Integrated Biological and Behavioral Surveillance (IBBS) Survey among People Who Inject Drugs (PWID- Male) in Western to Far Western Terai Highway Districts of Nepal

Round V

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Field Work Conducted by:

School of Planning, Monitoring, Evaluation and Research (SPMER)

The IBBS Surveys are part of the National HIV Surveillance Plan led by NCASC. The field work of the survey was carried out by School of Planning, Monitoring, Evaluation and Research with quality assurance from National Public Health Laboratory and with technical and financial assistance from the Global Fund with Save the Children International.

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ACRONYMS

AHH	Association for Helping the Helpless
AIDS	Acquired Immune-Deficiency Syndrome
ASHA	Advancing Surveillance, Policies, Prevention, Care & Support to Fight HIV/AIDS
CC	Community Centre
CMs	Community Mobilizers
DIC-	Drop-in-Centre
FSWs	Female Sex Workers
HBV	Hepatitis B Virus
HCV	Hepatitis C Virus
HIV	Human Immunodeficiency Virus
HTC	HIV Testing and Counseling Centre
IBBS	Integrated Biological and Behavioral Surveillance
IC	Information Centre
ID	Identification Number
KAPS	Key Affected 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
OE	Outreach Educator
PE	Peer Educator
PWIDs	People who inject drugs
PPS	Probability Proportional to Size
RPR	Rapid Plasma Regain
SACTS	STD/AIDS Counseling and Training Services
SLC	School Leaving Certificate
SPMER	School of Planning, Monitoring, Evaluation and Research
SPSS	Statistical Package for the Social Sciences
STI	Sexually Transmitted Infection
USAID	United States Agency for International Development
WHO	World Health Organization

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EXECUTIVE SUMMARY

The National Centre for AIDS and STD Control (NCASC) conducts Integrated Biological behavioral survey at regular interval among Key Affected Populations (KAPs). The existing National HIV and AIDS Strategy (2011-2016) identifies that People who Inject Drugs (PWIDs), Female Sex Workers (FSWs) and their clients, Male Labor Migrants (MLMs) and their spouses, and Men who have Sex with Men (MSM) are the key affected populations (KAPs) (NCASC, 2014). The surveys help to assess the prevalence of HIV and AIDS and STIs among them and the risk behavior related to it.

This is the fifth round of survey conducted among males who inject drugs in 7 highway districts in Terai from Western to Far-western region of Nepal. A total of 300 men were selected as the sample among the ones who met the criteria of the study population. The study found that there is a prevalence of HIV, Syphilis, Hepatitis B and Hepatitis C in the study population. The drug injecting and sexual risk behavior related to HIV and AIDS, STIs, HBV and HCV was assessed and the knowledge of the PWIDs related to prevention of HIV and AIDS, STIs and HCV and their behavior seeking health care was also identified.

Study Methodology

The present survey was carried out among the 300 PWIDs from the seven highway districts in Terai region in Nepal. It was carried out in Rupandehi and Kapilvastu district from Western Development region, Dang, Banke and Bardiya from Mid-Western development Region, and Kailali & Kanchanpur from Far-western Development Region. The survey follows similar sampling procedure that was used in the IBBS survey conducted among the PWIDs of 7 Terai districts on the Western Terai highway in the years 2005, 2007, 2009 and 2012. A two stage cluster sampling process was used to select the required sample population. Preliminary mapping exercise was carried out in the first phase of survey to develop the sampling frame.
In the first phase, during the mapping exercise, the research team visited at least three key informants including organizations which provided services to the PWIDs in local level to identify possible sites and number of PWIDs. Furthermore the researchers visited and observed the possible locations. After this, the researchers revisited the sites to reconfirm the information provided by the key informants. Besides, some information was also collected from local Non-Governmental Organizations (NGOs) and Community Based Organizations (CBOs) providing services to PWIDs pertinent to STIs, HIV and AIDS in the survey districts. Concerned government organizations and their representatives at the district and community level were also consulted for identification and authentication of hot spots and to estimate the size of PWIDs

On the basis of findings of preliminary mapping exercises, sampling frame was prepared. This frame was prepared based on estimation/enumeration of PWIDs. At least 20 PWIDs were enumerated and included in the survey cluster. The sites with smaller than 20 PWIDs was merged together with the nearest sites. Probability proportional to size (PPS) method was used to select 30 clusters based on the mapping exercise done by researchers in the first stage. In the second stage, 10 PWIDs were selected randomly from each cluster. Thus, a total of 300 PWIDs (10 from each cluster) were selected for the survey. Bardiya district was not selected for the survey purpose during PPS stage of sampling.

A clinic was established at a convenient location that was accessible from strategic points of each of the selected clusters. Each Clinic had 6 rooms - reception-1, interview room-2,

laboratory-1, STI Clinician room-1 and pre/post-test counseling room-1. The selected PWIDs were welcomed in the reception and a unique code number was provided to them. After this, they were guided to the interview room where a member of staff read out the consent form for them. It was then signed by the interviewer and the local motivator/mobilizer. The interview started after this. After completion of the interview they were led towards the pretest counseling room. After the pretest counseling, they were guided to the laboratory room. The lab had facility for drawing blood, centrifuging it for separating the serum and undergoing all the tests designated for the survey. After the blood (5 ml) was drawn in the lab, the PWID was sent to the STI Clinician who provided necessary Syndromic treatment of STIs as per National Guidelines on Case Management of STI (2014). After the result of the test was ready, the PWIDs were provided with the same and were provided posttest counseling according to the findings of the test results.

The participation of the PWIDs in the survey was voluntary. Twenty PWIDs who did not meet the study criteria or were not willing to participate in the study were excluded from the survey.

Laboratory Tests

Blood serum samples were tested using Determine HIV1/2 (Allere, Japan) as first test to detect antibodies against HIV. If the first test was negative, it was labeled as Negative. A second test was performed by using Uni-Gold HIV ½ (Trinity Biotech, Ireland) if the result of the first test was positive. In case of a tie between the first two test results, a third test was performed using STAT PAK (Chembio Diagnostics, USA) as a tie breaker.

Syphilis was tested using RPR. All the tests which came positive with RPR were tested further with serial serum dilution up to 64 times.

All the serum samples were tested for hepatitis B and Hepatitis C by the WHO certified rapid test kit. For Hepatitis B Hepacard kit, (J. Mitra and Company, India) was used. The test was reported positive if it was reactive. Similarly for Hepatitis C, HCV Serum/Plasma HVC TRI-DOT (J. Mitra and Company, India) was used and the test was reported as positive if it was reactive.

Key Findings

Socio Demographic Characteristics

The age range of the PWIDs was from 17 to 51 years. Their median age was 28 years while the mean age was 27 years with standard deviation of ± 8. Over half (50.3%) of the PWIDs were of the age group 20 to 29 years old while 11 percent of them were 19 years or below. Almost half (49.6%) of the PWIDs were ever married and majority (88.3%) of them were living with their family members at the time of survey.

Majority of them (84%) had formal education however 15 percent of them were illiterate. One in six (16.3 %) PWIDs had passed SLC or above.

STI/HIV/HBV Prevalence

The prevalence of HIV was 2.3 percent among the surveyed PWIDs. It was 11.7 percent in 2005, 11percent in 2007, 8 percent in 2009, 5 percent in 2012 and 2.4 percent in 2016. The data shows that there has been a significant decline in HIV prevalence over the period of time ($p<0.001$). All of the 7 (2.3%) HIV positive PWIDs were above 20 years, 6 were ever married and five were literate or had formal education. However, there was no significant relation between HIV and socio-demographic characteristics as age, marital status and literacy of the PWIDs. Six out of the seven HIV positive PWIDs were those who had been injecting drugs for over 5 years and five out of seven HIV positive PWIDs were injecting drugs for 1-6 times per week. However, none of these behaviors had a significant relationship with HIV.

Five of them had history of Syphilis while one of them had active Syphilis. The prevalence of Active Syphilis was found to decreasing over time. It was 1.7 percent in 2009, 1.3 percent in 2012 and has decreased to 0.3 percent in 2016.The prevalence of Hepatitis B was found to be 1.7 percent while 8 percent of them had Hepatitis C. Among the HCV positive PWIDs; 8.6 percent were above the age of 20 years, 11.4 percent were ever married and 4.7 percent were literate and a statistically significant ($p<0.05$) relationship was found between the marital status of the PWIDs with Hepatitis C infection. PWIDs who were ever married (11.4%) were more likely to have Hepatitis C than never married (4.6%) PWIDs.

Out of the 8 percent of Hepatitis C positive PWIDs, 18 percent had been injecting drugs for over 5 years and 8.4 percent of them injected drugs 1-6 times the week before the data was collected. Similarly, 15.8 percent of them had injected drugs with a previously used needle/syringe and 9.7 percent of them had injected drugs with a needle/syringe kept in public place at least once during week before the data was collected. A positive association was found with duration of drug use and Hepatitis C infection ($p<0.01$). The PWIDs who injected drugs for longer duration were more likely to develop Hepatitis C injection.

The study also assessed the relationship between sexual behavior and HIV positive PWIDs. Among the 7 HIV positive PWIDs, six had sex with a regular partner, six did not have sex with a non-regular partner and 6 did not have sex with a female sex worker.

The relationship between the sexual behavior and Hepatitis C positive PWIDs was assessed. During the past 12 months of the survey. Among 24 Hepatitis C positive PWIDs, 16 had a regular sex partner, 5 had a non-regular sex partner, and 8 had a FSW as a sex partner.

Among the 24 Hepatitis C positive PWIDS, 13 had one regular sex partner, 20 did not have a non- regular sex partner and 16 did not have a single FSW as a sex partner during the past 12 months, Both the number of types of sex partners and number of sex partners did not have statistical significance.

Drug Injecting Practices

The study revealed that the average duration of drug injecting practice among the drug users was 5.7 years. One third (33.3%) of them were injecting drugs for over 5 years and 44 percent were injecting drugs for a period 2-5 years. It was found that the median age of drug users was 21 years. Almost half (47.3%) reported that they had started injecting drugs before they reached 20 years. The comparison of age of first injection of drugs in the five rounds of the IBBS surveys showed that people are injecting drugs at an earlier age as compared to that of the past. The number of people injecting drugs for the first time before 20 years of age was 42 percent in

2005; 38.7 percent in 2007; 46.3 percent in 2009; 41.3 percent 2012; and it reached 47.3 percent in 2016.

The study also assessed the duration of drug injecting habit for less than two years and more than two years. It was found that the percentage of drug users for more than 2 years is greater than those using drugs for less than two years. This difference was found to be statistically significant ($p<0.001$).

The study found out that 93.7 percent the drug users were practicing safe injecting behaviors during their last injection. Among them, 51.7 percent reported to be using needle/syringe by purchasing it themselves and the remaining 42 percent were found to be using new needle syringe given to them by NGO staff/volunteers/friend.

Sixty two percent of them were found to be injecting in other parts of the country/out of the county in the past year of survey and only 25 percent of the PWIDs had ever sought for de-addiction treatment.

The needle/syringe practice in the past week was assed among the PWIDs during the five surveys. The study showed that some changes have taken over the years in needle exchange behavior of the drug users. The data shows that 12.7 percent of the drug users exchanged needles in 2016, it was 19 percent in 2005, 10.3 percent in 2007, 11.7 percent in 2009, and 10.3 percent in 2012. There is a statistically significant difference ($p<0.005$) between the needle/syringe ever used and never used in the past week.

Contrary to this, not much change has taken place in the use of the needles kept in public places, in the past week of survey. The data showed that 5.9 percent drug users used needles kept in public places in 2016. It was 15.3 percent in 2005; 4.3 percent in 2007, 7.7 percent in 2009, and 5 percent in 2012.

There have not been significant changes in the number of partners sharing needle/syringe in the week before the survey during the last five surveys in this population. 87.4 percent respondents reported that they did not share needle/syringe with their partners the week before the survey was conducted. The population doing so was 70.7 percent in 2005, 88.3 percent in 2007, 88.7 percent in 2009, and 90.3 percent in 2012.

Similarly, the study found out statistically significant decline ($p<0.001$) in the percentage of re-use of needle/syringe in week prior to the survey. Ten percentage of the respondents re-used the needle/syringe during this period in 2016, where as it was 38.7 percent in 2005, 22 percent in 2007, 15.3 percent in 2009, and 6 percent in 2012.

Sexual Behavior

The findings show that majority (95.7%) of the PWIDS had at least one sexual contact before the survey and among these 85.7 percent had had their first sex before they were 20 years.

