 6.8, a considerable proportion of IDUs were aware of messages such as '*Youn rog ra AIDS bata bhachnalai'* (81%)*, 'Jhilke dai chha chhaina condom'* (79.3%)*, 'Condom kinna ma bhaya hunna ra'* and *'Condom bata surakchhya youn swastha ko rakchhya'* (77% each)*, 'Ramro sanga prayog gare jokhim huna dinna'* (71%) *and 'HIV/AIDS bare aajai dekhi kura garau'* (58.3%).

**Table 6.8: Exposure 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 | 243 | 81.0 |
| Jhilke Dai Chha Chhaina Condom | 238 | 79.3 |
| Condom Kinna Ma Bhaya Hunna Ra | 231 | 77.0 |
| Condom Bata Surakchhya Youn Swastha ko Rakchhya | 231 | 77.0 |
| Ramro Sanga Prayog Gare Jokhim Huna Dinna Bharpardo Chhu Santosh Dinchhu Jhanjhat Manna Hunna | 213 | 71.0 |
| HIV/AIDS Bare Aaji Dekhi Kura Garaun | 175 | 58.3 |
| Maya Garaun Sadbhav Badaun | 79 | 26.3 |
| Manis Sanga Manis Mile hara Jeet kasko Hunchha | 44 | 14.7 |
| Ek Apas Ka Kura | 31 | 10.3 |
| Des Pardes | 26 | 8.7 |
| Others | 28 | 9.3 |

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

# CHAPTER – 7.0: KNOWLEDGE OF STIs AND HIV/AIDS

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

## 7.1 Knowledge about STIs

Ninety-three percent of IDUs had heard about STIs. However, there were 21 respondents (7%) who had not heard about STIs before this survey (Table 7.1).

**Table 7.1: Awareness of STIs**

| Heard of STIs | N = 300 | % |
|---|---|---|
| Yes | 279 | 93.0 |
| No | 21 | 7.0 |

The IDUs who had heard of STIs were asked questions on STI-related symptoms in order to assess their level of knowledge. They were asked to state male as well as female STI symptoms that they were aware of. A relatively high proportion of IDUs identified STI symptoms such as genital ulcers/sores/blisters among females (86.4%) as well as males (91%). Genital discharge was also identified as another male STI symptom by 68.1 percent of IDUs, and female STI symptoms by 58.1 percent of them. Additionally, symptoms like foul smelling discharge and abdominal pain were mentioned as female-specific STI symptoms by 40.1 percent and 8.6 percent of respondents respectively. Additionally, the IDUs also mentioned burning or pain during urination as one of the symptoms of STIs among males (31.2%) and also among females (17.6%) (Table 7.2).

**Table 7.2: Known Symptoms of Male and Female STIs**

| STI Symptoms as Mentioned by IDUs | STI Symptoms | | | |
|---|---|---|---|---|
| | Among Female (n=279) | | Among Male (n=279) | |
| | N | % | N | % |
| Genital ulcer/sore blisters | 241 | 86.4 | 254 | 91.0 |
| Genital discharge | 162 | 58.1 | 190 | 68.1 |
| Foul-smelling discharge | 112 | 40.1 | | |
| Burning/pain during urination | 49 | 17.6 | 87 | 31.2 |
| Itching | 53 | 19.0 | 55 | 19.7 |
| Abdominal pain | 24 | 8.6 | | |
| Swelling in groin area | 16 | 5.7 | 28 | 10.0 |
| Become thinner | 4 | 1.4 | 5 | 1.8 |
| Fever | 6 | 2.2 | 6 | 2.2 |
| Pain at the time of intercourse | 1 | 0.4 | 1 | 0.4 |
| Ulcer in the body | 3 | 1.1 | 3 | 1.1 |
| Others | 11 | 3.9 | 7 | 2.5 |
| Don't know | 20 | 7.2 | 20 | 7.2 |

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

The IDUs were also asked if they had experienced any symptoms such as genital discharge and genital ulcers/sores in the past year. While 12.3 percent had genital discharge, 9.7 percent of IDUs had genital ulcers/sores in the past year (Table 7.3).

**Table 7.3: STI Symptom/s Experienced in the Past Year**

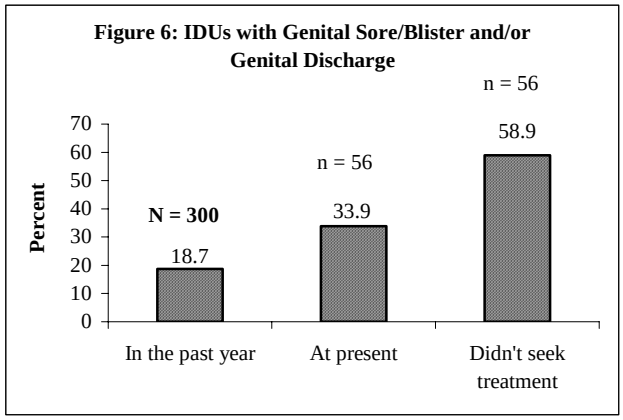
| STI Symptoms | N = 300 | % |
|---|---|---|
| **Had genital discharge in the past year** | | |
| Yes | 37 | 12.3 |
| No | 263 | 87.7 |
| **Had genital ulcer/sore blister in the past year** | | |
| Yes | 29 | 9.7 |
| No | 271 | 90.3 |

Those IDUs who have had symptoms of an STI in the past year were also asked if they had such symptoms at the time of the study. Twelve (32.4%) of those respondents who had genital discharge in the past year, had such symptoms at the time of the study. Similarly, nine (31%) of IDUs who had genital ulcers/sores in the past year had such symptoms during the time of the study (Table 7.4).

**Table 7.4: STI Symptom Currently Experienced and Treatment Sought**

| STI Symptoms and Treatment | N | % |
|---|---|---|
| **Currently experiencing genital discharge** | | |
| Yes | 12 | 32.4 |
| No | 25 | 67.6 |
| **Total** | **37** | **100.0** |
| **Currently experiencing genital ulcer/sore blister** | | |
| Yes | 9 | 31.0 |
| No | 20 | 69.0 |
| **Total** | **29** | **100.0** |

Figure 6 shows the proportion of IDUs who reportedly had at least one STI symptom like genital discharge and genital ulcers/sores in the past year and/or at the time of the survey. Overall, 56 IDUs (18.7%) had experienced such symptoms in the past year. Among these, 19 IDUs (33.9%) had been experiencing at least one of these symptoms at the time of the survey. Almost 59 percent of those respondents who have had such symptom in the past year or at the time of the survey had not sought treatment; 14.3 percent had been to a private doctor while 12.5 percent had visited a hospital/health post for treatment (data not shown).




## 7.2 Knowledge about HIV/AIDS

All the IDUs had heard of HIV/AIDS before. Three-fourths of them (75.7%) also knew people who had HIV/AIDS or had died of AIDS- related illness. When asked about the type of relationship that they shared with such individuals, 58.6 percent said they were close friends and 8.4 percent said they were relatives. Thirty-three percent of IDUs had heard/seen such people but did not have any relationship with them (Table 7.5).

**Table 7.5: Awareness of HIV/AIDS**

| Knowledge of HIV/AIDS | N | % |
|---|---|---|
| **Know anyone who is living with HIV/AIDS or has died due to AIDS related illness** | | |
| Yes | 227 | 75.7 |
| No | 73 | 24.3 |
| **Total** | **300** | **100.0** |
| **Nature of relationship with the person** | | |
| Close friend | 133 | 58.6 |
| No relation | 75 | 33.0 |
| Close relative | 19 | 8.4 |
| **Total** | **227** | **100.0** |

Respondents were asked about measures to prevent HIV/AIDS. Their understanding of the major HIV/AIDS prevention measures was assessed, including abstinence from sex (A); being faithful to one sex partner (B); and consistent condom use (C). The majority of the IDUs (96.7%) were aware that using a condom every time during sex (C) prevented them from contracting HIV, while 89.3 percent knew that being faithful to one sexual partner (B) protected them from HIV transmission. At the same time, 79.3 percent of IDUs knew that they could also protect themselves against HIV through abstinence from sexual contact (A).

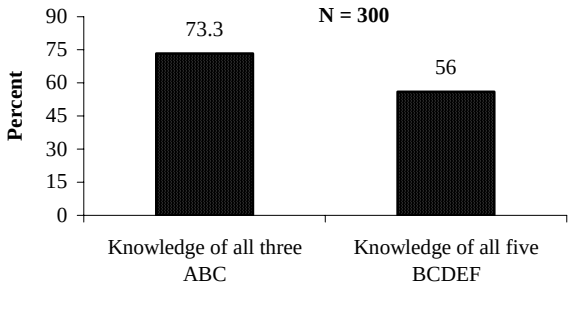
Additionally, 96.7 percent of IDUs knew that a healthy-looking person can be infected with HIV (D); and 88.7 percent knew that sharing meal with an HIV-infected person did not transmit HIV (F). However, a relatively smaller proportion of IDUs (65.3%) agreed that a person cannot get the HIV virus from a mosquito bite (E).

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

| Knowledge of Six Major Indicators on HIV/AIDS | N = 300 | % |
|---|---|---|
| HIV transmission can be avoided through | | |
| A Abstinence from sexual contact | 238 | 79.3 |
| B Being faithful to one partner | 268 | 89.3 |
| C Condom use during each sexual contact | 290 | 96.7 |
| Perception regarding HIV transmission | | |
| D A healthy-looking person can be infected with HIV | 290 | 96.7 |
| E A person can not get the HIV virus from mosquito bite | 196 | 65.3 |
| F Sharing a meal with an HIV infected person does not transmit HIV virus | 266 | 88.7 |

Overall, 73.3 percent of IDUs were aware of all three major modes of transmission, i.e. 'ABC' as mentioned above. 56 percent of IDUs were aware of five ways one can protect oneself against HIV and ways in which it cannot be transmitted. ('BCDEF'). (Figure 7)

**Figure 7: Knowledge of Major Modes of HIV Transmission**




The respondents were also asked certain probing questions regarding different modes of HIV transmission. The majority of respondents knew that HIV can be transmitted through the transfusion of blood from an infected person to another, and that a person can get HIV by using previously used needles/syringes (98.3% each). They knew that a person cannot get HIV by holding an HIV-infected person's hand (93.7%). About eight in ten respondents also agreed that a pregnant

woman infected with HIV/AIDS can transmit the virus to her unborn child (89%) and that a drug user can protect himself from HIV by switching to non-injecting drugs (83.3%). A relatively lower percentage of respondents (63.3%) said that women with HIV could transmit the virus to her newborn children through breast-feeding.

Those IDUs who said that a pregnant woman infected with HIV/AIDS could transmit the virus to her unborn child were further asked if they were aware of any measures by which such risk of transmission could be reduced. Thirty-nine percent of such IDUs mentioned that they should take medicine while the same proportion of IDUs (39.7%) had no idea about any such measures (Table 7.7).

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

| Statements Related to HIV/AIDS | N = 300 | % |
|---|---|---|
| A person can get HIV by using previously used needle by others | 295 | 98.3 |
| An IDU can protect themselves from HIV/AIDS by switching to non-injecting drugs | 250 | 83.3 |
| A woman with HIV/AIDS can transmit the virus to her new-born child through breastfeeding | 190 | 63.3 |
| Blood transfusion from an infected person to the other transmit HIV | 295 | 98.3 |
| A person can not get HIV by holding an HIV infected person's hand | 281 | 93.7 |
| A pregnant woman infected with HIV/AIDS can transmit the virus to her unborn child | 267 | 89.0 |
| **Total** | **300** | **100.0** |
| **Ways by which a pregnant woman can reduce the risk of transmission of HIV to her unborn child** | | |
| Take medicine | 104 | 39.0 |
| Treatment/ consult with doctor | 57 | 21.3 |
| Don't Know | 106 | 39.7 |
| **Total** | **267** | **100.0** |

## 7.3 Knowledge about HIV Testing Facilities

The availability of a confidential HIV testing facility allows people to undertake testing promptly and without fear of being exposed. Ninety-four percent of the respondents were aware of the existence of this type of facility in their communities.