Similarly, the study revealed that eighty three percent of the PWIDs had had sex with their regular partner, 40.5 percent of them with non-regular sex partner and almost half (49.3%) had had sexual intercourse with a female sex worker in the month of survey. Similarly, only 21.7

percent of the PWIDs had used condom consistently with their regular sex partner. The practice of consistent use of condom with their non-regular partner was 35.7 percent and 52.1 percent with the female sex workers. The comparison of data about the use of condom with the regular sex partners shows that there is s statistically significant changes ($p<0.001$) in the behavior of the respondents because the percentage of condom users was 3.9 percent in 2005, 7 percent in 2007, 8.7 percent in 2009, 42.9 percent in 2012 and 21.7 percent in 2016.

The trend of consistent condom use in non regular partner was 31.5 percent in 2005, 39.3 percent in 2007, 37.3 percent in 2009, 64.8 percent in 2012 and 35.7 percent in 2016. The comparison shows that there is a statically significant ($p<0.001$) difference in the practice of use of condoms in this category as well.

The use of consistent use of condom with FSWS was found to be 52.1 percent in 2016. It was 46.5 percent in 2005, 48.4 percent in 2007, 51 percent in 2009, and 70.3 percent in 2012. The finding is statistically significant with a p value <0.005.

STI and HIV/AIDS Awareness and Treatment Practices

The findings suggest that eighty-seven percent of the PWIDs had heard of STIs before the survey. Among them, 8.3 percent had genital discharge and 7.7 percent had genital ulcer/sore blister during the year of the survey. Seventeen of them were experiencing genital discharge and 10 of them had genital ulcer/sore blister during the survey as well.

Overall, only 43 percent had knowledge about how HIV transmission could be avoided (A: Abstinence from sexual contact, B: Being faithful to one partner and C: Using condom during each sexual contact). Regarding Knowledge of HIV, 85.3 percent knew that “a healthy-looking person can be infected with HIV (D), 65.7 percent of them knew that “a person cannot get the HIV virus from mosquito bite (E) and 89.9 percent of them knew that “sharing a meal with an HIV infected person does not transmit HIV virus (F)”. Overall, only 35.3 percent of them had Knowledge of BCDEF.

The findings suggest that the comprehensive knowledge about HIV has been decreasing overtime: Knowledge of ABC (measures to prevent HIV) was 77.3 percent in 2007 decreased to 73.3 percent in 2009, 72 percent in 2012 and 43 percent in 2016. Similarly, the knowledge of BCDEF (major modes of HIV transmission) was also found to be decreasing over time. It was 57 percent in 2007, 56 percent in 2009, and 43.3 percent in 2012 and has further decreased to 35.3 percent in 2016.

Sixty percent of the PWIDs had meet PE/OE, sixty nine percent of them had visited Drop-in Centers, 34.7 percent of them had visited HTC centre while only 5 percent of them had visited the STI Clinics in the survey year.

Knowledge regarding Hepatitis C

Less than half (43.7%) of the PWIDs responded that Hepatitis C could be transmitted through sex. The same percentage (43.7%) believed that use of condoms used during sex could protect against Hepatitis C. More than two third of the PWIDs (68.3%) knew that hepatitis C could be transmitted by sharing needles; and 55.7 percent were aware that hepatitis C could be transmitted through tattooing. Majority of the PWIDs (59.7%) knew that Hepatitis C can be cured while 36 percent were aware that herbal remedies would not cure hepatitis C.

CHAPTER 1: INTRODUCTION

1.1 Background

The National Centre for AIDS and STD Control had estimated that there were 39,249 People Living with HIV (PLHIV) in Nepal (NCASC, 2014). The prevalence of HIV infection among adult population in Nepal was only 0.20 percent (NCASC, ibid). Though HIV prevalence among general population in Nepal is low, Nepal's HIV epidemic is concentrated amongst the Key Affected Populations (KAPs). The existing National HIV and AIDS Strategy (2011-2016) identifies People who Inject Drugs (PWIDs), Female Sex Workers (FSWs) and their clients, Male Labor Migrants (MLM) and their spouses; and Men who have Sex with Men (MSM) as the key affected populations (KAPs) (NCASC, ibid). PWIDs, one of the major groups of KAPs practice high risk behaviors as unsafe needle/syringe sharing between injecting partners and also have habits of reusing needle/syringes previously used by them or those kept in public places. It has also been found that they also practice high risk sexual behaviors, multiple drug use and tattoos use. All these risk behaviors make them prone to HIV/STIs/HBV/HCV.

According to the National Surveillance Plan of NCASC, various rounds of IBBS survey have been conducted in different KAPs group in many districts. The previous four rounds of IBBS conducted among PWIDs in 7 Terai highway districts of Western to Far Western region show a decreasing trend in HIV frome 2005 to 2012. The findings of these surveys suggest that HIV infection among PWIDs in Western to Far Western Terai highway districts was 11.7 percent in 2005, 11 percent in 2007, 8 percent in 2009 and 5 percent in 2012.Similarly, a recent IBBBS survey conducted by NCASC in 2015 in Eastern region shows the prevalence of Hepatitis C to be alarmingly high in this group of population.

This report has documented the findings of the fifth round of IBBS in PWIDs of 7 Terai highway districts of Western to Far Western Region.

1.2 Objectives of the Survey

This survey was carried out to fulfill the following objectives:

The primary objectives were:

- To track the trend in the prevalence of STI and HIV infection among PWIDs;
- To measure the prevalence of Hepatitis B and Hepatitis C among PWIDs;
- To estimate the prevalence of sexual behaviors and injection behaviors related to HIV/STIs/HBV/HCV among PWIDs.

The secondary objectives were:

- To estimate the knowledge of HIV/STIs/HCV as well as sexual and injecting behaviors among PWIDs;
- To explore associations between high risk sexual and injecting risk behaviors with HIV or STI/HBV/HCV among PWIDs;
- To estimate the prevalence of STI syndromes among PWIDs.

The findings of this survey are aimed to be used for a better and timely intervention design to combat HIV/STIs/HBV/HCV prevalent in this population.

1.3 Rationale of the survey

IBBS survey helps to collect two distinct types of data (HIV, STI, HCV and HBV biological and behavioral) from a single set of participants and also helps to understand the existing/emerging dynamics of epidemic HIV so that appropriate interventions can be designed to prevent the spread of the virus. By linking biological data with behavioral data, IBBS survey is very effective in helping to understand the emerging trends on HIV and HIV-related risk behaviors among the KAP very effectively.

IBBS surveys are considered powerful tools to generate evidence based data. Findings of these surveys are widely used for designing HIV interventions, to monitor HIV programs, and for estimation and to project the epidemic of HIV in many countries including Nepal. Estimation and projection of HIV prevalence in the country are also based on IBBS survey data. Data on key National HIV Indicators are determined using IBBS survey results. Furthermore, results of these surveys have wider application as these are utilized by different communities, donors, policy makers, program designers and implementers, academicians, and civil society organizations to track the level of HIV epidemic and related risk behaviors in Nepal.

The present survey attempted to assess the prevalence of HIV and Syphilis to track the trends. It also tried to assess the prevalence of Hepatitis B and Hepatitis C to establish baseline information in the survey area. Moreover, the study identifies the sexual behavior of PWIDs - Male in 7 districts from Western Terai Highway and studied their risk behavior of HIV and AIDS. Hence, this survey is as an important milestone to guide the national HIV and AIDS prevention and control program.

1.4 Variables

Socio-Demographic Characteristics: age, marital status, living with, age at first marriage, education, ethnicity, duration of stay in current residence, place of residence.

History of imprisonment: ever imprisoned/detained, drug use related imprisonment, frequency of imprisonment, history of drug injection in prison.

Drug intake and Injecting behaviors: frequency of alcohol intake, use of needle/syringe, place for needle exchange, types and routes of drugs intake, duration of drug intake, age at first injection of drug, history of drug intake in the past one month, non/sterile injecting drug use, types of drugs used in past one week/month, switching behavior of drug use, the last time drug was injected, frequency of drug intake/day, accessibility and use of injections, number of person to share same needle, mode of availing needles/syringes, use of already used needle, sharing needle with different partners, needle cleaning practice, injecting drug at outstations.

Sexual behaviors and perceptions and condom use: age at first sex, history of sexual intercourse in the past one year, sex with sex workers, number of sex partners, frequency of sex, number of existing regular/non-regular sex partners, history of sex with male and practice of us of condom, frequency of sex with male (week/month/year), frequency of sex with regular/non-regular partners, frequency of sex with female sex workers (FSWs), use of condom during sex with FSWs, amount paid for sex per sexual contact, total number of sex workers visited, sex after drug use by the partners, modes of sexual contacts, types of sexual contacts with regular/non-regular

partners, exchange of sex for money, ever heard about/used condom; availability of condom and practice of carrying condom.

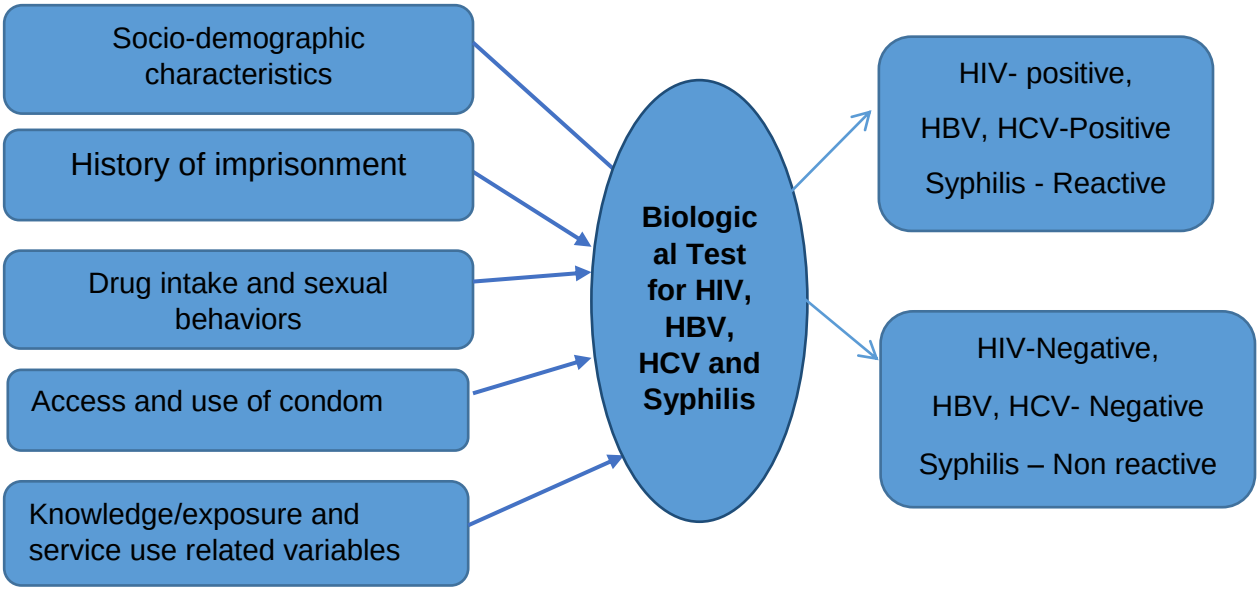
Exposure to Services or programs: met outreach worker/ peer educator or staff from a needle exchange program, HTC, current drug treatment practice, types of treatments/services received, duration of treatment or Opiod substitution therapy (OST), knowledge of STI/HIV services such as DIC,ICC, BCC centers.

Knowledge and practices related STI, HIV/AIDS and HCV: Knowledge of HIV and STIs, symptoms experienced knowledge of HIV prevention methods (ABC, BCDEF), knowledge of HIV transmission, prevention and control, misconceptions and sources of knowledge about STI, HIV and AIDS, activities for condom, knowledge of HCV.

Stigma and Discrimination: Knowledge of the death of neighboring person dying due to HIV and AIDS; willingness to take care of HIV positive male/female.

Lab testing: HIV, HBV, HCV and Syphilis prevalence.

Figure: 1.1 Conceptual Framework



CHAPTER 2: METHODOLOGY

2.1 Implementation of the Study

School of Planning, Monitoring, Evaluation and Research (SPMER) carried out this survey in coordination with NCASC and Save the Children, Nepal. SPMER was responsible for overall management of the survey including laboratory set up in the field sites; managing training to the researchers, counselors and lab technicians; supervising and collecting blood samples; and conducting HIV, VDRL, HBV, HCV tests. SPMER carried out mapping to estimate the population of PWIDs followed by data collection using preformed tools. Data analysis and report writing was done in close coordination with and support of NCASC and Save the Children Nepal.