Overall, 62.7 percent of respondents had been tested once for HIV, while the rest (37.3%) had never been tested. The majority (93.1%) of those who had been tested had done so voluntarily, and 80.9 percent of them had received the test result. Although 42.6 percent had been tested within the past year, others had been tested more than one year before (Table 7.8).

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

| Description on HIV Testing | N | % |
|---|---|---|
| **A confidential HIV testing facility is available in the community** | | |
| Yes | 282 | 94.0 |
| No | 18 | 6.0 |
| **Ever had an HIV test** | | |
| Yes | 188 | 62.7 |
| No | 112 | 37.3 |
| **Total** | **300** | **100.0** |
| **Type of test taken** | | |
| Required HIV test | 13 | 6.9 |
| Voluntary HIV test | 175 | 93.1 |
| **Test result received** | | |
| Yes | 152 | 80.9 |
| No | 36 | 19.1 |
| **Timing of last HIV test** | | |
| Within the past year | 80 | 42.6 |
| 1-2 years ago | 86 | 45.7 |
| 2-4 years ago | 14 | 7.4 |

| | | |
|---|---|---|
| More than 4 years ago | 8 | 4.3 |
| **Total** | **188** | **100.0** |

## 7.4 Sources of Knowledge About HIV/AIDS

Radio (97.3%), television (96.7%) and NGO workers (91.7%) 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 (88.3%), their friends/relatives (87.7%), newspaper/magazines (78%), billboards/signboards (72.3%), and from their workplaces (69%). Other sources of information are shown in Table 7.9.

**Table 7.9: Sources of Knowledge Regarding HIV/AIDS**

| Sources of Knowledge of HIV/AIDS | N=300 | % |
|---|---|---|
| Radio | 292 | 97.3 |
| Television | 290 | 96.7 |
| NGO workers | 275 | 91.7 |
| Pamphlets/posters | 265 | 88.3 |
| Friends/relatives | 263 | 87.7 |
| Newspapers/magazines | 234 | 78.0 |
| Bill board/sign board | 217 | 72.3 |
| Workplace | 207 | 69.0 |
| Health workers/volunteers | 164 | 54.7 |
| Street drama | 157 | 52.3 |
| Cinema halls | 147 | 49.0 |
| School/teachers | 147 | 49.0 |
| Community workers | 103 | 34.3 |
| Community events or training | 92 | 30.7 |
| Comic books | 84 | 28.0 |
| Video van | 56 | 18.7 |

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

Some of the IDUs had also received HIV/AIDS-related Information Education and Communication (IEC) materials and other information from different sources in the past year. 90.3% had received HIV- related information from such materials and sources. About eight in ten (79%) respondents had received IEC materials such as brochures/booklets/pamphlets on HIV/AIDS and condoms/information relating to condoms in the past year. Other IEC materials such as T-shirts/vests/caps with HIV/AIDS messages had been received by 6.7 percent of respondents (Table 7.10).

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

| Informative Materials Received | N = 300 | % |
|---|---|---|
| Condoms/information on condom | | |
| Yes | 236 | 78.7 |
| No | 64 | 21.3 |
| Brochure/booklets/pamphlets on HIV/AIDS | | |
| Yes | 237 | 79.0 |
| No | 63 | 21.0 |
| Received Information on HIV/AIDS | | |
| Yes | 271 | 90.3 |
| No | 29 | 9.7 |
| Others IEC materials | | |
| Yes | 20 | 6.7 |
| No | 280 | 93.3 |

## 7.5 Perceptions about HIV/AIDS

IDUs' perceptions about HIV-infected people and the stigma associated with the disease were examined with the help of several probing questions. The majority of

the respondents were ready to take care of an HIV-positive male relative (94.3%) or a HIV-positive female relative (93.7%) in their home. However, more than half of the IDUs (55.7%) said that if a family member had HIV they would rather keep it confidential and not talk about it with others.

At the same time, 91.3 percent of the IDUs said they would readily buy food from a HIV-infected vendor. Ninety-two percent agreed that unless very sick, people with HIV/AIDS should be allowed to continue their jobs. Furthermore, when asked about the health care needs of HIV-infected persons, 55 percent of IDUs maintained that the health care needs of an HIV-infected person were more than for other chronic diseases, while 43.3 percent believed that they should be provided same care and treatment as necessary for patients with other chronic illnesses (Table 7.11).

**Table 7.11: Attitude towards HIV/AIDS**

| Individual Perception | N = 300 | % |
|---|---|---|
| **Would readily take care of HIV positive male relative in the household** | | |
| Yes | 283 | 94.3 |
| No | 17 | 5.7 |
| **Would readily take care of HIV positive female relative in the household** | | |
| Yes | 281 | 93.7 |
| No | 19 | 6.3 |
| **Would prefer not to talk about a family member being HIV positive** | | |
| Yes | 167 | 55.7 |
| No | 133 | 44.3 |
| **Would readily buy food from HIV infected shopkeeper** | | |
| Yes | 274 | 91.3 |
| No | 26 | 8.7 |
| **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** | | |
| Same | 130 | 43.3 |
| More | 165 | 55.0 |
| Less | 5 | 1.7 |
| **Believe that HIV infected person should be allowed to continue working unless very sick** | | |
| Yes | 276 | 92.0 |
| No | 24 | 8.0 |

# CHATPER – 8.0: EXPOSURE TO HIV/AIDS AWARENESS PROGRAMS

Various intervention programs are underway to create awareness, educate people about HIV/AIDS and disseminate information regarding preventive measures. Some of these programs target specific groups of MARPs while others conduct general awareness campaigns. This chapter deals with the exposure of the IDUs to the ongoing HIV/AIDS awareness programs and their participation in such activities. Respondents were asked several questions relating to different components of current HIV/AIDS-related programs run by different organizations.

## 8.1 Peer/Outreach Education

Different organizations mobilize peer educators (PEs) and/or community mobilizers (CMs) and outreach educators (OEs) to conduct awareness activities in communities. They meet the target groups and hold discussions with them regarding HIV/AIDS/ STIs and safer injecting practices, safer sex practices and other related topics (Table 8.1). They also distribute IEC materials, condoms, and refer the target group to drop-in centers and STI treatment services. Some also carry new needles/syringes for distribution among the IDUs.

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

| Meeting with Peer Educators (PE) or Outreach Educators (OE) | N | % |
|---|---|---|
| **Met/discussed/interacted with PE or OE in the last 12 months** | | |
| Yes | 245 | 81.7 |
| No | 55 | 18.3 |
| **Total** | **300** | **100.0** |
| **Activities performed while with PE/OEs** | | |
| Discussion on how HIV/AIDS is/isn't transmitted | 210 | 85.7 |
| Discussion on safe injecting behavior | 161 | 65.7 |
| Was given syringe | 95 | 38.8 |
| Was given condom | 93 | 38.0 |
| Discussion on how STI is/isn't transmitted | 70 | 28.6 |
| Demonstration on using condom correctly | 49 | 20.0 |
| Discussion on regular/non-regular use of condom | 47 | 19.2 |
| Discussion on giving up drugs | 6 | 2.4 |
| Was suggested to stay at rehabilitation center | 6 | 2.4 |
| Was given alcohol pad/swab | 5 | 2.0 |
| Was given HIV related pamphlet/poster | 5 | 2.0 |
| Was given distilled water | 3 | 1.2 |
| Others | 7 | 2.9 |
| **Total** | **245** | ***** |
| **Organizations represented by PE/OEs** | | |
| Naulo Ghumti | 77 | 31.4 |
| AHH | 71 | 29.0 |
| Namuna | 62 | 25.3 |
| INF Nepalgunj | 34 | 13.9 |
| Nagarjun Development Council | 23 | 9.4 |
| Change Team | 20 | 8.2 |
| Aastha | 14 | 5.7 |
| SAHARA Nepal | 7 | 2.9 |
| Paschim Tara Nepal | 9 | 3.7 |
| Thagil | 5 | 2.0 |
| Watch | 3 | 1.2 |
| Wisdom Foundation | 3 | 1.2 |
| Life Line Help Group | 3 | 1.2 |
| Krishi Evem Gram Bikash Sasthan (KEGVS) India | 3 | 1.2 |
| N-SARC | 3 | 1.2 |
| Youth Vision | 2 | 0.8 |

| Meeting with Peer Educators (PE) or Outreach Educators (OE) | N | % |
|---|---|---|
| Others | 13 | 5.3 |
| **Total** | **245** | * |
| **Frequency of meeting with PE or OE** | | |
| Once | 3 | 1.2 |
| 2-3 times | 44 | 18.0 |
| 4-6 times | 36 | 14.7 |
| 7-12 times | 36 | 14.7 |
| More than 12 times | 126 | 51.4 |
| **Total** | **245** | **100.0** |

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

Around eight in ten respondents (81.7%) had met PE/OEs at least once in the past year. In these meetings 85.7 percent had been told about how HIV/AIDS is/is not transmitted from one person to another, while 65.7 percent had discussed safer injecting behaviors. The PE/OEs had also given them new syringes (38.8%) and condoms (38%).

While 31.4 percent of these IDUs had met PE/OEs from Naulo Gumti, 29 percent had met those who had come from AHH, and 25.3 percent from Namuna. It is further evident from Table 8.1 that the IDUs meet the PE/OEs quite often, as 51.4 percent of IDUs had met PE/OEs more than 12 times in the past year.

## 8.2 Drop-in-Centers

Drop-in-centers (DICs) are another important component of HIV prevention programs. The DICs not only provide a safe space for the target communities to socialize but are also the site for educational and counseling activities (Table 8.2). The DICs offer a number of services to the target groups, including group counseling, group classes, group discussions, individual counseling, and video shows on STIs/HIV/AIDS. Certain NGOs also run needle exchange programs through their DICs. The IDUs are also provided IEC materials and condoms at the DICs.

**Table 8.2: DIC Visiting Practices in the Past Year**

| DIC Visiting Practices | N | % |
|---|---|---|
| **Visit ed a DIC in the last 12 months** | | |
| Yes | 232 | 77.3 |
| No | 68 | 22.7 |
| **Total** | **300** | **100.0** |
| **Participated activities at DIC** | | |
| Collected a new syringe | 192 | 82.8 |
| Collected condoms | 113 | 48.7 |
| Participated in discussion on HIV transmission | 87 | 37.5 |
| Learnt about safe injecting behavior | 83 | 35.8 |
| Watched television | 66 | 28.4 |
| Learnt about the correct way of using condom | 38 | 16.4 |
| Watched film on HIV/AIDS | 17 | 7.3 |
| Collected medicine | 13 | 5.6 |
| Participated in discussion on reducing drug intake | 5 | 2.2 |
| Played | 5 | 2.2 |
| Went to have treatment | 4 | 1.7 |
| Others | 8 | 3.4 |
| **Total** | **232** | * |
| **Name of organizations that run the visited DIC** | | |
| Naulo Ghumti | 74 | 31.9 |
| AHH | 73 | 31.5 |
| Namuna | 61 | 26.3 |
| INF Nepalgunj | 31 | 13.4 |

| DIC Visiting Practices | N | % |
|---|---|---|
| Nagarjun Development Council | 18 | 7.8 |
| Change Team | 13 | 5.6 |
| Thagil | 9 | 3.9 |
| N-SARC | 7 | 3.0 |
| Paschim Tara | 4 | 1.7 |
| Community Support Group | 3 | 1.3 |
| Others | 15 | 6.5 |
| **Total** | **232** | * |
| **Frequency of visits to the DICs** | | |
| Once | 5 | 2.2 |
| 2-3 times | 32 | 13.8 |
| 4-6 times | 35 | 15.1 |
| *7-12 times* | 36 | 15.5 |
| More than 12 times | 124 | 53.4 |
| **Total** | **232** | **100.0** |

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

In the past year, 77.3 percent of IDUs had paid a visit to a DIC. The majority of them (82.8%) had been to a DIC to collect a new syringe. While 48.7 percent had collected condoms, 37.5 percent had participated in discussions related to HIV transmission, and another 35.8 percent of IDUs had also learnt about safer injecting behavior.

Around 31 percent of the respondents had visited DICs run by Naulo Ghumti (31.9%) and AHH (31.5%). Others had been to Namuna DIC (26.3%) and to INF DIC at Nepalgunj (13.4%). Although a few of the IDUs (2.2%) had visited a DIC just once, the rest had been more than once in the past year. This included 53.4 percent of IDUs who had visited DICs more than once a month on average in the year preceding the survey.

## 8.3 STI Clinics

The IDUs who engage in unsafe sexual encounters are at risk of contracting certain sexually transmitted infections (STIs). Timely detection of STIs may prevent serious health problems. There are different clinics being run by different government agencies as well as non-government organizations that provide STI testing and treatment facilities. Some of these programs specifically target certain MARPs, while some are meant for everyone.

The majority of the IDUs (93.7%) had, however, not been to an STI clinic in the past year. Among the few (6.3%) who had visited an STI clinic, the majority received a physical examination to detect STIs (73.7%) and had given a blood sample for STI identification (42.1%) at the clinic (Table 8.3). Some also participated in discussions regarding STI transmission (31.6%) and the use of condoms (26.3%).

**Table 8.3: STI Clinic Visiting Practices in the Past Year**

| STI Clinic Visiting Practices | N | % |
|---|---|---|
| **Visited any STI clinic in the last 12 months** | | |
| Yes | 19 | 6.3 |
| No | 281 | 93.7 |
| **Total** | **300** | **100.0** |
| **Participated activities at STI clinic** | | |
| Physical examination conducted for STI identification | 14 | 73.7 |
| Blood tested for STI | 8 | 42.1 |
| Participated in discussion on STI transmission | 6 | 31.6 |
| Participated in discussion on regular/non-regular use of condom | 5 | 26.3 |
| Discussion on safe injecting behavior | 2 | 10.5 |
| Took a friend | 1 | 5.3 |
| Others | 8 | 42.1 |
| **Total** | **19** | ***** |
| **Name of organizations that run the visited STI clinic** | | |
| Private clinic | 6 | 31.6 |
| Bheri hospital | 4 | 21.1 |
| Naulo Ghumti | 4 | 21.1 |
| N-SARC | 3 | 15.8 |
| NRCS | 1 | 5.3 |
| Others | 4 | 21.1 |
| **Total** | **19** | ***** |
| **Frequency of visits to STI clinics** | | |
| Once | 11 | 57.9 |
| 2-3 times | 8 | 42.1 |
| **Total** | **19** | **100.0** |

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

Around three in ten of these IDUs (31.6%) had visited private STI clinics. Others had been to Bheri hospital and Naulo Ghumti clinic (21.1% each) and to Nepal STD and AIDS Research Center/N-SARC (15.8%).

Around 58 percent of these respondents had visited an STI clinic only once in the past year.

## 8.4 VCT Centers

There are a number of VCT centers that provide HIV/AIDS and STI testing along with pre- and post-test counseling to IDUs and other MARPs. These centers form an integral part of the HIV/AIDS prevention program. Such centers provide information related to HIV/AIDS/STI transmission and also have treatment facilities. Certain IEC materials and condoms are also distributed through some of these centers.

Overall, 28.3 percent of IDUs had visited a VCT center in the past year. The majority of these (90.6%) had given a blood sample for HIV testing. They had also received pre-HIV test counseling (84.7%), post-HIV test counseling and their HIV test result (69.4% each) when they had visited these centers. Among those IDUs who had visited a VCT center in the past year, 31.8 had visited the Namuna VCT center, while 29.4 percent had been to Naulo Ghumti VCT center. More than one half had been to a VCT center only once (57.6%), while 35.3 percent had visited the centers two or three times in the past year (Table 8.4).

**Table 8.4: VCT Visiting Practices in the Past Year**

| VCT Visiting Practices | N | % |
|---|---|---|
| **Visited VCT center in the last 12 months** | | |
| Yes | 85 | 28.3 |
| No | 215 | 71.7 |
| **Total** | **300** | **100.0** |
| **Participated activities at VCT** | | |
| Gave blood sample for HIV test | 77 | 90.6 |
| Received pre- HIV test counseling | 72 | 84.7 |
| Received post HIV test counseling | 59 | 69.4 |
| Received HIV test result | 59 | 69.4 |
| Received information on safe injecting behavior | 24 | 28.2 |
| Received counseling on using condom correctly in each sexual intercourse | 20 | 23.5 |
| Took a friend | 9 | 10.6 |
| Got information on HIV/AIDS window period | 3 | 3.5 |
| Others | 1 | 1.2 |
| **Total** | **85** | ***** |
| **Name of the organization that run the visited VCTs** | | |
| Namuna | 27 | 31.8 |
| Naulo Ghumti | 25 | 29.4 |
| INF | 8 | 9.4 |
| N-SARC | 7 | 8.2 |
| FPAN | 5 | 5.9 |
| Hospital | 5 | 5.9 |
| WATCH | 4 | 4.7 |
| FHI | 4 | 4.7 |
| NNSWA | 3 | 3.5 |
| NRCS | 2 | 2.4 |
| Others | 7 | 8.2 |
| **Total** | **85** | ***** |
| **Frequency of visits to VCTs** | | |
| Once | 49 | 57.6 |
| 2 - 3 times | 30 | 35.3 |
| More than 3 times | 6 | 7.1 |
| **Total** | **85** | **100.0** |

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

## 8.5 Participation in HIV/AIDS Awareness Programs

A number of HIV/AIDS awareness activities such as workshops, training sessions, talk-programs and street dramas are conducted by various government agencies as well as by non-government organizations. Some of these programs specifically target the most at-risk populations, while some include everyone.

The IDUs were also asked if they had ever participated in any HIV/AIDS awareness programs. A total of 31.7 percent of respondents had participated in at least one HIV/AIDS awareness-raising program or in a similar community event. Almost half (49.5%) had taken part in AIDS Day celebrations. Some IDUs had participated in Condom Day celebrations (27.4%) and HIV/AIDS-related workshops (27.4%); in training (24.2%); and in group discussions (23.2%).

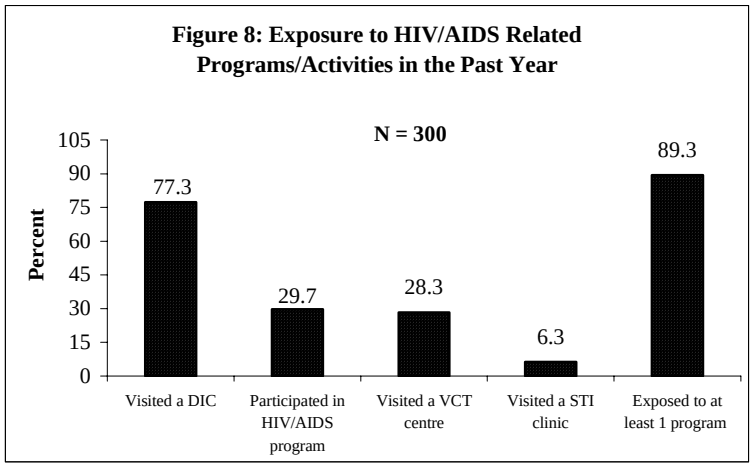
Among those IDUs who had participated in such events around three in ten IDUs (29.5%) reported taking part in events organized by Naulo Ghumti, while 18.9 percent had participated in activities conducted by Namuna. When asked about the frequency of such participation in the past year, 29.7 percent of IDUs said they had participated at least once while 70.3 percent of them had not taken part at all in any activities in the past year (Table 8.5).

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

| Participations in HIV/AIDS Awareness Programs | N | % |
|---|---|---|
| **Ever participated in HIV/AIDS awareness raising program or community events** | | |
| Yes | 95 | 31.7 |
| No | 205 | 68.3 |
| **Total** | **300** | **100.0** |
| **Participated activities** | | |
| AIDS Day celebration | 47 | 49.5 |
| Condom Day celebration | 26 | 27.4 |
| Street drama | 26 | 27.4 |
| HIV/AIDS related training | 23 | 24.2 |
| Group discussions | 22 | 23.2 |
| HIV/AIDS related Workshops | 4 | 4.2 |
| Condom use demonstration | 3 | 3.2 |
| Others | 4 | 4.2 |
| **Total** | **95** | ***** |
| **Name of the organizations that conducted such activities** | | |
| Naulo Ghumti | 28 | 29.5 |
| Namuna | 18 | 18.9 |
| AHH | 14 | 14.7 |
| INF | 13 | 13.7 |
| Change Team | 7 | 7.4 |
| SAHARA | 4 | 4.2 |
| N-SARC | 4 | 4.2 |
| WATCH | 3 | 3.2 |
| Recovery Nepal | 3 | 3.2 |
| NRCS | 3 | 3.2 |
| Richmond Fellowship | 2 | 2.1 |
| Nagarjun Development Council | 2 | 2.1 |
| Can't Say | 2 | 2.1 |
| Others | 18 | 18.9 |
| **Total** | **95** | ***** |
| **Frequency of participation in such programs in past 12 months** | | |
| Once | 42 | 14.0 |
| 2-3 times | 40 | 13.3 |
| 4-6 times | 7 | 2.3 |
| Did not participate | 211 | 70.3 |
| **Total** | **300** | **100.0** |

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

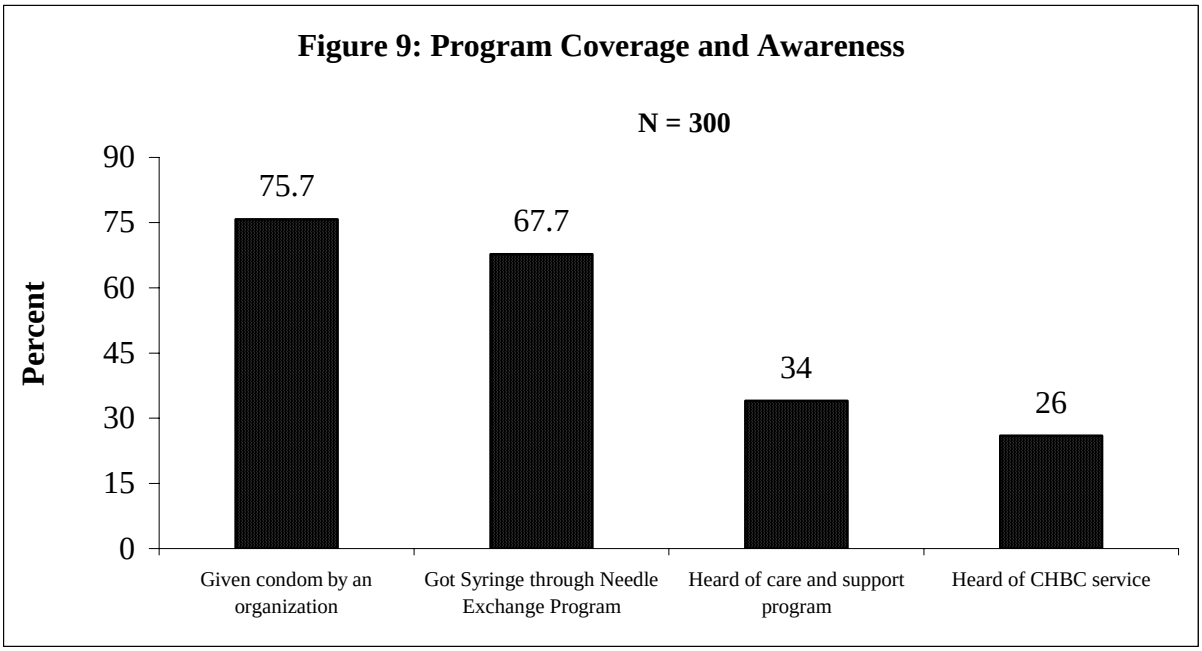
Figure 8 compares the exposure level of the IDUs to different program components of ongoing HIV/AIDS preventive and awareness initiatives. Overall, 89.3 percent of IDUs had participated in at least one of these targeted HIV/AIDS prevention activities in the West and Far-West Terai. The majority (81.7%) had met and /or interacted with PE/OEs in the past year. Around seven in 10 of them (77.3%) had also visited a DIC in the year preceding the survey. Comparatively, a smaller proportion of IDUs had participated in HIV/AIDS-related programs (29.7%) and had visited a VCT center (28.3%). Only a few IDUs (6.3%) had visited an STI clinic in the past year.