The survey was conducted in close collaboration with many organizations working and advocating for PWIDs like Sparsha Nepal Kathmandu, United Nepal Foundation Lumbini (UNFL) in Rupandehi and Kapilvastu; Association for helping the helpless (AHH) in Dang and Banke, Namuna in Kailali, and Nepal National Social Welfare Association (NNSWA) in Kanchanpur.

2.2 Survey Population and Survey Area

This survey was carried out among the PWIDs in the 7 (Western: Rupandehi & Kapilvastu; Mid-Western: Dang, Banke & Bardiya; Far-Western: Kailali & Kanchanpur) districts on the Mahendra highway in Nepal. However, Bardiya was excluded from the study during the PPS Sampling process. PWIDs are one of the key affected populations (KAPs) effected by HIV and STIs. They serve as the major client group of FSWs.

For the present survey, PWIDs were defined as “male aged 16 years or above who had been injecting drugs for at least three months prior to the date of the survey” from the 7 western districts of the Terai highway. Only those PWIDs who met this definition were selected as the respondents in this survey.

2.3 Survey Design

This survey was conducted using descriptive serial cross-sectional design. It was carried out using the same methods that were used in the previous rounds of IBBS surveys conducted among People Who Inject Drugs (PWIDs). Individual face to face interview was organized to assess the drug injecting and sexual risk behaviors of the PWIDs; and the biological samples were tested using venous blood/serum to determine the prevalence of HIV, syphilis, Hepatitis B and Hepatitis C. The prevalence of HIV, Syphilis Hepatitis B and Hepatitis C among PWIDs was determined using the national guideline developed by NCASC. HIV test was performed by using determine - HIV½ for detection of HIV antibodies. All the positives identified by determine - HIV ½ tests were subjected to Uni-gold HIV ½ tests. If there was a tie in the first two test results, a third test using STAT-PAK was conducted to break the tie. Rapid Plasma Reagin (RPR) test was used

to diagnose syphilis among PWIDs. All the serum samples were tested for hepatitis B and Hepatitis C by the Rapid Kit. HBsAg Serum/Plasma Hepacard kit, (J. Mitra and Company, India) was used to detect Hepatitis B antigen in serum; and HCV Serum/Plasma HVC TRI-DOT (J. Mitra and Company, India) was used to detect HCV antibody.

2.4 Mapping

In the first stage, the researchers visited at least three local key informants working with PWIDs from the survey districts. Besides these, the information was also collected from local Non-Governmental Organizations (NGOs) and Community Based Organizations (CBOs) providing services to PWIDs pertinent to STIs, HIV and AIDS in the survey districts. Concerned government organizations and their representatives in the districts were also consulted for identification and authentication of hot spots and estimation of number of PWIDs. After this, researches conducted research walks on possible locations pointed by key populations and informants as part of preliminary mapping exercise. The survey team, then, analyzed the enumerated clusters and PWIDs and finalized clusters and size of survey population.

2.5 Sampling and Sample Size

In the first stage, the researchers visited at least three local key informants working with PWIDs from the survey districts. The information about the number of PWIDs and site was collected.
On the basis of findings of preliminary mapping exercises, sampling frame was prepared. Twenty PWIDs were enumerated as a survey cluster. The locations where there were less than 20 PWIDs were merged with the nearest site of other PWIDs to form a cluster. Sample frame was prepared based on estimation/enumeration of PWIDs. Probability proportional to size (PPS) method was used to select 30 clusters based on the mapping exercise done by researchers in the first stage.

In the second stage, 10 PWIDs were selected randomly from each cluster for the final survey. Thus, a total of 300 (10 PWIDs from 30 clusters) respondents were selected for the interview and laboratory tests.

2.6 Stakeholder and Consultative Meeting

Extensive meetings were organized with various stakeholders of the seven the Terai highway districts prior to the survey. The meetings were conducted in presence of the district public health officers and HIV focal persons in all districts. The meetings were also held with United Nepal Foundation Lumbini (UNFL) in Rupandehi and Kapilvastu; Association for helping the helpless (AHH) in Dang and Banke, Namuna in Kailali; and Nepal National Social Welfare Association (NNSWA) in Kanchanpur.

2.7 Process of Identification and Recruitment of PWIDs

People from local NGOs and peer groups were used as motivators. This helped to build good relations with the PWIDs and played effective role in systematic selection of the respondents and ensured their participation in the survey. A briefing was organized for the respondents on the objective of study and the benefits and risks of participating in the survey. The motivators helped in many ways to contact the PWIDs, explain them about the survey. They also provided the details of the number of available PWIDs in each site, and assisted in selection of the PWIDs randomly. Besides, they brought the PWIDs to the survey site and became a witness on behalf of the surveyed PWID.

2.8 Refusals

Every respondent had the right to participate or refuse in this survey. The survey team welcomed any decision taken by them. There were 20 cases of refusals. The causes of refusals were not meeting the study criteria (18 people) and not interested to participate in the study (2 people).

2.9 Control of Duplication

To avoid repetition of the respondents, counselors asked various questions before their selection regarding information pertinent to the experience of undertaking procedure, blood test for STIs (Syphilis, HBV and HCV) and HIV, meeting with the peer educators for the blood test, the possession of an ID card with a survey number and the PWIDs number . Further, the laboratory technicians and STI technicians who examined and treated the respondents at the survey site helped to avoid this repetition.

2.10 Recruitment of and Training to the Research Team

Experienced male candidates having at least university degree in the relevant discipline were selected as supervisors and research assistants. Similarly, experienced lab technicians were hired for the testing of blood samples; and health assistants were recruited for the symptomatic identification of STIs and their Syndromic management as per National Guidelines on Case Management of STI 2014. Previous exposure to HIV and AIDS programs was one of the main criteria in the selection process.

School of PMER, Intrepid Nepal, SAIPAL jointly organized one week of intensive training program for field researchers. The training was facilitated by the experts of various relevant disciplines. Training was organized focusing on the introduction to the survey, administration of the questionnaire, and methods of approaching the respondents, rapport building techniques and sharing of experiences (problems and solutions). The program objectives and the purpose of the

survey were explained in the training; and the sampling methodology being adopted for selection of the sample was also discussed.

The training also covered research ethics, research protocol, counseling, rapport building and overcoming embarrassment. A significant time was allocated to train on HIV, syphilis, HBV, HCV test for lab team; and for the coordinator to understand the sample selection techniques. In addition, the training session also involved mock interviews, role-plays, and class lectures to help enumerators to understand each question included in the questionnaire. Role-play practices were carried out assuming actual field situations. Concerned expert officials from NCASC, Save the Children and other relevant agencies were invited to facilitate the training program.

2.11 Field Operation Procedure

2.11.1 Clinic Set-up

A clinic was established at a convenient and central location which was accessible site from other strategic points. Each clinic had 6 rooms (reception-1, interview room-2, laboratory-1, STI Clinician room-1 and Pre/Post-test counseling room-1).

The selected PWIDs were welcomed in the reception and a unique and unduplicated code number was provided to them. Then they were guided to the interview room where a member of staff read out the consent form for them. It was then signed by the interviewer and the local motivator/mobilizer. The interview started after this. After the completion of the interview they were led to Pre test counseling room. After the pre test counseling they were guided to the Laboratory room. The lab had facility for drawing blood, centrifuging it for separating the serum and undergoing all the tests designated for the study. After the blood was drawn in the lab, the PWIDs was sent to the STI Clinician who provided necessary Syndromic treatment of STIs as per National Guidelines on Case Management of STI 2014.After the test result was ready the PWIDs were provided with the same and were also provided post test counseling according to the findings of the test results.

Throughout the study refrigerators/cold chain boxes were used to maintain the cold chain system. A double power backup facility was ensured in all clinic set up site.

The survey team used locally available shelters such as guest houses and hotels to operate the clinic and conduct interview and lab test of the respondents. Proper sanitation and waste management system was maintained throughout the study in all camp sites.

2.11.2 Clinical Procedures

After completion of the interview, a trained Health Assistant (HA) examined the respondents for any signs of STI or general health problems. All respondents with STI symptoms were provided syndromic treatment according to the National Guidelines on Case Management of STI 2014. Some essential medicines were also provided to them if they needed. Health Assistant made

appropriate referrals of the identified cases that would need additional treatment other than those provided at the clinic.

2.11.3 Laboratory Procedures

After pre-test counseling, the lab technician briefed the respondents about the HIV, Syphilis, HBV and HCV testing process and sought consent for drawing blood. Venous blood samples were drawn in 5 ml syringe. The samples were tested for HIV, Syphilis, HBV and HCV within half an hour after the blood was drawn from each of the participants. The survey was designed to provide test results with pretest–posttest counseling in the shortest possible time.
Waste products were collected in different color coded containers. Needles were destroyed using needle destroyer. Waste products, formed as a result of laboratory and clinical procedure were managed in accordance with the standard disposal procedures. In Rupandehi, the medical waste was sent to UNFL office for proper disposal and in other districts it was sent to district hospitals after proper coordination.

2.12 Survey and Laboratory ID codes

Confidentiality of the participants was strictly maintained throughout the study. Anonymous and non-identifying survey ID codes were used for all data components pertaining to the survey. The use of survey codes were prevented by linking consent forms with actual survey and referral history. A separate laboratory code was maintained to identify the results of rapid tests for HIV, Syphilis, HBV and HCV. Each of the respondents was assigned a laboratory code that was also linked to their ID codes in order to link to the behavioral and biological data.

2.13 HIV Rapid Testing

HIV rapid testing was conducted at the survey site after completion of pre-test counseling by certified laboratory technician. Rapid testing was conducted using a serial testing scheme based on the NCASC national guideline algorithm and approved commercial test kits. All participants who gave consent were tested using Alere Determine HIV-1/2 rapid test kits (Japan). Non-reactive results were considered negative, and reactive results were confirmed with Uni-Gold HIV rapid test (Trinity Biotech, Ireland). If Uni-Gold results were nonreactive, results were recorded as indeterminate. HIV ½ STAT-PAK (Chembio Diagnostics Systems, USA) was used as a tiebreaker test. All participants were provided post-test counseling, with specific messages tailored to their test result. Persons with any reactive result, or indeterminate result were referred to HIV care services for further counseling and testing.

Interpretation of the test results
- All samples negative by first test were reported as negative.
- All samples positive by the first test were subjected to second test.
- All tests positive by tiebreaker test were reported positive.
- All tests negative by tiebreaker test were reported as negative.