Furthermore, as seen in Figure 9, 75.7 percent of IDUs had received a condom from an organization at least once in the past year, 67.7 percent of them had received a

new syringe from a PE/OE or other staff from a Needle Exchange Program during the same span of time. At the same time, 34 percent of IDUs had ever heard about a care and support program that provides ART (Antiretroviral therapy) services and information related to the therapy to HIV – positive people while 26 percent of IDUs had heard about Community Home Based Care services provided to HIV – positive people.

**Figure 9: Program Coverage and Awareness**



# CHAPTER – 9.0: A COMPARATIVE ANALYSIS OF SELECTED CHARACTERISTICS

This chapter compares data on selected indicators to analyze changes between the first, second and third rounds of IBBS among IDUs in the Western to Far Western Terai highway districts of Nepal. It specifically deals with trends in HIV and STI prevalence over the years. Socio-demographic characteristics, drug-injecting behaviors, needle/syringe practices, and condom use of study participants have also been analyzed.

## 9.1 Socio-Demographic Characteristic

The demographic characteristics of the IDUs indicate a more or less similar pattern in all three rounds of the survey. More than half of the respondents in all three rounds (58.7% in 2005, 67.3% in 2007 and 63.7% in 2009) were over 25 years of age. The median age of the respondents was 25 years in the first round and 27 years in the second and third rounds.

The overall educational status of the respondents was not significantly different between the three rounds. A little over one-fourth of the IDUs had passed the primary level of education in all three rounds (26% in 2005, 25.7% in 2007 and 27% in 2009). However, there was a slight increase in the proportion of IDUs who had completed secondary level schooling in the third round (37.7% in 2005, 35.3% in 2007 and 43.3% in 2009). Similarly, while in the previous two rounds, over one in ten IDUs was illiterate (11.3% in 2005 and 14% in 2007), a relatively smaller proportion of IDUs (6.3%) were illiterate in the third round (Table 9.1).

**Table 9.1: Socio-Demographic Characteristics**

| Socio-Demographic Characteristics | First round (2005) | | Second round (2007) | | Third round (2009) | |
|---|---|---|---|---|---|---|
| | N=300 | % | N=300 | % | N=300 | % |
| **Age** | | | | | | |
| < 25Yrs. | 124 | 41.3 | 98 | 32.7 | 109 | 36.3 |
| >25 years | 176 | 58.7 | 202 | 67.3 | 191 | 63.7 |
| **Median age** | **25** | | **27** | | **27** | |
| **Education** | | | | | | |
| Secondary | 113 | 37.7 | 106 | 35.3 | 130 | 43.3 |
| Primary | 78 | 26.0 | 77 | 25.7 | 81 | 27.0 |
| SLC and above | 61 | 20.3 | 60 | 20.0 | 54 | 18.0 |
| Illiterate | 34 | 11.3 | 42 | 14.0 | 19 | 6.3 |
| Literate only | 14 | 4.7 | 15 | 5.0 | 16 | 5.3 |
| **Ethnicity** | | | | | | |
| Chhetri/Thakuri | 91 | 30.3 | 76 | 25.3 | 72 | 24.0 |
| **Occupational caste** | 41 | 13.7 | 44 | 14.7 | 33 | 11.0 |
| Tamang/Magar/Sherpa | 36 | 12.0 | 37 | 12.3 | 31 | 10.3 |
| Brahmin | 31 | 10.3 | 31 | 10.3 | 44 | 14.7 |
| Terai caste | 30 | 10.0 | 26 | 8.7 | 29 | 9.7 |
| Musalman | 26 | 8.7 | 32 | 10.7 | 35 | 11.7 |
| Gurung/Rai/Limbu | 20 | 6.7 | 17 | 5.7 | 22 | 7.3 |
| Newar | 16 | 5.3 | 23 | 7.7 | 22 | 7.3 |
| Chaudhary/Tharu | 6 | 2.0 | 3 | 1.0 | 7 | 2.3 |
| Giri/Puri/Sanyasi | 2 | 0.7 | 4 | 1.3 | 5 | 1.7 |
| Majhi/Sunuwar | 0 | 0.0 | 3 | 1.0 | 0 | 0.0 |
| Thakali | 0 | 0.0 | 2 | 0.7 | 0 | 0.0 |
| Marwadi | 0 | 0.0 | 1 | 0.3 | 0 | 0.0 |
| Others | 1 | 0.3 | 1 | 0.3 | 0 | 0.0 |

The ethnic/caste composition of the IDUs has not changed significantly since 2005. In the sample IDUs from Chhetri/Thakuri cast were 30.3 percent in the first round, 25.3 percent in the second round, and 24 percent in the third round. Similarly, the proportion of other caste/ethnic groups differed only slightly between all three rounds.

## 9.2 Drug Injecting Practices

Most of the IDUs in all three rounds had been injecting drugs for more than a year, with the average duration being 4.3 years in 2005, 5.5 years in 2007, and 5.9 years in 2009. Those IDUs who had been injecting for less than two years made up 25 percent of the study participants in 2005, 18.7 percent in 2007 and 21.3 percent in 2009. However, the proportion of IDUs injecting for five or more years increased from 28 percent in 2005 to 44 percent in 2007 and 51.3 percent in 2009.

The median age of the respondents at their first injection was 21 years in 2005 and 2009, while it was 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, which again increased to 46.3 percent in 2009 (Table 9.2).

**Table 9.2: Drug Injecting Practices**

| Drug Injecting Practice | First round (2005) | | Second round (2007) | | Third round (2009) | |
|---|---|---|---|---|---|---|
| | N=300 | % | N=300 | % | N=300 | % |
| **Duration of drug injection habit** | | | | | | |
| Up to 2 years | 75 | 25 | 56 | 18.7 | 64 | 21.3 |
| 2-5 years | 141 | 47 | 112 | 37.3 | 82 | 27.3 |
| > 5 years | 84 | 28 | 132 | 44.0 | 154 | 51.3 |
| **Average duration years** | **4.3** | | **5.5** | | **5.9** | |
| **Age at first drug injection** | | | | | | |
| Up to 20 years | 126 | 42.0 | 116 | 38.7 | 139 | 46.3 |
| 21 + years | 174 | 58.0 | 184 | 61.3 | 161 | 53.7 |
| **Median age** | **21** | | **22** | | **21** | |

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

Data relating to the injecting practices of the study population in all the rounds show that the majority of the respondents had avoided unsafe injecting behavior such as injecting with others' previously used needles/syringes (81 percent in 2005, 89.7% in 2007 and 88.3% in 2009); and using needles/syringes kept in public places (84.7% in 2005, 95.7% in 2007 and 92.3% in 2009). Although the findings indicate a positive trend since the first round, comparison between the data of the second and third rounds show that the proportion of respondents involved in risky injecting practices has increased slightly since the second round. In 2007, 10.3 percent of the IDUs had ever used a needle/syringe that had been used by others, while in 2009, 11.7 percent had done so. At the same time, 4.3 percent of respondents had ever used a needle/syringe kept in a public place in 2007, while 7.7 percent IDUs had done so in 2009.

Nevertheless, IDUs who had not shared their needle/syringe with anyone else in the past week increased from 70.7 percent in the first round to around 88 percent in second as well as in the third round of the survey (Table 9.3).

The proportion of respondents who had cleaned a previously used syringe in the past week to re-use it had decreased since the first round (38.7 percent in 2005, 22 percent in 2007 and 15.3 percent in 2009).

**Table 9.3: Syringe Using and Sharing Practice in Past Week**

| Needle/Syringe Use in the Past Week | First round (2005) | | Second round (2007) | | Third round (2009) | |
|---|---|---|---|---|---|---|
| | N = 300 | % | N = 300 | % | N = 300 | % |
| **Used a needle/syringe that had been used by another** | | | | | | |
| Never Used | 243 | 81.0 | 269 | 89.7 | 265 | 88.3 |
| Ever Used | 57 | 19.0 | 31 | 10.3 | 35 | 11.7 |
| **Used a needle/syringe that had been kept in public place** | | | | | | |
| Never Used | 254 | 84.7 | 287 | 95.7 | 277 | 92.3 |
| Ever Used | 46 | 15.3 | 13 | 4.3 | 23 | 7.7 |
| **Number of needle/syringe shared partners** | | | | | | |
| None | 212 | 70.7 | 265 | 88.3 | 266 | 88.7 |
| Two or more partners | 88 | 29.3 | 35 | 11.7 | 34 | 11.3 |
| **Re-used needle/syringe in the past week** | | | | | | |
| Yes | 116 | 38.7 | 66 | 22.0 | 46 | 15.3 |
| No | 184 | 61.3 | 234 | 78.0 | 254 | 84.7 |

## 9.4 Condom Use with Different Partners

Condom use was more consistent in the past year's sexual contacts with FSWs than with non-regular and regular partners. At the same time, very few IDUs had used condoms consistently with regular partners in all three rounds.

Overall, consistent condom use was highest with female sex workers followed by with non-regular sex partners. While over two fifths of IDUs who had sexual contact with female sex workers in the past year had used a condom consistently in the first and the second round (46.5% and 48.4%), 51 percent of them reported so in the third round. At the same time, around three in ten respondents had used condoms consistently with non-regular female sex partners in the year preceding the survey in all three rounds (31.5% in 2005, 39.3% in 2007 and 37.3% in 2009). However, consistent use of condom with regular partners was still low among IDUs (3.9% in 2005, 7% in 2007 and 8.7% in 2009) throughout the three rounds.

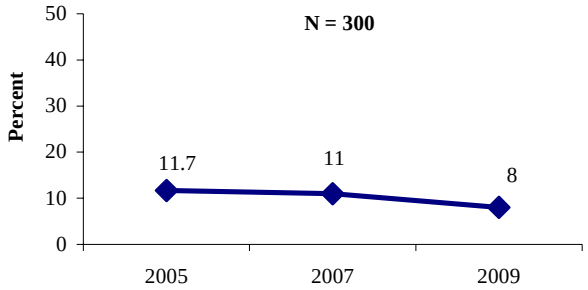
**Table 9.4: Consistent Use of Condom with Different Sex Partners in the Past Year**

| Consistent Use of Condom | First round (2005) | | Second round (2007) | | Third round (2009) | |
|---|---|---|---|---|---|---|
| | N | % | N | % | N | % |
| **Use of condom with regular female sex partners during past 12 months** | | | | | | |
| Every time | 5 | 3.9 | 10 | 7.0 | 11 | 8.7 |
| Sometime – never | 123 | 96.1 | 133 | 93.0 | 115 | 91.3 |
| **Total** | **128** | **100.0** | **143** | **100.0** | **126** | **100.0** |
| **Use of condom with non-regular female sex partners during past 12 months** | | | | | | |
| Every time | 17 | 31.5 | 22 | 39.3 | 31 | 37.3 |
| Sometime – never | 37 | 68.5 | 34 | 60.7 | 52 | 62.7 |
| **Total** | **54** | **100.0** | **56** | **100.0** | **83** | **100.0** |
| **Use of condom with female sex workers during past 12 months** | | | | | | |
| Every time | 47 | 46.5 | 44 | 48.4 | 49 | 51.0 |
| Sometime – never | 54 | 53.5 | 47 | 51.6 | 47 | 49.0 |
| **Total** | **101** | **100.0** | **91** | **100.0** | **96** | **100.0** |

## 9.5 HIV Prevalence among IDUs

HIV prevalence among IDUs has decreased slightly since the first round. As seen in Table 9.5, the IBBS showed that the rate of infection was 11.7 percent in 2005, 11 percent in 2007 and eight percent in 2009 (Figure 10).

**Figure 10: HIV Prevalence among IDUs in Three Rounds of IBBS**




Among different study centers in the Western to Far-Western Terai, Banke still had the highest HIV prevalence (30% in 2005, 31.7% in 2007 and 23.3% in 2009); followed by Rupandehi (13.3% in 2005, 10% in 2007 and 8.3% in 2009). As in the previous two rounds, no HIV prevalence was found in the Kailali and Kanchanpur study centers. The third round of the survey included 30 respondents from Taulihawa (Kapilbastu) but no HIV prevalence was found among any of these respondents either.

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

| Study Center | First round (2005) | | | Second round (2007) | | | Third round (2009) | | |
|---|---|---|---|---|---|---|---|---|---|
| | Total Sample | HIV+ | % | Total Sample | HIV + | % | Total Sample | HIV+ | % |
| Study centers (Districts) | | | | | | | | | |
| Bhairahawa/Butawal (Rupandehi) | 150 | 20 | 13.3 | 140 | 14 | 10.0 | 120 | 10 | 8.3 |
| Taulihawa (Kapilbastu) | na | na | na | na | na | na | 30 | 0 | 0.0 |
| Nepalgunj (Banke) | 50 | 15 | 30.0 | 60 | 19 | 31.7 | 60 | 14 | 23.3 |
| Dhanagadi (Kailali) | 50 | 0 | 0.0 | 50 | 0 | 0.0 | 50 | 0 | 0.0 |
| Bhimdutta Nagar (Kanchanpur) | 50 | 0 | 0.0 | 50 | 0 | 0.0 | 40 | 0 | 0.0 |
| **Total** | **300** | **35** | **11.7** | **300** | **33** | **11.0** | **300** | **24** | **8.0** |

# CHAPTER – 10.0: CONCLUSIONS AND RECOMMENDATIONS

## 10.1 Summary of Major Findings

HIV prevalence among IDUs in the West and Far-West Terai was eight percent. Three percent had a history of syphilis, while 1.7 percent had active syphilis.

Married IDUs had a significantly higher prevalence of HIV (12.2%) compared to unmarried ones (3.9%); likewise, those IDUs who had been injecting drugs for more than five years had significantly higher HIV prevalence (12.3%) than those who had injected for a shorter span of time (less than 2 years - 1.6%; 2-5 years - 4.9%).

The age of the IDUs ranged from 16 to 50 years, with a median age of 27. Overall, 54 percent of respondents were between 20 to 29 years; while adolescents of 19 years or younger made up eight percent of the respondents.

Forty-two percent of the IDUs were currently married and overall, 41 percent were living with their spouse or with a female sexual partner at the time of the survey.

The IDUs had been injecting drugs for 5.9 years on average. Two in ten IDUs (21.3%) had been injecting for less than two years.

Over 90 percent of IDUs had avoided risky injecting practices in the last three injections. Likewise, the past week's injecting practices also showed that the majority of the IDUs had avoided risky injecting behaviors such as injecting with a used needle/syringe (88.3%); injecting with a syringe kept at a public place (92.3%); and sharing needles/syringes with others (88.7%).

Around eight in ten IDUs (81.7%) had injected in places outside their district or in other countries. Among these, 17.6 percent had used a pre-used needle/syringe and 19.6 percent had given their needle/syringe to someone else after use.

Ninety-eight percent of IDUs had maintained sexual contact before the date of survey. Around 87 percent were below 20 when they had their first sexual encounter.

Over one half (52.8%) had sexual contact with two or more female partners in the past year.

Fifty-one percent had used condoms consistently with female sex workers, compared to 37.3 percent with non-regular female sex partners and 8.7 percent with regular female sex partners in the past year.

Fifty-six IDUs (18.7%) had ever had at least one STI symptom. Among them, 58.9 percent had not sought any treatment.

73.3 percent of IDUs were aware of all three main prevention measures, namely, (A) abstinence from sex, (B) being faithful to one sex partner and (C) and regular condom use. Fifty-six percent of IDUs were aware of ‘B,C,D,E,F’ (a healthy looking

person can be infected with HIV, 'D'; a person cannot get the HIV virus from a mosquito bite, 'E'; and sharing meal with an HIV-infected person does not transmit the HIV virus, 'F').

Ninety four percent of IDUs knew that a confidential HIV testing facility was available in their community. However only 37.3 percent of them had ever taken a HIV testing before.

Altogether, 81.7 percent of IDUs had met peer/outreach educators at least once in the past year; while 77.3 percent had visited a drop-in center (DIC), and 28.3 percent had visited a VCT (Voluntary Counseling and Testing) center in the past year. However, only 6.3 percent of IDUs had been to an STI clinic before.

29.7 percent of respondents had participated in at least one HIV/AIDS-related program or similar community event in the past year.

## 10.2 Recommendations

Based on the findings of this study, some specific recommendations have been made. These recommendations, however, are not definitive and comprehensive; they simply highlight the study's key findings and are complementary to some of the strategies/programs that are already being implemented.

- This survey shows that 46.3 percent of IDUs had their first injection at the age of less than 21 years and that 61.3 percent had completed at least secondary education. HIV/AIDS educational efforts targeting youths/adolescents should be continued and updated. Information and awareness campaigns through wider distribution of IEC materials like pamphlets, posters, banners, radio and television programs should be continued targeting this specific age group.

- The majority of the IDUs were aware of the risk associated with unsafe injecting and needle sharing behavior, as approximately 95 percent of them had avoided high-risk injecting behavior such as injecting with a previously used syringe and injecting with a syringe left at a public place in the last three injections. Information services and prevention activities should be further improved with emphasis on behavioral change activities and health promotion intervention. Harm reduction initiatives such as wider dissemination of information on safe injecting behavior and needle exchange programs should be continued and further expanded.

- Consistent use of condoms was reported by only 8.7 percent of IDUs with regular partners, 37.3 percent with non-regular partners and 51 percent with commercial sex workers in the past year. When stating their reasons for not using condoms, around four in ten (40.6%) had not considered it necessary to use a condom during the last sexual encounter with a regular partner, while 45.2 percent each cited unavailability of condoms and their dislike for the product as reasons for not using condoms with a sex worker; and 32.4 percent again cited non-availability of condoms as reasons for not using one

with non-regular partners. Barriers to inconsistent condom use should be explored further to design intervention strategies to address them.

- Thirty-five percent of IDUs had ever been to a de-addiction treatment center; 50.5 percent of them had received their last treatment less than a year before the survey. More consideration is needed to integrate rehabilitation support and a psychosocial component (counseling, support groups) into the continuum of services for IDUs.

- While 37.3 percent had never been tested for HIV, around 60 percent of those IDUs who had experienced STI symptoms had never sought any treatment. Client-friendly STI testing and treatment facilities and VCT centers should be made available to encourage more IDUs to voluntarily come forward for such services.

- Radio and television are important sources that can be mobilized for disseminating necessary information to the target groups, as more than 90 percent of IDUs named these mediums as their information sources regarding condoms and information on HIV/AIDS. PE/OEs are good contact points to disseminate necessary information and IEC materials to the target population. Around 82 percent of respondents had met them at least once in the past year. Mobilization of PEs/OEs should continue in order to provide one-to-one education for behavioral change and safe injecting and sexual practices.

- Around seven in ten IDUs (77.3%) had visited a DIC at least once in the past year. More DICs with expanded activities at central locations could cover more of the target group.

- Around 68 percent of respondents had never participated in any HIV/AIDS-related programs. Ongoing programs should be expanded geographically and the capacity building of local NGOs should be emphasized in order to increase access to more of the target population.

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# ANNEXES

# ANNEX – 1: Indicators for Monitoring and Evaluation Framework for HIV

| Prevention 1: HIV related risk and transmission among IDUs | Results (%) | Indicators |
|---|---|---|
| **Impact/outcome indicators** | | |
| Percentage of IDUs who are HIV infected | 8.0 | PMP/ASHA/ National/UNGASS |
| Percentage of IDUs who had adopted behavior that reduce transmission of HIV i.e. who both avoided using non sterile injecting equipment and used condom in the last sex in last month | 33.0 | National |
| Percentage of IDUs reporting the use of sterile injecting equipment in the last time they injected | 96.2 | UNGASS |
| Percentage of IDUs who avoided sharing injecting equipment in the last month | 84.7 | ASHA |
| Percentage of IDUs who used condom at last sex with female sex worker in the last 12 months | 67.7 | PMP/ASHA |
| Percentage of IDUs who say they consistently use a condom when they have sex with a female sex worker in the last 12 months | 51.0 | PMP/ASHA |
| Percentage of IDUs who both correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV transmission | 56.0 | PMP/ASHA/ National/UNGASS |
| **Output/coverage indicators** | | |
| Percentage of IDUs reached with targeted HIV prevention service programs (BCC with OE/PE or DIC or STI Clinics or VCT or community events / trainings or drug treatment or rehabilitation) | 89.3 | ASHA/National |
| Percentage of IDUs reached with HIV prevention programs (Knows where to receive HIV test and received condoms) | 71.3 | UNGASS |
| Percentage of IDUs who received an HIV test in the last 12 months and who know their results | 23.3 | UNGASS |

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

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

n = required minimum sample size per survey round

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

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

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

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

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

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

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

# ANNEX – 3: Questionnaire

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

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

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

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

Would you be willing to participate?

1. Yes 2. No

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

**Operational definition of respondent:**

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

**Male IDUs under the age of 16 will be excluded**.

**Code Respondents: (Kathmandu and Pokhara Sites only)**

Seed: 1. Yes 2. No

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

☐☐☐☐☐

☐☐☐☐☐

☐☐☐☐☐

---

Did the interviewee abandon the interview?