Figure 2.1: Algorithm of HIV Testing

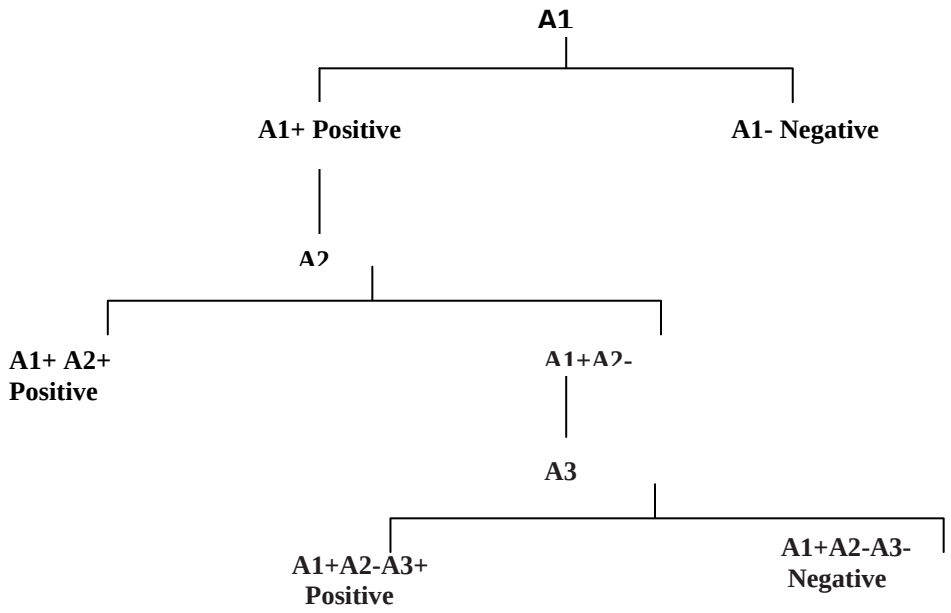


Table 2.1: Symbols used for HIV testing

A1 (First test):	Determine HIV ½
A2 (Second test):	Uni-Gold HIV
A3(Third test):	Stat Pak
"+"	Reactive
"-"	Non-reactive

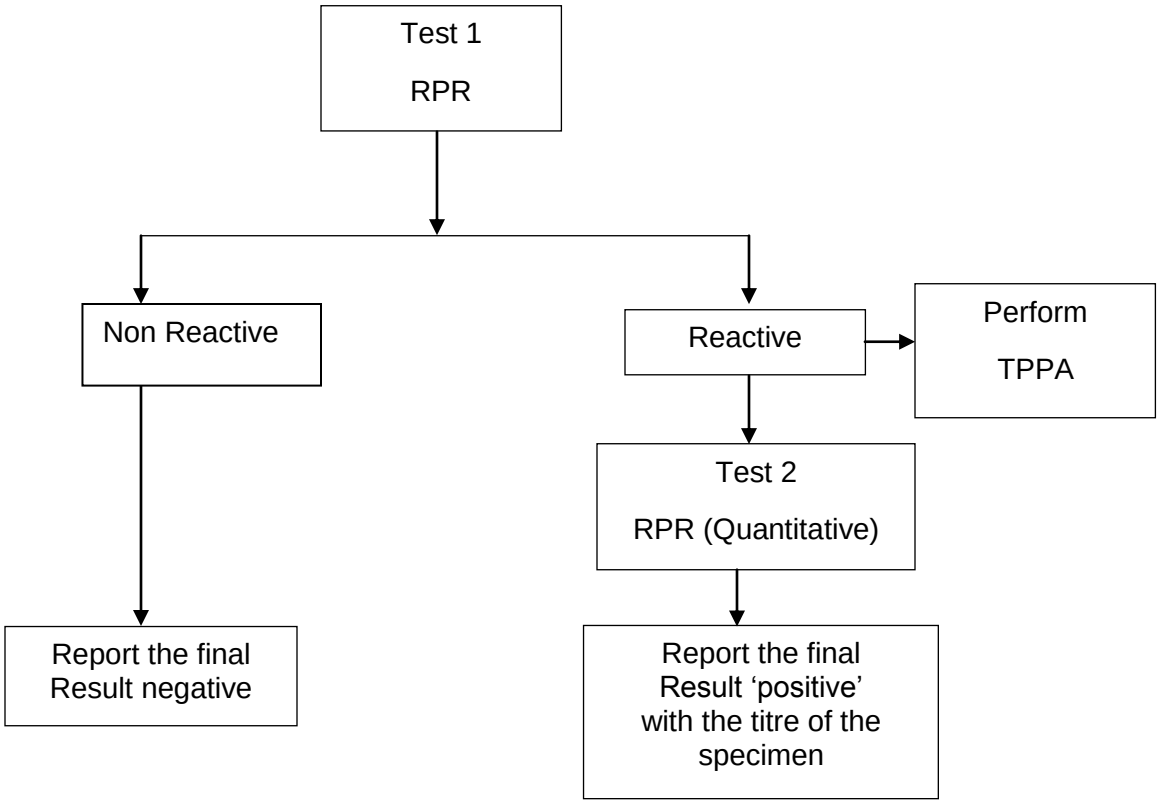
Table 2.2: Sensitivity and Specificity of HIV1/2Kits

Test Kits	Company	Initial	Confirm	Tie Break	Antigen Type	Spec.	Sens.
Determine	Allere	X			Recom HIV-1 and HIV-2	99.4%	100.0%
Uni-Gold	Trinity Biotech		X		HIV-1 and HIV-2	100.0%	100.0%
STAT PAK	CHEM BIO			X	HIV-1 (gp41; p24) -2 (gp36)	99.3%	100.0% 99.7

2.14 Syphilis Testing

Rapid Plasma Reagin (RPR) is a blood screening test which detects antibodies that are present in a person with syphilis. A reactive syphilis IgG result indicates that a person has been exposed to T. Pallidum at some point of time in his life. However, this testing may remain reactive for life in the majority of people who have had syphilis, even if they have been treated properly. Therefore, a positive result does not indicate that the person currently has untreated syphilis and should be confirmed with a non-treponemal test such as RPR to assess disease activity. Recommended and followed Algorithm for Syphilis Serology Testing is depicted below.

Figure 2.2 Syphilis Testing Strategy II Algorithm

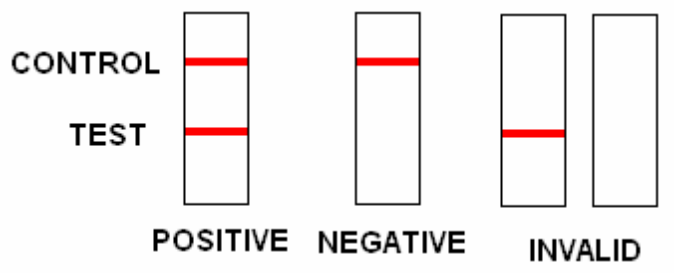


2.15 Hepatitis B and Hepatitis C Rapid Testing

Hepatitis B

All the serum samples were tested for hepatitis B surface antigen (HbsAg) by Rapid kit. For detection of Hepatitis B antigen in serum, HBs Ag HEPACARD Serum/Plasma Kit (J. Mitra and Company, India) was used. It is an in-vitro diagnostic test based on immune chromatographic principle and gives qualitative visual read results. The presence of HbsAg in serum or plasma is an indication of an active Hepatitis B infection. During testing, the serum or plasma specimen reacts with the particle coated with anti-HBsAg antibody. The presence of this colored line in the test region indicates a positive result; while its absence indicates a negative result. To serve as a procedural control, a colored line will always appear in the control line region indicating that proper volume of specimen was added and membrane wicking has occurred.

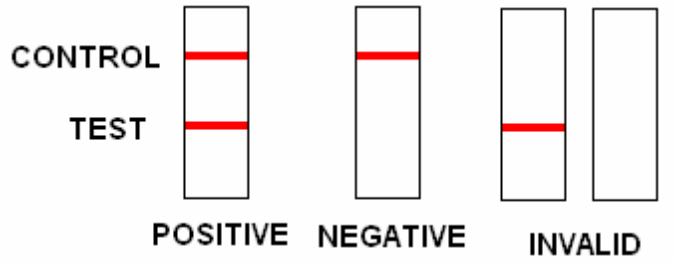
Figure 2.3: Hepatitis B Kit with various results



Hepatitis C

For the detection of HCV antibody, HCV TRI-DOT Serum/Plasma Kit (J. Mitra and Company, India) was used. Serum sample was used to diagnose the infection of Hepatitis C. The serum is dropped into the test kit. If two red lines appear in the control and test region of the kit, the result is labeled as HCV positive. If the red line appears in the control region only, it is labeled as HCV negative. The absence of the control band indicates that the test is invalid.

Figure 2.4: Hepatitis C Kit with various results



POSITIVE: Two distinct red lines appear. One line should be in the control region (C) and another line should be in the test region (T).

* NOTE: The intensity of the red color in the test line region (T) varies depending on the concentration of HBsAg present in the specimen. Therefore, any shade of red in the test region (T) should be considered positive.

NEGATIVE: One red line appears in the control region (C). No apparent red or pink line appears in the test region (T).

INVALID: Control line fails to appear. Insufficient specimen volume or incorrect procedural techniques are the most likely reasons for control line failure. In such cases the procedure was repeated with a new test device.

2.16 Sample Transportation

After the samples were collected in site, thermometer was used to record the temperature thrice a day in order to ensure maintenance of the optimal temperature. Cold chain process was maintained throughout the survey. The sample was then transported to Kathmandu in a cold chain box packed with ice packs along with use of thermometer to ensure the maintenance of temperature during transport. In Kathmandu, “all Positive and 10% of negative samples” of HIV/RPR/HBV/HCV were handed over to NPHL in the cold chain box.

2.17 Internal and External Quality Assurance

Regular monitoring was an integral part of the quality assurance mechanism of School of PMER during the mapping and whole survey period. Survey core team members regularly visited the field to support field researchers to make them more responsible for quality work and quick response. Besides this, the core team was deployed for cross-verification of data collected by the researchers in different hotspots of PWIDs. During the process of data collection, special measures were adopted to avoid repeated interviews with the same PWID. School of PMER shared and interchanged the researchers among all survey sites to track the repetition of same PWID. The researchers were instructed to ask about previous experiences of blood test, inspect the arm from where blood was drawn and possession of ID card issued by School of PMER in case of any doubt about duplication. The confidentiality was maintained strictly throughout the survey.

External quality assurance (EQA) is an evaluation of the performance of the study team and the procedures. All the HIV positives samples and 10 percent of all the HIV negative samples were retested at NPHL as an EQA of HIV testing. Similarly, all the RPR reactive samples and 10 percent of all RPR non-reactive samples were retested at NPHL as an EQA of Syphilis testing. Similarly all positive HCV and positive HBV test kits and 10 percent of negative test kits were sent to NPHL along with serum in cryo vial which were retested at NPHL as an EQA for HBV and HCV. The in-built internal control was used to ensure the validity of test and all positive and 10 percent of negative samples were sent to NPHL for External Quality Assurance. Aliquots of selected serum specimens were prepared in the field. Serum specimens were stored at laboratory at a

temperature 2 to 8 degree Celsius. Once testing activities in the field was completed, School of PMER handed over the serum specimens to NPHL for retesting. The test kits as those used in the field were also provided to the NPHL. The EQA samples were sent to the NPHL with the new code numbers.

2.18 Research Instruments

A slightly modified (than 2012 survey) questionnaires was developed and agreed by all responsible concerned organizations. QuickTapSurvey App was used to feed in the questionnaires into the Micromax Canvas Tab which was used for data collection for the first time in IBBS survey. The software was developed by PERC Nepal.

2.19 Pretesting of research tools

A quantitative research approach was adopted in this survey. Slight changes were made in the questionnaire before the survey. Save the Children US/Global fund provided the draft of questionnaires in TAB form for the data collection.

Once the tool was received from Save the Children US/Global fund, the research tool was pre-tested using 15 interviews with the members of the target group in one of the highway district. These interviews were excluded from the real study. The Pre-testing of the tool was done to gather information on the following points; easy or difficulty to understand the statement, comprehension, confidence in response, level of discomfort and social desirability.

2.20 Data Management and Analysis

After the completion of the survey, the data was received in Excel form. Excel was used for coding and cleaning the data. Then the data was analyzed using SPSS.20 software. Chi square trend analysis software was used to do Chi Square test.

Frequency distribution, percentages, range, mean and median, standard deviation were used to analyze the results of the survey. Chi square test was calculated to measure the statistical significance of the relationship between cross-tabulated categorical variables.

2.21 Monitoring and Supervision

The School of PMER followed the result based participatory monitoring process for this survey. Since the beginning of the survey various initiatives, approaches and integrates lessons learned from other similar survey activities and appropriate monitoring approaches were adopted with up gradation. Clear monitoring guideline was made in consultation with Save the Children and NCASC. This contributed to achieve success of the survey, generation of knowledge and learning

and finally create good quality survey result. Strong mechanism was established for monitoring among study team and standard monitoring tools were used to ensure the quality of the survey.

Activities of the study team was supported and monitored by the team leader and the Chairman of School of PMER. The Team leader reported regularly to the assigned personnel of Save the Children and NCASC regarding the status of the survey.

2.22 Ethical Consideration

Save the Children obtained ethical approval from Nepal Health Research Council (NHRC) for the study. For ethical consideration in relation to the respondents: Three main aspects of ethics were considered based on the Belmont Report of Ethical Consideration.

Respect to the respondents: The respondents were dealt with respect in the process of collecting data. They were given adequate information about the purpose and benefits of the study and were given freedom to decide whether or not they want to participate in the study. Consent form was read out to them in front of the witness (local mobilizer), then after signed by the interviewer and the mobilizer. The data collected was kept with confidentiality and was used only for the study purpose without revealing the individual information of the respondents.

Beneficence and malficence: The study objective was to determine the trends in the prevalence of HIV and STI infections, and assess the sexual and injecting behaviors related to HIV/STI/HBV/HCV among the survey populations in the selected study areas. Study participants were introduced to the study and invited to participate. The nature and the purpose of the study, potential risk and benefits, and measures to ensure confidentiality were explained to the participants. Study participants did not have direct benefits from this survey but this survey has helped them to gain knowledge about HIV, STIs, HCV, HBV virus and high risk behavior related to HIV/STIs/HCV. The participants benefited indirectly by knowing their HIV/STIs/HBV/HCV status. The participants were well explained about slight pain while drawing blood sample.