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

Interviewer Name: _____ Code Interviewer: _____

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

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

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

1. Yes → When? _____Days ago **(make sure that it was interviewed by New ERA and close the interview)**
2. No **(continue interview**)

002. Respondent's ID #: ☐☐☐☐☐☐

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

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

_____

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

1. Yes 2. No

002.4 How long you have been injecting drugs?

Years ☐☐ Months ☐☐

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

**003. Interview Location**
(to be filled by interviewer)

003.1 Name of location _____

003.2 Ward No. ☐☐

003.3 VDC/Municipality: _____

003.4 District: _____

## 1.0 BACKGROUND OF RESPONDENT

| Q.N. | Questions | Coding Categories | Skip |
|---|---|---|---|
| 101 | Where are you living now?<br><br>**(Write current place of residence: Ward No. Tole, Lane etc.)** | Ward..... ☐☐<br>VDC/Municipality_____<br>_<br>District_____<br>__ | |
| 101.1 | How long have you been living continuously at this location? | Month ..... ☐☐☐<br>Always (since birth) ..... 0<br>Others (Specify)_____<br>..... 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 ..... ☐☐<br>**(write the completed years)** | |
| 104 | What is your educational status? | Illiterate..... 0<br>Literate ..... 19<br>Grade ..... ☐☐<br>**(write the completed grade)** | |
| 105 | What is your caste?<br>**(Specify Ethnic Group/Caste)** | Ethnicity/Caste _____<br>Code No. ..... ☐☐ | |
| 106 | What is your current marital status? | Never married ..... 1<br>Married ..... 2<br>Divorced/Permanently separated. 3<br>Widow..... 4<br>Other (Specify)_____<br>..... 96 | → 108 |
| 107 | How old were you when you first got married? | Age ..... ☐☐<br>**(write the completed years)** | |
| 108 | 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<br>(Specify)_____..... 96<br>No response ..... 99 | 110 |
| 109 | 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 |
| 109.1 | If yes, what is the sex of your partner? | Male..... 1<br>Female ..... 2 | |
| 110 | During the past one-month how often have | Every day ..... 1 | |

| Q.N. | Questions | Coding Categories | Skip |
|---|---|---|---|
| | you had drinks containing alcohol?<br><br>**(Such as beer, local beer etc.)** | More than once a week..... 2<br>Less than once a week ..... 3<br>Never drink..... 4<br>Others (Specify)_____<br>..... 96<br>No response..... 99 | |

## 2.0 DRUG USE

| Q.N. | Questions | Coding Categories | Skip |
|---|---|---|---|
| 201 | How long have you been using drugs?<br><br>**(Drug means medicine not used for treatment purpose rather used for Intoxication**) | Years..... ☐☐<br>Months..... ☐☐<br>No response ..... 99 | |
| 202 | How old were you when you first injected drugs?<br>**(Include self-injection or injection by another)** | Years ..... ☐☐<br>*(write the completed years)* | |
| 203 | How long have you been injecting drugs?<br><br>**(Include self-injection or injection by others**) | Years..... ☐☐<br>Months..... ☐☐<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 syringe/needle at any time in the last month? | Yes ..... 1<br>No..... 2 | |
| 203.3 | 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?
***(Read the list, multiple answer possible)***

| Description | Used in Last-Week | | | | Injected in Last-Week | | | |
|---|---|---|---|---|---|---|---|---|
| | YES | NO | DK | NR | YES | NO | DK | NR |
| 1. Tidigesic | 1 | 2 | 98 | 99 | 1 | 2 | 98 | 99 |
| 2. Brown Sugar | 1 | 2 | 98 | 99 | 1 | 2 | 98 | 99 |
| 3. Nitrosun | 1 | 2 | 98 | 99 | 1 | 2 | 98 | 99 |
| 4. Ganja | 1 | 2 | 98 | 99 | 1 | 2 | 98 | 99 |
| 5. Chares | 1 | 2 | 98 | 99 | 1 | 2 | 98 | 99 |
| 6. White Sugar | 1 | 2 | 98 | 99 | 1 | 2 | 98 | 99 |
| 7. Phensydyl | 1 | 2 | 98 | 99 | 1 | 2 | 98 | 99 |
| 8. Calmpose | 1 | 2 | 98 | 99 | 1 | 2 | 98 | 99 |
| 9. Diazepam | 1 | 2 | 98 | 99 | 1 | 2 | 98 | 99 |
| 10. Codeine | 1 | 2 | 98 | 99 | 1 | 2 | 98 | 99 |
| 11. Phenergan | 1 | 2 | 98 | 99 | 1 | 2 | 98 | 99 |
| 12. Cocaine | 1 | 2 | 98 | 99 | 1 | 2 | 98 | 99 |
| 13. Proxygin | 1 | 2 | 98 | 99 | 1 | 2 | 98 | 99 |
| 14. Effidin | 1 | 2 | 98 | 99 | 1 | 2 | 98 | 99 |
| 15. Velium 10 | 1 | 2 | 98 | 99 | 1 | 2 | 98 | 99 |
| 16. Lysergic Acid Dithylamide(LSD) | 1 | 2 | 98 | 99 | 1 | 2 | 98 | 99 |
| 17. Nitrovate | 1 | 2 | 98 | 99 | 1 | 2 | 98 | 99 |
| 18. Combination (Specify) ___ | 1 | 2 | 98 | 99 | 1 | 2 | 98 | 99 |
| 96. Others (Specify)_____ | 1 | 2 | 98 | 99 | 1 | 2 | 98 | 99 |

| | | | |
|---|---|---|---|
| 204.1 | In the last month, did you switch from one drug to another? | Yes ..... 1<br>No..... 2 → 205 | |

| Q.N. | Questions | Coding Categories | Skip |
|---|---|---|---|
| 204.1.1 | If yes, which drug? | From _____drug<br>To _____drug | |
| 204.1.2 | What is the reason for switching? | _____<br>_____<br>_____<br>_____<br>___ | |
| 205 | How many times would you say you injected drugs yesterday? | Times..... ☐ → 209<br>Not injected ..... 0 | |
| 206 | Would you like to tell me why you did not injected yesterday? | _____<br>_____<br>_____<br>_____<br>___ | |
| 207 | How many days ago did you get injected? | Days ago ..... ☐☐ | |
| 208 | How many times would you say you injected drugs on the last day? | Times..... ☐ | |
| 209 | During the past one-week how often would you say you injected drugs? | Once a week ..... 1<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 |
|---|---|---|---|
| 301 | Think about the times, you have injected drugs yesterday/last day. How many times did you inject drugs on that day?<br>**(Fill the number from answer to Q. 205 or 208 and verify by asking the respondent)** | Times ..... ☐☐ | |
| 302 | The lat time you injected, how did you get that syringe/needle?<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 after he use ..... 2<br>I picked it up from a public place which was left there by others+ 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>(write the name of Organization)<br>I used a needle/syringe which I purchased ..... 6<br>I reused my own needle/syringe 7<br>My friend gave new needle/ | |

| Q.N. | Questions | Coding Categories | Skip |
|---|---|---|---|
| | | syringe ..... 8<br>Others (Specify) _____ 96<br>Don't know ..... 98<br>No response..... 99 | |
| 302.1 | If you were in a group the last time that you injected, how many different people in the group do you think used the same needle? | Nos. ..... ☐☐<br>Injected alone..... 95 | |
| 303 | Think about the time before 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 after he use ..... 2<br>I picked it up from a public place which was left there by others+ ..... 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>(write the name of Organization)<br>I used a needle/syringe which I purchased ..... 6<br>I reused my own needle/syringe 7<br>My friend gave new needle/ syringe ..... 8<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 had used the same needle? | Nos. ..... ☐☐<br>Injected alone..... 95 | |
| 304 | Now think about the time before **(before Q. 303**), 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 after he use..... 2<br>I picked it up from a public place which was left there by others+ 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>**(write the name of Organization)**<br>I used a needle/syringe which I purchased ..... 6<br>I reused my own needle/syringe 7<br>My friend gave new needle/syringe..... ...8<br>Others (Specify) _____96<br>Don't know ..... 98<br>No response..... 99 | |

| Q.N. | Questions | Coding Categories | Skip |
|---|---|---|---|
| 304.1 | That time If you were in a group, how many different people in the group do you think had used the same needle? | Nos. ..... ☐☐<br>Injected alone..... 95 | |
| 305 | Think about the times, you have injected drugs during the past one-week. How often was it with a needle or syringe that had previously been used by someone else? | Every times ..... 1<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 |
|---|---|---|---|---|---|---|
| 305.1 | When you injected drug during the past week, how often did you use a syringe/needle that had been left in public place? **(Public place means places other than the IDU's home that are used to hide syringe/needle)** | Every times ..... 1<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? | | | | | |
| | ***Read out list. Multiple answers possible*** | **Yes** | **No** | **DK** | **NR** | |
| | 1. Your usual sexual partner | 1 | 2 | 98 | 99 | |
| | 2. A sexual partner who you did not know | 1 | 2 | 98 | 99 | |
| | 3. A friend | 1 | 2 | 98 | 99 | |
| | 4. A drugs seller | 1 | 2 | 98 | 99 | |
| | 5. Unknown Person | 1 | 2 | 98 | 99 | |
| | 96. Other (Specify) _____ | 1 | 2 | 98 | 99 | |
| 307 | With how many different injecting partners did you share needles or syringes in the past one-week? **(Count everyone who injected from the same syringe)** | Number of partners..... ☐☐<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? **(By that I mean a syringe that was filled without you witnessing it)** | 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? **(front-loading/back-loading/ splitting)** | 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 |
|---|---|---|---|
| 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 |
| 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 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 |
| 315 | Where can you obtain new unused needles and syringes?<br><br>**(Do not read out list. Multiple answers possible. Probe only with "Anywhere Else?")** | Drugstore ..... 1<br>Other shop ..... 2<br>Health worker..... 3<br>Hospital ..... 4<br>Drug wholesaler/drug 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 of ____11<br>Steal from legitimate source (hospital./pharmacy) ..... 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 (or another country)? | Yes..... 1<br>No..... 2<br>Don't' remember ..... 98<br>No response..... 99 | 316.4 |
| 316.1 | If yes, in which other cities/districts did you inject, including cities in other countries? | Cities_____<br>_<br>Districts_____<br>_<br>Country<br>_____ | |
| 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 |
|---|---|---|---|
| 316.3 | When you injected drugs in another city, how often did you give 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 | |
| 316.4 | In the last 12 months, have any of an outreach worker, a peer educator or a staff from a needle exchange program given you a new needle/syringe? | Yes ..... 1<br>No..... 2<br>Don't' remember ..... 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 now.....…2<br>Have never received treatment.....3<br>No response..... 99 | 401 |
| 318 | How many months ago did you last receive treatment or help for your drug use? | Months ..... ☐☐<br>Don't know ..... 98<br>No response..... 99 | |
| 319 | What kind of treatment or help you received? **(Do not read out the responses, probe asking, "Are there any other kinds of treatment that you've received?" Multiple Answers Possi** | | |