Justice to the respondents: The study has priority to reduce prevalence of HIV and STDs among the PWIDs. Respondents had right and ability to refuse to participate. Only those participants who gave verbal inform consent voluntarily were enrolled in the study. Written consent was not taken from the respondents. Researcher followed a standard oral consent procedure appropriate for both literate and low literate potential respondents. The content of the form was read out to them and explained by the interviewer or facilitator.

2.23 HIV Pre- and Post-test Counseling and Follow-Up

All the survey participants were informed that they could receive their test result at the same site after the completion of the interview as per the standard protocol. They were also informed that they could collect their test results by showing the ID card (with their survey number) provided to them by the survey team. Pre- and post-counseling for HIV, syphilis, HBV, HCV test was provided to all the survey participants. They were briefed about the importance of receiving the test results.

CHAPTER 3: SOCIO-DEMOGRAPHIC CHARACTERISTICS

This chapter explains the demographic and social characteristics of the male PWIDs in selected Western, Mid-Western and Far Western Terai highway districts of Nepal.

3.1 Demographic Characteristics

Table 3.1 presents the Demographic characteristics of the PWIDS. The age of the PWIDs ranged from 17 to 51 years. Their median age was 28 years while the mean age was 27 years (±S.D=8). Over half (50.3%) of the PWIDs were of the age group 20 to 29 years while 11 percent of them were 19 years or below. Around one tenth (10.7%) PWIDs were of 40 years and above.

Table 3.1: Demographic Characteristics

Description	**Number**	**%**
Age Group		
<=19 years	33	11.0
20-24 years	88	29.3
25-29 years	63	21.0
30-34 years	43	14.3
35-39 years	41	13.7
40+ years	32	10.7
Mean	28 years	
Median	27 years	
Range	17-51	
SD	8	
Total	**300**	**100**
Marital Status		
Never Married	151	50.3
Married	145	48.3
Divorced/Separated	4	1.3
Total	**300**	**100**
Age at marriage		
<=14 years	3	2
15-19 years	53	36
20-24 years	52	35
25-29 years	26	17
30+ years	15	10

Mean	22 years	
Median	21 years	
Range	13-36	
Standard deviation (SD)	5	
Total	**149**	**100**

Over half (50.3%) of the PWIDs were unmarried. Among the 49.6 percent of the PWIDs who were married, 1.3 percent were presently divorced or separated.

The mean age at first marriage was 21 years (±S.D=5) with a range of 13 to 36 years. Among those who were married, 90 percent had married before the age of 30.

Majority (88.3%) of the PWIDs were living with their family members whereas, 4.7 percent reported to be living with their wife and 3.7% their friends. Two percent were living alone while the rest (1.3%) reported to be living in rehabilitation centre.

Table 3.2: CURRENT LIVE IN PARTNERS

Currently living with	**N**	**%**
Wife	14	4.7
Family members	265	88.3
Friend	11	3.7
Alone	5	2
Others	4	1.3
Total	300	100

3.2 Social Characteristics

As shown in table 3.2, 15 percent of the PWIDs were illiterate and one percent of them had no formal education but could read and write. Among the 84 percent of the PWIDs who were literate; 16.3 percent had completed primary level of education while over half (51.3%) of them had completed secondary level of education. Similarly, around one out of six (16.3%) of them had passed S.L.C and even had higher level of education.

Table 3.3 : Social Characteristics

Description	**N**	**%**
Education level		
Illiterate	45	15.0
Literate only	3	1.0
Primary	49	16.3
Secondary	154	51.3

Higher secondary and above	49	16.3
Caste		
Chhetri/Thakuri	87	29.0
Brahmin	36	12.0
Muslim	19	6.3
Occupational Caste	41	13.7
Tamang/Magar/Sherpa	38	12.7
Terai caste	48	16.0
Newar	7	2.3
Gurung/Rai/Limbu	15	5.0
Chaudhari/Tharu	7	2.3
Giri/Puri/Sanyasi	2	.7
Duration of stay in same place		
Since birth	253	84.3
Since 5 years	19	6.3
More than 5 years	28	9.3
Total	**300**	**100.0**

Among the surveyed PWIDs, just below one third (29%) of them were Chhetri/Thakuri, 12 percent were Brahmin and 6.3 percent we Muslims. Over one out of ten (13.7%) were of occupational caste. Similarly, 12.7% were Tamang/Magar/Sherpa while around one in six (16%) were of Terai caste.

Most (84.3%) of PWIDs were living in their birth districts. Among 15.6 percent who had migrated from other places; 6.3 percent were living in the survey districts for less than 5 years while 9.3 percent were living there for over 5 years.

CHAPTER 4: PREVALENCE OF HIV, STI, HBV, HCV AND ITS ASSOCIATION WITH BACKGROUND CHARACTERISTICS OF PWIDs

4.1 HIV/STI, HBV and HCV Prevalence

The prevalence of HIV was 2.3 percent among the surveyed PWIDs. Five of them had history of Syphilis (VDRL positive but the titre was less than 16) while one of them had active Syphilis. The prevalence of Hepatitis B was 1.7 percent while 8 percent of them had Hepatitis C.

Table 4.1: HIV and STI Prevalence

HIV and STI Prevalence	N (300)	%
HIV	7	2.3
Active Syphilis	1	0.3
Syphilis History	5	1.7
HBV	5	1.7
HCV	24	8.0

4.2 Relation between Socio-Demographic Characteristics and HIV Infection

Among the 7 HIV positive PWIDs, all 7 were above 20 years, 6 were ever married and five were literate or had formal education. However there was no significant relation between HIV and socio-demographic characteristics such as age, marital status and literacy of the PWIDs. (Table 4.2).

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

	N=300	HIV+		
Age group		**n**	**%**	p value
Below 20 years	33	0	0	
20 + Years	267	7	2.4	
Marital status				
Ever married	149	6	4.0	
Never married	151	1	0.7	P=>0.05
Literacy				
Illiterate	43	2	4.7	
Literate/formal school	257	5	1.9	P=>0.05

Note: p value has not been taken wherever one of the cells contain zero value.

4.3 Relation between Socio-Demographic Characteristics and HCV

Among the 24 HCV positive PWIDs, 23 were above the age of 20 years, 17 were ever married and 22 were literate. The study examined the relation between the socio-demographic characteristics of the PWIDs and Hepatitis C. The findings show that there age group and literacy status of the PWIDs with Hepatitis C infection did not have significant association.. But a statistically significant association ($p<0.05$) was found between the marital status of the PWIDs with Hepatitis C infection. PWIDs who were ever married were more likely to have Hepatitis C (11.4%) than the ones who were never married (4.6%) as shown in Table 4.3.

Table 4.3: Relation between Socio-Demographic Characteristics and HCV

	N=300	HCV+		
Age group		**n**	**%**	p value
Below 20 years	33	1	3.0	
20 +	267	23	8.6	p>0.05
Marital status				
Ever married	149	17	11.4	
Never married	151	7	4.6	p<0.05
Literacy				
Illiterate	43	2	4.7	
Literate	257	22	8.6	p>0.05

4.4 Relationship between Drug Injection Behavior and HIV

The relationship between drug injecting behavior such as duration of drug use, frequency of drugs injected in the previous week, use of previously used needle/syringe to inject drugs during the last week and injected with a needle/syringe kept in public place during the past week was correlated with prevalence of HIV (Table 4.4).

Among the seven HIV positive PWIDs, six had been injecting drugs for over 5 years and five reported that they injected drugs from 1-6 times in the previous week. However, none of these behaviors had a significant relationship with HIV.

Table 4.4: Relation between Drug Injecting Behavior and HIV Infection

		HIV+		
Drug Injecting Behavior	**N=300**	**N**	**%**	**p Value**
Injecting drugs since				
Less than 2 year	68	0	0.0	
2-5 Years	132	1	0.8	
More than 5 years	100	6	6.0	

Frequency of drugs injection in the past week				
Not Injected	72	2	2.8	
1-6 times a week	155	5	3.2	
Everyday	16	0	0.0	
2 or more times a day	57	0	0.0	
Injected with a previously used needle/syringe during the past week				
Not injected/Never	262	6	2.3	
Ever Injected	38	1	2.6	p>0.05
Injected with a needle/syringe kept in public place during the past week				
Ever Injected	238	6	2.5	

Note: p value has not been taken wherever any one of the cells contain value zero.

4.5 Relationship between Drug Injection Behavior and HCV

The relationship between drug injecting behavior such as duration of drug use, frequency of drugs injected in the past week, injected with a previously used needle/syringe during the past week and Injected with a needle/syringe kept in public place during the past week was assessed with Hepatitis C

As shown in Table 4.5, the findings suggest that out of the 24 Hepatitis C positive PWIDs, 18 had been injecting drugs for over 5 years; 13 were injecting drugs 1-6 times a week within the past week, 18 had injected with a previously used needle/syringe during the past week and 23 had injected at least once with a needle/syringe kept in public place during the past week. A positive association has been seen with duration of drug use and Hepatitis C infection ($p<0.01$). The PWIDs who injected drugs for longer duration were more prone to have Hepatitis C infection.

Table 4.5: Relation between Drug Injecting Behavior and HCV Infection

Drug Injecting Behavior	N=300	HCV+		P-value
		n	%	
Injecting drugs since				
Less than 2 year	68	1	1.5	
2-5 Years	132	5	3.8	
More than 5 years	100	18	18.0	p<0.01
Frequency of drugs injection in the past week				
Not Injected	72	2	2.8	
1-6 times a week	155	13	8.4	
Everyday	16	2	12.5	
2 or more times a day	57	7	12.3	p>0.05
Injected with a previously used needle/syringe during the past week				
Not injected/Never	262	18	6.9	
Ever Injected	38	6	15.8	p>0.05

Injected with a needle/syringe kept in public place during the past week				
Ever Injected	238	23	9.7	

4.6 Relationship between Sexual Behavior and HIV

The study also assessed the relationship between sexual behavior and HIV positive PWIDs. Among the 7 HIV positive PWIDs, 6 had had sex with a regular partner, six of them did not have sex with a non-regular partner and 6 of them did not have sex with a female sex worker during the past twelve months.

Table 4.6 Relationship between Sexual Behavior and HIV

Sex with Different Partners in the Past 12 Months	**N=300**	**HIV +**	
		N	**%**
With regular partner			
Yes	212	6	2.8
No	82	1	1.2
Never had sexual contact	6	0	0.0
With Non-regular partners			
Yes	119	1	0.8
No	175	6	3.4
Never had sexual contact	6	0	0.0
With Female sex worker			
Yes	71	1	1.4
No	223	6	2.7
Never had sexual contact	6	0	0.0
Number of regular partner in the past 12 months			
0 partner	88	1	1.1
1 partner	157	6	3.8
2 or more partners	55	0	0.0
Number of non-regular partner in the past 12 months			
0 partner	229	6	2.6
1 partner	19	0	0.0
2 or more partners	52	1	1.9
Number of female sex workers in the past 12 months			
0 partner	181	6	3.3
1 partner	36	0	0.0
2 or more partners	83	1	1.2

Note: p value has not been taken wherever any one of the cells contain value zero.

Among the seven PWIDs who were HIV positive; six had one regular sex partner, six did not have a single non-regular sex partner and six did not have a single female sex worker as sex partners during the last 12 months.

4.6 Relationship between Sexual Behavior and HCV

The relationship between the sexual behavior and Hepatitis C positive PWIDs was assessed. Among 24 Hepatitis C positive PWIDs, 16 had a regular sex partner, 19 did not have a non-regular sex partner and 15 did not have a FSW as a sex partner during the past 12 months of the survey.

Table 4.7 Relationship between Sexual Behavior and HCV

Sex with Different Partners in the Past 12 Months	N=300	HIV +		
		n	%	p-value
With regular partner				
Yes	212	16	7.5	p>0.05
No	82	7	8.5	
Never had sexual contact	6	1	16.7	
With Non-regular partners				
Yes	119	5	3.4	
No	175	19	10.9	
Never had sexual contact	6	0	0.0	
With Female sex worker				
Yes	71	8	11.3	p>0.05
No	223	15	6.7	
Never had sexual contact	6	1	16.7	
Number of regular partner in the past 12 months				
0 partner	88	8	9.1	p>0.05
1 partner	157	13	8.3	
2 or more partners	55	3	5.5	
Number of non-regular partner in the past 12 months				
0 partner	229	20	8.7	
1 partner	19	0	0.0	
2 or more partners	52	4	7.7	
Number of female sex workers in the past 12 months				
0 partner	181	16	8.8	p>0.05
1 partner	36	2	5.6	
2 or more partners	83	6	7.2	

Note: p value has not been taken wherever any one of the cells contain value zero.

Among the 24 Hepatitis C positive PWIDS, 13 had one regular sex partner, 20 did not have a non-regular sex partner and 16 did not have a single FSW as a sex partner during the past 12 months. The data showed that both the number of types of sex partners and number of sex partners did not have statistical significance.

4.7 Co-Infection

Among 24 Hepatitis C positive cases, there was co-infection with 3 HIV cases and 1 Hepatitis B case.

Among 5 Hepatitis B positive cases, there was co-infection with 1 Hepatitis C case.

Among 7 HIV positive cases, there was co-infection with 3 Hepatitis C cases.

Table 4.8 Co-Infection

Co-infection with Hepatitis C	**N**	**%**
HIV	3	12.5
Hepatitis B	1	4.2
Syphilis	0	0
Total Hepatitis C	**24**	**100**
Co-infection with Hepatitis B		
Hepatitis C	1	20
HIV	0	0
Syphilis	0	0
Total Hepatitis B	**5**	**100**
Co-infection with HIV		
Hepatitis C	3	42.9
Hepatitis B	0	0
Syphilis	0	0
Total HIV	**7**	**100**

CHAPTER 5: DRUG USE, NEEDLE SHARING AND TREATMENT AMONG PWIDs

This chapter deals with the drug use, needle sharing, alcohol use behavior and their treatment seeking behavior among the PWIDs of the surveyed districts. Drug injecting practices and needle sharing behavior increases the risk of HIV, HBV and HCV among this population.

5.1 Alcohol Consumption and Oral Drug Use among PWIDs

It was seen that three fourth (76.3%) of the PWIDs were consuming alcohol at least once over the past one month. Among those who used alcohol, over one fourth (27.3%) consumed alcohol every day, 28 percent consumed alcohol more than once a week, while one in five (21%) consumed alcohol less than once a week. Among the surveyed PWIDs 23 percent reported not to have consumed alcohol in the past one month.

Table 5.1 Alcohol Intake and Oral Drug Use

Alcohol and oral drug use	N	%
Alcohol intake during the past month		
Every day	82	27.3
More than once a week	84	28.0
Less than once a week	63	21.0
Never	69	23.0
No response	2	.7
Duration of oral drug use		
Less than two years	40	13.3
Two to Five years	126	42.0
More than 5 years	134	44.7
Average duration in years	6.8	
Total	**300**	**100.0**

The average duration of oral drug use among the PWIDs was 6.8 years. Among the 300 respondents, 134 (44.7%) reported to be using oral drugs for over five years, 126 (42%) reported to be using oral drugs for a period between two to five years and the remaining 40 (13.3%) were using oral drugs for less than two years.

Among various oral drugs combination, the most common was Ganja/Chares (73.3%). Over half (52.3%) used Brown Sugar/White Sugar and 52.3 percent used Nitrosun/Nitrovate. The other common oral drugs were Phensydyl/Corex (used by 44.3%), Phenergan/Stagon (used by 22.3%) and Benz diazepam (used by 20%).

Table 5.2: Types of Orally Used Drugs

Types of Orally Used Drugs in the Last Week*	N	%
Ganja/Charas	221	73.3
Brown Sugar/White Sugar	157	52.3
Nitrosun/Nitrovate	160	53.3
Phensydyl+Corex	133	44.3
Tidigestic/Noorphine/Nufine/Lupegesic	69	23.0
Phenergan/Stagon	67	22.3
Calmpose/Diazepam/Velium 10	60	20.0
Proxygin/Proxyvon	46	15.3
Lysergic Acid Dithylamide (LSD)	32	10.7
Avil/Algic	31	10.3
Codeine	21	7.0
Effidin	12	4.0
Cocaine/Cracks	11	3.7
Amphetamine/Yava	10	3.3

Note: Because of multiple responses the percentage may exceed 100

5.2 Drug Injecting Practices of PWIDs

It was found that the average duration of drug injecting practice was 5.7 years. One third (33.3%) of the drug users were injecting drugs for over 5 years, 44 percent of them were injecting drugs for a period between two to five years and over one in five (22.7%) were injecting drugs for less than 2 years.

The mean age of injecting the drug for the first time was 22.1 years (±S.D= 6.3) and the median age was 21 years. It was also seen that the earliest age of injecting drug for the first time was at the age of 9 years. The study revealed that just below half (47.3%) of them started injecting drugs before they turned 20 years, whereas, over half (52.7%) got indulged to drug injecting practices after they were 21 years old.

Table 5.3: Drug Injecting Practices

Drug Injecting Practices	N	%
Duration of drug injection		
Less than 2 years	68	22.7
2 – 5 years	132	44.0
More than 5 years	100	33.3
Average duration years	5.7	
Age at the time of injecting drug for first time		

Up to 20 years	142	47.3
21+ years	158	52.7
Mean	22.1	
Median	21	
Range	9 to 47	
Standard deviation (SD)	6.3	
Frequency of drug injections within the past week		
Once a week	18	6.0
2-3 times a week	46	15.3
4-6 times a week	86	28.7
Once a day	16	5.3
2-3 times a day	42	14.0
4 or more times a day	15	5.0
Not injected	72	24.0
Don't Know	5	1.7
Frequency of drug injections on the last injected day		
Not injected yesterday	152	50.7
Once	72	24.0
Twice	52	17.3
Three and more	24	8.0

Note: Because of multiple responses the percentage may exceed 100

The study showed that one in twenty (5%) of them injected drugs 4 or more times every day, fourteen percent injected drugs 2-3 times a day, and 5.5 percent injected drugs once every day. It was found that 28.7 percent injected drugs 4-6 times, 15.3 percent two to three times and 6 percent injected drugs once during the week before the survey.

During the last day of drug injection, about a quarter (24%) had injected drug once, 17.3 percent had injected twice, 8 percent had injected three or more times and half of them had not injected drugs the day before the survey.

The most common combination of the injected drug use was Tidigesic/Noorphine/Nufine/Lupegesic (56.3%). Over half of them (50.7%) were using Phenargan/Stagon while about one in five (24.7%) of them were using Brown Sugar/White Sugar. Sixteen percent of them were injecting Chlorphenaramine (Avil/Algic) and a similar number (15.7%) was injecting Proxygin/Proxyvon.

Table 5.4: Types of Drugs Injected in Past Week

Types of Drugs Injected in Past Week*	**N**	**%**
Tidigestic/Noorphine/Nufine/Lupegesic	169	56.3
Phenergan/Stagon	152	50.7
Brown Sugar/White Sugar	74	24.7

Nitrosun/Nitrovate	54	18.0
Avil/Algic	48	16.0
Proxygin/Proxyvon	47	15.7
Others (Calmpose/Diazepam/Velium 10)	19	6.3
Effidin	14	4.7
Cocaine/Cracks	12	4.0
Amphetamine/Yava	12	4.0

Note: Because of multiple responses the percentage may exceed 100

5.3 Syringe Use and Sharing Behavior

The injecting behavior of the PWIDs has been assessed in two forms viz. low risk injecting behavior and high risk injecting behavior. The low risk injecting behavior referes to the use of needle/syringe purchased by the PWID himself or using a new needle/syringe given by NGO staffs/volunteers/friends. The high risk injecting behavior refers to the use of needle/syringe given by friend/relative after use, or reuse of the needle/syringe and use of needle/syringe kept in public places.

It was found that the PWIDs were practicing safe injecting behaviors in the last three injections. During the last injection 93.7 percent of them were practicing safe injecting behaviors among which 51.7 percent reported that they were using needle/syringe by purchasing it themselves and the remaining (42 %) used new needle/syringe given to them by NGO staff/volunteers/friend. A similar finding was reported about the syringe use and sharing behavior during the second last injection. It was found that 90 percent of them were practicing safe injecting behavior during the second last injection. Among them 47.3 percent reported to be using needle/syringe by purchasing it themselves and the remaining (42.7%) used new needle syringe given to them by NGO staff/volunteers/friends. During the third last injection it was reported that 89.3 percent of the PWIDs were practicing safe injecting behavior. Among them, 43.7 percent reported to be using needle/syringe by purchasing it themselves and the remaining (45.7 %) reported using new needle syringe given to them by NGO staff/volunteers/friends. The data has also been presented in detail in Table 5.5 below.

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	155	51.7	142	47.3	131	43.7
Used new needle/syringe given by NGO staff/volunteers/friend	126	42	128	42.7	137	45.7

Low risk behavior total	**281**	**93.7**	**270**	**90.0**	**268**	**89.3**
High risk injecting behavior						
Used own previously used needle/syringe	1	0.3	2	0.7	3	1
Used needle/syringe given by friend/relative after his/her use	3	1	3	1	3	1
Used needle/syringe that had been kept in public place by self	0	0	0	0	1	0.3
Used needle/syringe that had been kept in public place by someone else	1	0.3	0	0	1	0.3
High risk behavior total	**5**	**1.6**	**5**	**1.7**	**8**	**2.6**
Persons in the group using the same needle/syringe						
2 persons	34	11.3	35	11.7	35	11.7
3 or more persons	19	6.3	12	4.0	14	4.7
None/Alone	247	82.3	253	84.3	251	83.7
Total	**300**	**100**	**300**	**100**	**300**	**100**

The study revealed that 1.6 percent, 1.7 percent and 2.6 percent participants were practicing high risk injecting behavior in the last, second last and third last injections respectively.

During all the past three injections, majority of the PWIDs (over 90%) reported that they had not injected drugs in a group. During these three injections 11.3 percent, 11.7 percent and 11.7 percent shared same needle/syringe within two persons respectively. The data revealed that 6.3 percent, 4 percent and 4.7 percent participants shared the needle/syringe with three or more people in the last three injections respectively.

The needle sharing practice of the PWIDs in the past week shows that almost two third (66.7%) of them never used needle/syringe that had been used by others while 12.7 percent of them had shared the needle/syringe in the past week. One fifth of them (20.7%) reported that they had not injected drugs during the last week of the survey.

Among the 238 PWIDs who had injected in the past week, 14 (5.9%) reported to have used needle syringe that had been kept in public place while the rest 224 (94.1) had not done so. Similarly, among the 238 PWIDs who had injected in the past week, 223 (93.7%) reported that they had given needle/syringe to others after using it themselves, whereas, the remaining 15 (6.3%) did not give any response and replied “I don’t know”. This information has also been presented in detail in Table 5.6 below.

Table 5.6: Injecting Practice in the Past Week

Used a needle/syringe that had been used by others	**N**	**%**
Used	38	12.7
Never Used	200	66.7

Not Injected last week	62	20.7
Total	300	100.0
Used a needle/syringe that had been kept in public place		
Used	14	5.9
Never Used	224	94.1
Total	238	100.0
Gave a needle/syringe to someone else		
Yes	223	93.7
Don't Know	15	6.3
Total	238	100%
Number of needle/syringe shared partners		
None	195	87.4
1-2 partner	17	7.6
Three or more	11	4.9
Total	223	100.0
Types of needle/syringe sharing partner *		
Regular sex partner	3	10.7
Non-regular sex partner	2	7.1
Friends	19	67.9
Drug seller	3	10.7
Unknown person	2	7.1
Total	28	*

Note: Because of multiple responses the percentage may exceed 100

As mentioned in the table above, among the 223 PWIDs who had given their needle/syringe to others after use, 195 (87.4%) reported that they did not have any partner(s) with whom they shared the needle/syringe in the last week of the survey, while 7.6% had shared the needle/syringe with 1 to 2 partners. The remaining 11 (4.9%) had shared needle/syringe with three or more partners during the same time. Among 28 PWIDs who had shared needle/syringe in the last week, 19 (57.7%) had shared it with friends, 3 (10.7%) with their regular sex partners, 3 (10.7) with drug seller, two each (7.1%) had shared the needle/syringe with their non-regular sex partners and unknown persons, during this time.

5.4 Drug Sharing Behavior

Among 238 PWIDs who reported to have injected in the past week, majority of them 212 (89.1%) had not injected from a prefilled syringe while 24 (10.1%) had injected from a prefilled syringe. Similarly, 213 out of 238 (89.5%) who had injected in the past week reported not to have injected with a syringe after the drugs were transferred into their syringe from other's syringe while the rest 24 (10.1%) reported to have done so.