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

## 4.0 SEXUAL HISTORY

| Q.N. | Questions | Coding Categories | Skip |
|---|---|---|---|
| 401 | How old were you at your first sexual intercourse? | Years old ..... ☐☐<br>***(Write completed years)***<br>Never had sexual intercourse..... 0<br>Don't know ..... 98<br>No response..... 99 | → 601 |

| Q.N. | Questions | Coding Categories | Skip |
|---|---|---|---|
| 402 | Have you had sexual intercourse in the last 12 months? | Yes ..... 1<br>No ..... 2<br>No response ..... 99 | 404 |
| 403 | In total, how many different female sexual partners have you had sex in the last 12 months? | Total Number ..... ☐☐ | |
| 403.1 | How many were female "regular partners"?<br><br>**(Your wife or live-in sexual partners)** | Number ..... ☐☐<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 ..... ☐☐<br>Don't know ..... 98<br>No response ..... 99 | |
| 403.3 | How many were female "non-regular partners"?<br>**(Sexual partners, you are not married to and have never lived with and did not have sex in exchange for money)** | Number ..... ☐☐<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 |
| 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 |
| 404.2 | With how many different male partners have you had anal sex in the last 12 months? | Number ..... ☐☐<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 |
|---|---|---|---|
| 501. | Did you have sex with female regular partner (wife or live-in 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..... ☐☐<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><br>501.4 |
| 501.3 | Why did not you or your partner use a condom that time? | Not available ..... 1<br>Too expensive ..... 2 | |

| Q. N. | Questions | Coding Categories | Skip |
|---|---|---|---|
| | **(Do not read the possible answers, multiple answer possible)** | 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 ever had anal sex with your female regular partners? | Yes ..... 1<br>No ..... 2<br>Don't know ..... 98<br>No response ..... 99 | 502 |
| 501.7 | The last time you had anal-sex with a female regular partner did you and your partner use a condom? | Yes ..... 1<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? ***(Check 403.2 and circle the response of Q. 502)*** | Yes ..... 1<br>No ..... 2 → | 503 |
| 502.1 | **Think about the female sex workers that you have had sex in the past one-month.**<br>In total how many female sex workers you sold sex in exchange for money or drugs? | No. ..... ☐☐<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. ..... ☐☐<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 ..... ☐☐<br>Don't know ..... 98<br>No response ..... 99 | |
| 502.3 | The last time you had sex with a female sex worker did you and your partner use a condom? | Yes ..... 1 → 502.5<br>No ..... 2<br>Don't know ..... 98<br>No response ..... 99 | 502.5 |
| 502.4 | Why did not you and your partner use a condom that time? | Not available ..... 1<br>Too expensive ..... 2<br>Partner objected ..... 3<br>Don't like them ..... 4<br>Used other contraceptive ..... 5 | |

| Q. N. | Questions | Coding Categories | Skip |
|---|---|---|---|
| | **(Do not read the possible answers, multiple answer possible)** | 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 injected 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 |
| 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>**(Check 403.3 and circle the response of Q. 503)** | 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..... ☐☐<br>Don't know..... 98<br>No response..... 99 | |
| 503.2 | The last time you had sex with a female non-regular partner did you and your partner use a condom? | Yes ..... 1<br>No..... 2<br>Don't know..... 98<br>No response..... 99 | → 503.4<br>503.4 |
| 503.3 | Why did not you and your partner use a condom that time?<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-time ..... 2<br>Sometimes ..... 3<br>Never used..... 4 | |

| Q. N. | Questions | Coding Categories | Skip |
|---|---|---|---|
| | | Don't know..... 98<br>No response..... 99 | |
| 503.5 | Did you know whether your female non-regular partners also injected 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 |
| 503.7 | The last time you had anal sex with a female non-regular partner, did you and your partner use a condom? | Yes ..... 1<br>No..... 2<br>Don't know..... 98<br>No response..... 99 | |

| Q.N. | Questions | Coding Categories | Skip |
|---|---|---|---|
| 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 ..... ☐☐<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 → 504.4<br>No..... 2<br>Don't know ..... 98<br>No response..... 99 → 504.4 | |
| 504.3 | Why didn't you use condom at that time?<br>**(Don't read possible answer, multiple answer possible)** | Not available ..... 1<br>Too expensive..... 2<br>Partner objected..... 3<br>Don't like ..... 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 during 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 injected 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<br>Don't know ..... 98<br>No response.....99 → 507 | |
| 505.1 | If yes, did you or your partner use a condom when you had last sex in the last month? | Yes..... 1<br>No..... 2<br>Don't know ..... 98<br>No response.....99 | |
| 506 | In the last month, how often did you or your partner use a condom when you had sex? | Every times ..... 1<br>Almost every-times ..... 2<br>Sometimes ..... 3<br>Never used..... 4<br>Don't know ..... 98<br>No response..... 99 | |

| Q.N. | Questions | Coding Categories | Skip |
|---|---|---|---|
| 507 | With whom did you have the last sexual intercourse? | FSW ..... 1<br>Regular partner ..... 2<br>(Wife or live in sexual partner)<br>Other female friend ..... 3<br>Male friend ..... 4<br>Did not have sexual contact in the past year ..... 5<br>Don't Know ..... 98<br>No response ..... 99 | → 601 |
| 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, 501.7, 501.8, 502.3, 502.5, 502.8, 502.9, 503.2, 503.4, 503.7, 503.8, 504.4, 505.1, 506, 508 and circle responses in Q. 601 & 602)***

| Q. N. | Questions | Coding Categories | Skip |
|---|---|---|---|
| 601 | Have you ever heard of a condom?<br><br>**(Show picture or sample of condom)** | Yes ..... 1<br>No ..... 2<br>Don't know ..... 98<br>No response ..... 99 | 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>No ..... 2<br>No response ..... 99 | 701 |
| 604 | **From which place or people, you can obtain condoms?**<br><br>**(**Multiple answer possible. Don't read the list but 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 doctor 8<br>Friend ..... 9<br>*Pan Pasal* ..... 10<br>Others (Specify) _____ 96<br>No response ..... 99 | |
| 604.1 | Did any organization give you condom in the last 12 months? | Yes, free of cost ..... 1<br>Yes, by taking money ..... 2<br>No ..... 3 | |
| 605 | How long would it take ***(from your house or the place where you work)*** to obtain a condom? | Less than 30 minutes ..... 1<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 |
|---|---|---|---|
| 701 | Have you ever heard of diseases that can be transmitted through sexual intercourse? | Yes ..... 1<br>No ..... 2<br>No response ..... 99 | 704 |
| 702 | Can you describe any symptoms of STIs in women?<br><br>**(Do not read possible answers, multiple answers possible.)** | Lower 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 genital discharge/burning urination during the last 12 months? | Yes ..... 1<br>No ..... 2<br>Don't know ..... 98<br>No response ..... 99 | 705 |
| 704.1 | Currently, do you have 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 |
| 705.1 | Currently, do you have genital ulcer/sore blister? | 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>Never had such symptoms ..... 4<br>Others (Specify) _____ 96 | |

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

| Q. N. | Questions | Coding Categories | Skip |
|---|---|---|---|
| 801 | Have you ever heard of HIV or the disease called AIDS? | Yes ..... 1<br>No ..... 2<br>No response ..... 99 | |
| 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 fried 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 during each sexual act? | 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 only 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>**(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 |
| 812 | What can a pregnant woman do to reduce the risk of transmission of HIV to her unborn child?<br>**(Do not read the possible answers, multiple answer possible)** | Take medication (Antiretroviral) ..... 1<br>Others (Specify) _____ 96<br>Don't know ..... 98<br>No response ..... 99 | |
| 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 | |

| Q. N. | Questions | Coding Categories | Skip |
|---|---|---|---|
| 813.2 | Can a person get HIV by shaking hand with an infected person? | 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 have a confidential HIV test? **(By confidential, I mean that no one will know the result if you don't want him or her to know it.)** | Yes ..... 1<br>No ..... 2<br>Don't know ..... 98<br>No response ..... 99 | |
| 814.1 | Do you know where to go for HIV test? | Yes ..... 1<br>No ..... 2 | |
| 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 |
| 816 | Did you voluntarily take up the HIV test, or were you required to have the test? | Voluntary ..... 1<br>Required ..... 2<br>No response ..... 99 | |
| 817 | | | |
| 817.1 | | | |
| 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 48 months ..... 4<br>Don't know ..... 98<br>No response ..... 99 | |
| 819 | Please do not tell me the result, but did you find out the result of your HIV test? | Yes ..... 1 → 901<br>No ..... 2<br>No response ..... 9 → 901 | |
| 819.1 | 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<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>***(Read the following list, multiple answers possible)*** | | | |
| | **Source of Information** | **Yes** | **No** | |
| | 1. Radio | 1 | 2 | |
| | 2. Television | 1 | 2 | |
| | 3. Newspapers/Magazines | 1 | 2 | |
| | 4. Pamphlets/Posters | 1 | 2 | |
| | 5. School/Teachers | 1 | 2 | |
| | 6. Health Worker/Volunteer | 1 | 2 | |
| | 7. Friends/Relatives | 1 | 2 | |
| | 8. Work Place | 1 | 2 | |
| | 9. People from NGO | 1 | 2 | |
| | 10. Video Van | 1 | 2 | |
| | 11. Street Drama | 1 | 2 | |
| | 12. Cinema Hall | 1 | 2 | |
| | 13. Community Event/Training | 1 | 2 | |
| | 14. Bill Board/Sign Board | 1 | 2 | |
| | 15. Comic Book | 1 | 2 | |
| | 16. Community Workers | 1 | 2 | |
| | 96. Others (Specify) _____ | 1 | 2 | |
| 902 | Has anyone give you following information or items in the past year?<br>***(Multiple answer possible, read the list)*** | | | |
| | **Items** | **Yes** | **No** | |
| | 1. Condom | **1** | **2** | |
| | 2. Brochure/Booklets/Pamphlets about HIV/AIDS | 1 | 2 | |
| | 3. Information about HIV/AIDS | 1 | 2 | |
| | 96. Others (Specify) _____ | 1 | 2 | |

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

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

| Q. N. | Questions | Coding Categories | Skip |
|---|---|---|---|
| 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 well?<br>**Knowing someone is defined as being able to contact them, and having had contact with them in the past 12 months** | Total _____ ☐☐☐<br>Don't know..... 98<br>No response ..... 99 | 1008 |
| 1005.1 | Among them, 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..... ☐☐ | |
| 1007 | Again, among those, please try to estimate the number of people by religion: | Hindu ..... ☐☐<br>Buddhist ..... ☐☐<br>Muslim ..... ☐☐<br>Christian ..... ☐☐<br>Others (Specify) _____<br>..... ☐☐ | |
| 1008 | How is the person who gave you the coupon related to you ?<br><br>**(For Pokhara and Kathmandu only)** | A close friend ..... 1<br>A friend ..... 2<br>Your sexual partner ..... 3<br>A relative ..... 4<br>A stranger..... 5<br>Others (Specify)_____ 96<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 Mobilizes (CM) or Community Educators (CE) in the last 12 months? | Yes ..... 1<br>No ..... 2<br>No response ..... 99 | →1105 |
| 1102 | What activities did these PE or OEs involve you in when you met them?<br><br>**(Multiple answers. DO NOT READ the possible answers)** | 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)_____<br>96 | |
| 1103 | Do you know which organization were they from?<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) _____<br>96 Don't know ..... 98 | |
| 1104 | How many times have these PE, OE, CM and/or CE met you in the last 12 months? | Once ..... 1<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>**Drop-In Center (DIC), Information Center (IC), Counseling Center (CC)** | Yes ..... 1<br>No ..... 2 | → 1109 |
| 1106 | What did you do when you went to the out reach center (DIC,IC or CC) in the 12 last months ?<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)_____<br>..... 96 | |

| Q. N. | Questions | Coding Categories | Skip to Q.N. |
|---|---|---|---|
| 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) _____<br>96 Don't know 98 | |
| 1108 | How many times have you visited out reach centers (DIC, IC or CC) in the last 12 months? | Once 1<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 | What did you do when you visited such STI clinic?<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)_____<br>96 | |
| 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 | |

| Q. N. | Questions | Coding Categories | Skip to Q.N. |
|---|---|---|---|
| 1114 | What did you do when you visited such VCT center/s?<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) _____<br>96 Don't know ..... 98 | |
| 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 | If Yes, What activities did you participate in?<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) _____<br>96 | |

| Q. N. | Questions | Coding Categories | Skip |
|---|---|---|---|
| 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) _____<br>96 Don't know ..... 98 | |
| 1120 | How many times have you participated in such activities in the last 12 months? | Not participated within last year.....0<br>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 programs 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 |
|---|---|---|---|
| 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 to keep it 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 him/her? | 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 one of your colleagues has HIV but he/she is not very sick, Do you think he/she should be allowed to continue working? | Yes ..... 1<br>No ..... 2<br>Don't know ..... 98 | |

| Q. N. | Questions | Coding Categories | Skip |
|---|---|---|---|
| | | No response..... 99 | |

# ANNEX – 4: Oral Informed Consent

## Oral Informed Consent Form for male Injecting Drug Users

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

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

**Principal Investigator/s:**

Satish Raj Pandey, FHI/Nepal
Laxmi Bilas Acharya, FHI/Nepal

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**Introduction**

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

### Information about the Research

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

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

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

**Possible Risks**

The risk of participating in this study is the minor discomfort during blood drawing. Providing blood sample does not put you at any other risk. Some of the questions we ask make you feel uncomfortable to answer them. You are free not to answer such questions and also to stop participating in the research at any time you want to do so. You might feel some mental

stress after getting your test results. But at such time you will get counseling on HIV and STI through a qualified counselor. They will provide information about STIs and counseling for any mental stress you have.