Table 5.7: Syringe Using and Sharing Practice in the Past Week

Drug Sharing Practice in the Past Week	N	%

Injected with a pre-filled syringe		
Yes	24	10.1
No	212	89.1
Don't know	2	.8
Total	238	100
Injected with a syringe after drugs were transferred into it from other's syringe		
Never injected	213	89.5
Injected	24	10.1
Don't know	1	0.4
Total	238	100
Shared bottle, spoon, cooker, vial/container, cotton/filter and rinsing water with others		
Never Shared	181	76.4
Shared	21	8.9
Don't know	35	14.8
Total	237	100
Drew drug solution from a common container also used by others		
Never	207	87
Drew at least once	29	12.2
Don't know	2	0.8
Total	238	100

The study also studied the sharing behavior of bottle, spoon, cooker, vial/container, cotton/filter and rinsing water with others. Among 237 respondents, 181 (76.4%) reported that they had not done so while 21 (8.9%) reported that they had shared these equipments. The remaining 35 (14.8%) replied that they don't know either they did so or not.

Among 238 PWIDs who reported to have injected in the past week 207 (87%) never "drew drug solution from a common container also used by others", while 29 (12.2%) had done so at least once.

The injecting behavior in other parts of the country and Abroad in the past 12 months was also assessed among the surveyed PWIDs. The data showed that nearly two third (62%) of the PWIDs had injected in other parts of the country or out of the country while 113 (37.7%) had not done so.

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		
Injected in other parts of country/out of country	**N**	**%**
Yes	186	62.0
No	113	37.7

Don't know	1	.3
Total	300	100.0
Used a needle/syringe that had been used by others		
Yes	11	5.9
No	175	94.1
Total	186	100.0
Gave a needle/syringe to someone else after use		
Sometimes – Always	13	4.0
Never	172	95.5
Don't know	1	0.5
Total	186	100.0

Among the 186 PWIDs who had injected in other parts of the country or out of the country, a vast majority (N=175 or 94.1%) had not shared needle/syringe that was used by others while the rest 11 (5.9%) had shared needle/syringe that was used by others. Majority of the PWIDs (95.5%) had never given a needle/syringe to someone else after use whereas the remaining 13 (4%) had done so while injecting in other parts of the country/out of the country.

5.5 Needle/Syringe Cleaning Practice

The respondents were asked if they had cleaned used needle/syringe in the past week. The data shows that majority of them (83.3) had not re-used the syringe, 10.3 percent had cleaned the used needle/syringe for re-use while 5 (1.7%) of the respondent had never cleaned the needle/syringe.

Table 5.9: Needle/Syringe Cleaning Practice

Needle/Syringe Cleaning Practice		
Cleaned used needle/syringe in the past week	**N**	**%**
Every time	7	2.3
Almost every time	2	.7
Sometimes	22	7.3
Never	5	1.7
Never reused	250	83.3
Others	4	1.3
Don't know	6	2.0
No response	4	1.3
Total	300	100.0
Cleaned a used needle/syringe with		
Water	10	28.6
With Urine	4	11.4
With Saliva	1	2.9

Boiled the syringe in water	9	25.7
Others	7	20.0
Don't know	3	8.6
No response	1	2.9
Total	35	100.0

Note: Because of multiple responses the percentage may exceed 100

Among those who cleaned a needle/syringe before use, 42.9 percent had done so adopting non-sterile techniques (with water, urine, saliva). About one fourth (25.7%) of them, who had cleaned the needle/syringe for re-use, cleaned it by boiling the syringe in water.

5.6 Knowledge of and Access to New Needles/Syringes

Majority (96.3%) of the PWIDs said that they could obtain a new syringe whenever required. A large portion of them said that they could obtain it from medicine shops (83.7%) and drug suppliers (63.7%). Among other common places from where the PWIDs could obtain a new syringe were needle exchange program (40.3%), hospitals (37.5%), health workers (18.4%) and friends (11.8%).

Table 5.10: Knowledge/Sources of New Syringes

New Syringe Accessibility	N	%
Can obtain new syringe		
Yes	289	96.3
No	8	2.7
Don't know	2	0.7
No response	1	0.3
Total	300	100.0
Can obtain syringe from*		
Medicine shop	241	83.7
Drugs supplier	192	66.7
Friends	34	11.8
Hospital	108	37.5
Drug users	13	4.5
Needle exchange program	116	40.3
Health workers	53	18.4
Family and relatives	3	1.0
Received new needle/syringe from OE/PE or staff of Needle exchange program in past 12 months		
Yes	206	68.7
No	91	30.3
Don't know	3	1
Total	300	100

Note: Because of multiple responses the percentage may exceed 100

The data shows that over two third (68.7%) of the PWIDs had received a new needle/syringe from OE/PE or staff of needle exchange program within the year of the survey.

5.7 Treatment Practice

The study also explored the practice of treatment for deactivation of the drug habit. It was found that a quarter (25%) of the PWIDs had received treatment for de-addiction. Among the 75 PWIDs who had received de-addiction treatment, 4 could recall the time of treatment.

Table 5.11: Treatment Received and Types of Such Treatment

Treatment for De-addiction	N	%
Treatment Received		
Ever treated	75	25.0
Never treated	225	75.0
Total	300	100.0
Response to treatment received		
Yes	71	94.7
Don't know	4	5.3
Total	75	100.0
Last treatment received (months)		
Less than 6 months before	17	5.7
6-11 months before	14	4.7
12-23 months before	16	5.3
24-35 months before	8	2.7
36-47 months before	6	2.0
48 or more months before	10	3.3
Total	71	23.7

Those who received de-addiction treatment reported that they had received the last treatment from 6 months to 4 years before the survey was conducted. Among those who received de-addiction treatment, 8 percent had received it within 1 year, ten percent had received it within last 1 year to 3 years and 5.3 percent had received the treatment before 3 years from the time the survey was conducted.

CHAPTER – 6: SEXUAL BEHAVIOR AND CONDOM USE

This chapter explains the sexual behavior, types of sex partners and use of condom by the PWIDs.

6.1 Sexual Behavior of PWIDs

The data from the survey shows that most of the PWIDs (95.7%) had at least one sexual contact before the survey. Among them, 85.7 percent had their first sexual contact before the age of 20 years, while the remaining 14.3 percent had their first sexual contact at or after the age of 20 years. The median age of first sexual contact among the PWIDs was found to be 17 years.

Table 6.1: Sexual Behavior

Sexual Behavior		
Sexual Behavior	N	%
Yes	287	95.7
No	6	2
No response	7	2.3
Total	300	100
Age at first sexual intercourse		
Below 20 years	246	85.7
20 years and above	41	14.3
Median	17	
Sexual intercourse in the past 12 months		
Yes	256	87.1
No	38	12.9
Total	294	100.0
Numbers of female sexual partners in the past 12 months		
1 partner	118	46.1
2 or more partners	138	53.9
Total	256	100.0

Among those who had sexual contact (N = 294), 87.1 percent had had sexual contact within the year of survey. Among those who had sexual contact within last one year, 46.1 percent had one partner while the remaining 53.9 percent had 2 or more partners.

Among the 294 respondents who reported to have had sexual intercourse within the last one year, 72.1 percent had sexual contact with a regular partner and 176 out of 212 (83%) had sexual intercourse with their regular sex partners within the month of the survey.

Table 6.2: Sexual Intercourse with Regular Female Sex Partners

Sexual Practice		
Sex with a regular partner during the past 12 months	**N**	**%**
Yes	212	72.1
No	82	27.9
Total	294	100.0
Sex with a regular partner during the last month		
Yes	176	83.0
No	21	9.9
Don't know	11	5.2
No response	4	1.9
Total	212	100.0
Frequency of sex with a last regular female sex partner during the last month		
1-4 sexual contact	74	42.0
5 and more sexual contacts	102	58.0
Average	5.8	
Total	176	100.0

Among 176 PWIDs who had sexual contact with their regular female sex partners, 42 percent had one to four sexual contacts while the remaining 58 percent of them had five and more sexual contact within the month of the survey.

One hundred nineteen (40.5%) among a total of 294 PWIDs reported to had sex with a non-regular sex partners within the year of the survey. Among the 126 PWIDs who had non-regular sex partners, 36 (30.3%) reported to have one non regular sex partner and the remaining 83 (69.7%) informed that they had two or more non-regular sex partners during the year of the survey.

Among the 294 respondents who replied to the question whether they had had sex with non-regular female sex partner during past one month, 119 (40.5 %) replied “yes” where as the remaining 175 (59.5 %) denied to have done so.

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

Sexual Practice		
Sex with non-regular female sex partner in the past 12 months	**N**	**%**
Yes	119	40.5
No	175	59.5
Total	294	100.0
Number of non-regular female sex partner in the past 12 months		
1 partner	36	30.3
2 and more partners	83	69.7
Average	2.8	
Total	119	100.0
Sex with non-regular female sex partner during past month		
Yes	119	40.5
No	175	59.5
Total	294	100.0
Sex with non-regular female sex partner in the last months		
Yes	93	78.2
No	20	16.8
Don't know	5	4.2
No response	1	.8
Total	119	100.0
Frequency of sex with last non-regular female sex partners during past month		
1-4 sexual contacts	70	75.3
5 and more sexual contacts	23	24.7
Average	4.1	
Total	93	100.0

Among the 119 PWIDs who replied to the question whether they had sex with a non regular sex partner within the last month, 93 (78.2 %) replied “yes” whereas, 20 (16.8 %) replied that they did not have sex with a non regular sex partner within the month of the survey. Among the 93 PWIDs who had had sex with a non-regular partner within the month of the survey, 75.3 percent had one to four sexual contacts and the remaining 24.7 percent had had five or more sexual contacts.

Among the 300 surveyed PWIDs, 296 replied to the question “Whether they had sex with a female sex worker (FSW) within the year of the survey”. Among them 24.1 percent reported positive answer whereas, the remaining 75.9 percent denied to have done so. a total of 26.8 percent of those who answered yes had sex with one FSW and 73.2 percent had sex with 2 or more FSWs within the year of the survey.

Table 6.4: Sexual Intercourse with Female Sex worker

Sexual Practice	N	%
Sex with female sex worker in the past 12 months		
Yes	71	24.1
No	223	75.9
Total	296	100.0
Number of female sex workers visited in the past 12 months		
1 FSW	19	26.8
2 or more FSWs	52	73.2
Average	2.7	
Total	71	100.0
Sex with female sex worker during past month		
Yes	35	49.3
No	28	39.4
Don't Know	8	11.3
Total	71	100.0
Frequency of sex with last female sex worker during the past month		
1 - 4 times	33	94.3
5 or more times	2	5.7
Average	2.8	
Total	35	100.0

Among the 71 PWIDs who had sex with a FSW within the year of the survey, 35 (49.3%) had done so within the month of the survey. Furthermore, 33 of them had one to four sexual contacts and the two had five or more sexual contacts with FSW within the survey month.

Among the 300 surveyed PWIDs, 294 respondents replied to the question whether they had had sex with a male sex partner with the past 12 months. Among them 6 (2%) replied that they had sex with a male sex partner. Among them, one half (3) had sex with one male sex partner and the other half (3) had had sex with two and more male sex partners within the surveyed year.

Table 6.5: Sexual Intercourse with Male Sex Partner

Sexual Practice		
Sex with male sex partner in the past 12 months	**N**	**%**
Yes	6	2.0
No	288	98.0
Total	294	100.0
Number of male sex partner visited in the past 12 months		

1 Male Sex Partner	3	50.0
2 or more Male Sex Partner	3	50.0
Average	1.5	
Total	6	100.0
Sex with male sex partner during past month		
Yes	4	1.4
No	290	98.6
Total	294	100.0
Frequency of sex with last male sex partner during the past month		
1 - 2 times	4	100.0
Total		100

Similarly, four of the PWIDs had sex with a male sex partner within a month of the survey. All of them reported that they had one to two sexual contacts with a male sex partner within the surveyed month.

6.2 Knowledge and Use of Condoms

The study also examined the participants' knowledge and use of condoms. The data shows that almost all (99.7%) of them had heard about condom. Forty-two percent of the PWIDs reported that they had used condom with regular female sex partner, 67.2 percent of them had done so with non regular partners, 77.5 percent with FSWs and 66.7 percent with a male sex partner during the last sexual intercourse.