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

**Possible Benefits**

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

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

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

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

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

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

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

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

**Your Rights as a Participant**

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

**VOLUNTEER AGREEMENT**

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

_____ _____

Signature of witness Date

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

_____ _____

Signature of Person Who Obtained Consent Date

# ANNEX – 5: Study Centers

| District | Study centers | No. of Centers | Sample Covered | Total Sample |
|---|---|---|---|---|
| Kanchanpur | Bhimdutta Nagar | 6 | 40 | 300 |
| Kailali | Dhangadhi | | 50 | |
| Banke | Nepalgunj | | 60 | |
| Rupandehi | Bhairahawa | | 35 | |
| | Butwal | | 85 | |
| Kapilbastu | Taulihawa | | 30 | |

# ANNEX – 6: HIV Prevalence by Study Districts

| Study Center (District) | Third Round (2009) | | |
|---|---|---|---|
| | Total Sample | HIV+ | % |
| Bhairawa/Butwal (Rupandehi) | 120 | 10 | 8.3 |
| Taulihawa (Kapilbastu) | 30 | 0 | 0.0 |
| Nepalgunj (Banke) | 60 | 14 | 23.3 |
| Dhangadi (Kailali) | 50 | 0 | 0.0 |
| Bhimdutta Nagar (Kanchanpur) | 40 | 0 | 0.0 |
| Total | 300 | 24 | 8.0 |

# ANNEX – 7: Clinical/Lab Checklist

**CONFIDENTIAL**

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

**Clinical/Lab Checklist**

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

**Name of Clinician:** _____

Name of Lab Technician: _____

(33A) Clinical TEST (B) Specimen Collection

| | | Yes | No |
|---|---|---|---|
| Weight : _____Kg. | Pre-test counseled | 1 | 2 |
| B.P. : _____mm of Hg | Blood Collected for HIV & Syphilis | 1 | 2 |
| Pulse : _____ | Date & place for post-test results given | 1 | 2 |
| Temperature: _____º 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 – 8: Participation in Post Test Counseling

| Date | Counseling Center | Total Sample | Client Counseled | | Client with HIV+ | Client with HIV- |
|---|---|---|---|---|---|---|
| | | | N | % | | |
| 15 – 22 March. 2009 | Bhimdutta Nagar | 40 | 4 | 10.0 | 0 | 4 |
| 03 – 22 March. 2009 | Dhangadhi | 50 | 4 | 8.0 | 0 | 4 |
| 12 February – 01 March, 2009 | Nepalgunj | 60 | 8 | 13.3 | 3 | 5 |
| 10 – 16 February, 2009 | Bhairahawa | 35 | 4 | 11.4 | 0 | 4 |
| 17 – 27 February, 2009 | Butwal | 85 | 11 | 12.9 | 0 | 11 |
| 06 – 13 March, 2009 | Taulihawa | 30 | 4 | 13.3 | 0 | 4 |
| **Total** | | **300** | **35** | **11.7** | **3** | **32** |

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

| Reasons for not injected on the Previous day* | n = 150 | % |
|---|---|---|
| Lack of money | 77 | 51.3 |
| To quit slowly | 24 | 16.0 |
| Taking other medicines | 22 | 14.7 |
| Unavailability/ Lack of drugs | 19 | 12.7 |
| Busy in house work/lack of time | 16 | 10.7 |
| Illness | 2 | 1.3 |
| Guardian not allowed to go outside | 2 | 1.3 |
| Not a regular User (do drugs sometimes only) | 2 | 1.3 |
| Fear of being arrested by police | 2 | 1.3 |
| Others | 2 | 1.3 |

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

## ANNEX – 10: Typical Injecting Points

| Typical Injection Points | N=300 | % |
|---|---|---|
| Calf | 171 | 57.0 |
| Upper arm | 45 | 15.0 |
| Thigh | 44 | 14.7 |
| Wrist | 24 | 8.0 |
| Forearm | 4 | 1.3 |
| Palm | 4 | 1.3 |
| Finger | 3 | 1.0 |
| Armpit | 2 | 0.7 |
| Others | 3 | 1.0 |

# ANNEX – 11: Gathering Place to Inject Drugs

| Gathering Places of IDUs to Inject Drugs | N=300 | % |
|---|---|---|
| Forest/Bushes/Farm/Lawn/bamboo field | 127 | 42.3 |
| Own room/friend's room/ drug seller's/ user's home | 51 | 17.0 |
| River bank/Slum area/Pond | 20 | 6.7 |
| Toilet/Public toilet | 18 | 6.0 |
| Around school/Campus | 6 | 2.0 |
| Sunauli (India) | 55 | 18.3 |
| Gaurifanta (India) | 3 | 1.0 |
| Rupediya (India) | 8 | 2.7 |
| Temple | 4 | 1.3 |
| Others | 8 | 2.7 |

# ANNEX – 12: Combination of Different Drugs Injected

| Types of Combinations | N=212 |
|---|---|
| Phenargan + Lubrigesic | 65 |
| Diazepam + Tidigesic + Hydrocole | 49 |
| Diazepam + Tidigesic + Phenargan | 20 |
| Diazepam + Phenargan + Lubrigesic | 15 |
| Diazepam + Lubrigesic + Hydrocole | 9 |
| Tidigesic + Phenargan + Hydrocole | 7 |
| Norphin + Diazepam + Phenargan | 6 |
| Diazepam + Tidigesic | 5 |
| Norphin + Phenargan | 3 |
| Tidigesic + Phenargan | 3 |
| Diazepam + Phenargan | 3 |
| Phenargan + Calmpose + Lubrigesic | 3 |
| Diazepam + Calmpose | 2 |
| Tidigesic + Phenargan + Calmpose | 2 |
| Diazepam + Proxygin | 2 |
| Brown Sugar + Vitamin C | 2 |
| Fortwin + Stargun | 2 |
| Norphin + Avil + Diazepam + Spamindan | 1 |
| Tidigesic + Phenargan + Hydrocole | 1 |
| Norphin + Diazepam + Phenargan | 1 |
| Diazepam + Tidigesic + Calmpose | 1 |
| Tidigesic + Calmpose + Hydrocole | 1 |
| Phenargan + Lubrigesic + Hydrocole | 1 |
| Diazepam + Lubrigesic | 1 |
| Norphin + Phenargan + Hydrocole | 1 |
| Diazepam + Fortwin | 1 |
| Calmpose + Brown Sugar | 1 |
| Diazepam + Tidigesic + Brown Sugar + Vitamin C | 1 |
| Norphin + Diazepam + Nitrosun | 1 |
| Diazepam + Tidigesic + Proxygin | 1 |
| Norphin + Avil + Diazepam + Phenargan + Stargun | 1 |

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

## ANNEX – 13: Drug Switching Practice of IDUs and Reasons for Such Change

| Drug Switching Behavior of IDUs | N | % |
|---|---|---|
| **Switched from one drugs to another drugs in past month** | | |
| Yes | 8 | 2.7 |
| No | 292 | 97.3 |
| **Total** | **300** | **100.0** |
| **Name of old and new drugs** | | |
| Tidigesic to Brown Sugar | 2 | 25.0 |
| Norphin + Nitrovate to Brown Sugar | 1 | 12.5 |
| Diazepam + Tidigesic to Brown Sugar | 2 | 25.0 |
| Tidigesic to Proxyvon | 1 | 12.5 |
| Diazepam + Tidigesic + hydrocole to Norphin + Diazepam + hydrocole | 1 | 12.5 |
| Norphin + Diazepam to Brown Sugar + Corex + Nitrosun | 1 | 12.5 |
| **Total** | **8** | **100.0** |
| **Reasons for changing drugs** | | |
| Lack of money | 3 | 37.5 |
| Non-availability/scarcity of drugs | 5 | 62.5 |
| Others | 1 | 12.5 |
| **Total** | **8** | ***** |

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

## ANNEX – 14: Name of the Institution and Types of Treatment Received

| Types of Treatments / Types of Institutions n=105 | Residential Rehabilitation | Help for Cold turkey | Without drug | With other drug | Out Patient Counseling | Detoxification with Metha-done | Other treat-ment/ help |
|---|---|---|---|---|---|---|---|
| | % | % | % | % | % | % | % |
| Sahara Treatment Center | 18.1 | - | - | - | - | - | - |
| Richmond Fellowship | 17.2 | - | 1.9 | - | 1.0 | - | - |
| Lumbini Punarsthapana | 15.2 | - | - | - | - | - | - |
| Youth Vision | 4.8 | - | - | - | - | - | - |
| Naulo Ghumti | 3.8 | - | - | - | - | - | - |
| Happy Nepal Wisdom Foundation | 3.8 | - | - | - | - | - | - |
| International Nepal Fellowship | 2.9 | - | - | 4.8 | 4.8 | - | - |
| Tinal Chailence Rehab. centre | 2.5 | - | - | 1.0 | - | - | - |
| Nawa Kiran Ashram | - | - | - | 1.9 | - | - | - |
| Seren Foundation | 1.9 | - | - | - | - | - | - |
| LALS | 1.9 | - | - | - | - | - | - |
| Nawa Kiran Rehab. Centre | 1.0 | - | - | - | | - | - |
| Support and Care Centre | 1.0 | - | - | - | - | - | - |
| Own home | - | - | - | - | - | - | 1.0 |
| Don't Know | 1.9 | - | - | - | - | - | - |
| Others | 1.9 | 1.0 | 1.0 | 6.7 | 3.8 | 1.0 | - |
| Total | 77.1 | 1.0 | 2.9 | 14.3 | 9.5 | 1.0 | 1.0 |

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

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

| Reasons of not Using Condom in the Last Sexual Intercourse With: | N | % |
|---|---|---|
| **Regular partner** | | |
| Didn't think it was necessary | 39 | 40.6 |
| Used other contraceptive | 34 | 35.4 |
| Don't like them | 28 | 29.2 |
| Want to have child | 14 | 14.6 |
| Partner objected | 8 | 8.3 |
| Trust partner | 8 | 8.3 |
| Wife is pregnant | 1 | 1.0 |
| Not available | 1 | 1.0 |
| Others | 2 | 2.1 |
| **Total** | **96** | * |
| **Sex worker** | | |
| Not available | 14 | 45.2 |
| Don't like them | 14 | 45.2 |
| Didn't think of it | 3 | 9.7 |
| Trust own partner | 1 | 3.2 |
| Didn't think it was necessary | 1 | 3.2 |
| Others | 3 | 9.7 |
| **Total** | **14** | * |
| **With non- regular partner** | | |
| Not available | 11 | 32.4 |
| Don't like them | 9 | 26.5 |
| Didn't think it was necessary | 9 | 26.5 |
| Trust partner | 5 | 14.7 |
| Partner objected | 3 | 8.8 |
| Didn't think of it | 2 | 5.9 |
| Used other contraceptive | 1 | 2.9 |
| Others | 1 | 2.9 |
| **Total** | **34** | * |