Table 6.6: 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	89	42.0
No	123	58.0
Total	212	100.0
Condom use with non-regular female sex partner during last sexual intercourse		
Yes	80	67.2
No	37	31.1
Don't know	1	.8
No response	1	.8
Total	119	100.0
Condom use with female sex worker during last sexual intercourse		

Yes	55	77.5
No	12	16.9
Don't know	2	2.8
No response	2	2.8
Total	71	100.0
Condom use with male sex partner during last sexual intercourse		
Yes	2	66.7
No	1	33.3
Total	3	100.0

The consistent use of condom during vaginal sex was also assessed among the PWIDs (Table 6.7). It was 21.7 percent among regular sex partners (212), 35.7 percent among non-regular sex partners (126) and 52.1 percent among FSWs (71).

Table 6.7: Consistent condom use with different type of sex partner

Type of Sex partner and consistent use of Condom	**N**	**%**
Regular sex partner	212	72.1
Consistent use of condom with regular partner	46	21.7
Non regular sex partner	126	49.2
Consistent use of condom with non-regular partner	45	35.7
Female Sex Workers	71	24.1
Consistent use of condom with FSWs	37	52.1

The Consistent condom use was also measured during last anal sex with different partners. It was 12.5 percent among regular sex partners (8), 27.3 percent with non regular sex partner (11) and 60 percent with FSWs (10).

Table.6.8: Consistent condom use during last anal sex with different partners

Anal sex acts	**N**	**%**
Regular sex partner	8	3.8
Consistent use of condom with regular partner	1	12.5
Non regular sex partner	11	9.2
Consistent use of condom with non-regular partner	3	27.3
Female Sex Workers	10	14.1
Consistent use of condom with FSWs	6	60.0

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6.3 Sources of Information about Condoms

The data shows that almost all (99.7%) the PWIDs had heard of condom. Eighty-nine percent of them knew that they could obtain condom from medical shop/clinic. Other sources mentioned were Pan Pasal/Other shops (70.6%), PE/OE (57.9%) and hospital (40.1%).

Table 6.9: Sources and information about condoms

Ever heard Condom	N	%
Yes	299	99.7
No	1	0.3
Total	300	100
Place/person from where condom can be obtained*		
Hospital	120	40.1
Medical Shop/Clinic	266	89.0
Hotel	6	2.0
Pan Pasal/Other Shop	211	70.6
Health Workers	26	8.7
PE/OE	173	57.9
Friends	11	3.7
Received condom (free of cost) from an organization in the past 12 months		
Yes	204	68.2
No	95	31.8
Total	299	100.0
Carry condom		
Yes	95	31.8
No	204	68.2
Total	299	100.0

***Note: Because of multiple responses the percentage may exceed 100**

Among the 299 PWIDs who had heard of condom, 68.2 percent had received it free of cost from an organization in the last. Similarly, 31.8 percent of them replied that they carried condom with them whereas 68.2 percent mentioned that they did not carry it.

CHAPTER 7: KNOWLEDGEOF STIs, HIV/AIDS AND HCV

This chapter deals with the knowledge of STIs, HIV/AIDS and Hepatitis C among PWIDs. It also describes their attitude and perceptions towards HIV/AIDS, knowledge about how HIV/AIDS is transmitted and regarding HIV testing facilities.

7.1 Knowledge about STIs

Eighty seven percent of PWIDs reported that they had heard about STIs while the remaining 13 percent had not heard about it.

Table 7.1: Awareness of STIs

Heard about STIs	N	%
Yes	261	87.0
No	39	13.0
Total	300	100.0

The PWIDs who had heard of STIs were asked about the symptoms on female and male patients of STIs. When asked about the known symptoms of STIs in female, almost half (48.8 % and 48.4 %) each replied it to be genital ulcers/sores and genital discharge (discharge of pus from genitalia respectively). Other common responses were fowl smelling vaginal genital discharge (44.2%), lower abdominal pain (28.8%), burning pain during urination (19.4%) and itching (15.9%).

Table 7.2: Known Symptoms of Male and Female STIs

STI symptoms mentioned by PWIDs	N	%
Known Symptoms of Female STIs		
Lower abdominal pain	73	28.3
Fowl smelling genital discharge	114	44.2
Genital ulcers /Sores	126	48.8
Burning pain during urination	50	19.4
Itching	41	15.9
Swelling in groin areas	16	6.2
Discharge of pus from Genitalia (Genital Discharge)	125	48.4
Others	3	1.1
Don't know	86	33.3
Known Symptoms of Male STIs		
Genital Discharge	149	57.5
Burning pain during urination	123	47.5
Genital Ulcers/Sore blisters	159	61.4
Swelling in groin area	75	29.0

Others	2	0.8
Don't know	65	25.1

***Note: Because of multiple responses the percentage may exceed 100**

When asked about the symptoms of STIs on male, the most common response was genital ulcers/sore blisters (61.4%). Other common responses were genital discharge (57.5%), burning pain during urination (47.5%) and swelling in groin area (29%). Moreover, ninety-one percent of the PWIDs had not experienced genital discharge within the year of survey while 8.3% had experienced genital discharge.

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

STI Symptoms	N	%
Had genital discharge in the past year		
Yes	25	8.3
No	273	91.0
Don't know	2	0.7
Total	300	100.0
Had genital ulcer/sore blister in the past year		
Yes	23	7.7
No	276	92.0
Don't know	1	0.3
Total	300	100.0

Among the surveyed PWIDs 7.7 percent reported that they had genital ulcer/sore blister within the year of the survey and remaining 92 percent had not experienced the same symptom(Table 7.3). Similarly, sixty percent of the PWIDs informed that they were experiencing genital discharge during the time of survey, whereas, 43.5 percent were experiencing genital ulcer/sore blister (Table 7.4).

Table 7.4: STI Symptom Currently Experienced and treatment seeking behavior

STI Symptoms and Treatment	N	%
Currently experiencing genital discharge		
Yes	17	68.0
No	8	32.0
Total	25	100.0
Currently experiencing genital ulcer/sore blister		
Yes	10	43.5
No	13	56.5
Total	23	100.0
Seeking treatment		

Didn't seek treatment	17	5.7
Private Doctor	9	3.0
Hospital	18	6.0
Treatment is not required	255	85.0
Others	1	0.3
Total	300	100.0

The behavior of the PWIDs related to treatment of the STI was also explored in the study. The data shows that most (90.7%) of them had not sought any treatment as they thought that treatment was not required (85%). Only 9 percent had undergone treatment; 3 percent with private doctor and 6% in a hospital.

7.2 Knowledge about HIV/AIDS

The study showed that almost all (99.3%) of the PWIDs had heard of HIV/AIDS. Among them, two third (66.3%) “knew someone living with HIV/AID or someone who had died due to AIDS-related illness”. Among the 199 who knew the persons with HIV/AIDS, 26 replied to be their close relative, 69 replied to be their close friend and the rest 104 replied that they had no relation with them.

Table 7.5: Awareness of HIV/AIDS

Ever heard of HIV or disease called AIDS	**N**	**%**
Yes	298	99.3
No	2	0.7
Total	300	100.0
Know anyone who is living with HIV/AIDS or has died due to AIDS related illness		
Yes	199	66.3
No	101	33.7
Total	300	100.0
Nature of relationship with the person		
Close relative	26	13.1
Close friend	69	34.7
No relation	104	52.3
Total	199	100.0

The PWIDs were asked questions to explore the level of their knowledge about HIV/AIDS (Table 7.6). The data shows that more than half (55.7%) of them knew that HIV transmission could be avoided by “abstinence of sexual contact (A)”, 71.3 percent knew that HIV transmission could be avoided by “being faithful to one partner (B) and 93.3 percent knew that HIV transmission could be avoided by “using condom during each sexual contact (C)”.

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	167	55.7
B Being faithful to one partner	214	71.3
C Condom use during each sexual contact	280	93.3
Knowledge of ABC	129	43.0
Perception regarding HIV transmission		
D A healthy-looking person can be infected with HIV	256	85.3
E A person cannot get the HIV virus from mosquito bite	197	65.7
F Sharing a meal with an HIV infected person does not transmit HIV virus	269	89.7
Knowledge of BCDEF	106	35.3

Regarding perception, 85.3 percent knew that “A healthy-looking person can be infected with HIV (D)”, 65.7 percent of them knew that “A person cannot get the HIV virus from mosquito bite (E)” and 89.9 percent of them knew that “Sharing a meal with an HIV infected person does not transmit HIV virus (F)”. Overall, only 43% had knowledge about how HIV transmission could be avoided (A, B, C) and only 35.3% of them had Knowledge of BCDEF.

Some other questions were also asked to assess their knowledge of HIV/AIDS (Table 7.7). Majority of them (94.3%) knew that a person could get HIV by reusing the needle used by others. They knew that they could protect themselves from HIV/AIDS by switching to non-injecting drugs (63.3%) HIV could be transmitted through blood transfusion from an infected person (97.3%); a person cannot get HIV by holding hand of HIV infected person (88%); and a pregnant woman infected with HIV/AIDS can transmit the virus to her unborn child (77.3%).

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	283	94.3
An IDU can protect themselves from HIV/AIDS by switching to non-injecting drugs	190	63.3
A woman with HIV/AIDS can transmit the virus to her new-born child through breastfeeding	164	54.7
Blood transfusion from an infected person to the other transmit HIV	292	97.3
A person cannot get HIV by holding an HIV infected person’s hand	264	88.0
A pregnant woman infected with HIV/AIDS can transmit the virus to her unborn	232	77.

child		3
Ways by which a pregnant woman can reduce the risk of transmission of HIV to her unborn child		
Take medicine	134	57.8
Don't know	98	42.2
Total	232	100

The PWIDs who responded that a pregnant woman infected with HIV/AIDS can transmit the virus to her unborn child were also asked about ways by which a pregnant woman could reduce the risk of transmission of HIV to her unborn child. More than half (57.8%) of them knew that the pregnant women could do so by taking medicine.

7.3 Knowledge about HIV Testing Facilities

The knowledge about the HIV testing facility among the PWIDs was assessed in the study (Table 7.8). Seventy-nine percent of them knew that a confidential HIV testing facility was available in the community. Sixty-seven percent (201 PWIDs) had tested for HIV at least once. Among them, 92 percent had done it as they felt they required doing it and the remaining 8 percent did so voluntarily. Furthermore, 98 percent of them had received the test result and 69.1 percent had done the test within the year of survey. When they were asked about the result of their last test, 2.5 percent mentioned that it was positive.

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

Description on HIV Testing		
A confidential HIV testing facility is available in the community	**N**	**%**
Yes	237	79.0
No	30	10.0
Don't know	33	11.0
Total	300	100.0
Ever had an HIV test		
Yes	201	67.0
No	99	33.0
Total	300	100.0
Reason for test taken		
Required HIV test	185	92.0
Voluntary HIV test	16	8.0
Total	201	100.0
Test result received		

Yes	197	98.0
No	4	2.0
Total	201	100.0
Timing of last HIV test		
Within Last Years	139	69.2
1 - 2 years	40	19.9
2 - 4 years	13	6.5
4 years or more	9	4.5
Total	201	100.0
What was the result of your last test?		
Positive	5	2.5
Negative	187	94.9
Confusion	2	1.0
Result not received	1	0.5
Don't know	2	1.0
Total	197	100.0

7.4 Perceptions on HIV/AIDS

The PWIDs were asked questions in order to find out their perception and attitude towards HIV/AIDS. The data shows that majority (93.3%) of them were ready to take care of their male relative with HIV positive and 92.7 percent were ready to take care of their female relative with HIV positive. Two third (66.3%) of them wanted to keep the condition of their HIV positive family member confidential, and 90.3 percent of them were ready to buy food from a HIV infected shop keeper.

Table 7.9: Attitude towards HIV/AIDS

Individual Perception	N (300)	%
Would readily take care of HIV positive male relative in the household		
Yes	280	93.3
No	15	5.0
Don't know	5	1.7
Would readily take care of HIV positive female relative in the household		
Yes	278	92.7
No	17	5.7
Don't know	5	1.7
Would prefer not to talk about a family member being HIV positive		

Yes	199	66.3
No	97	32.3
Don't know	4	1.3
Would readily buy food from HIV infected shopkeeper		
Yes	271	90.3
No	25	8.3
Don't know	4	1.3
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	78	26.0
More	180	60.0
Less	4	1.3
Don't know	35	11.7
No response	3	1.0
Believe that HIV infected person should be allowed to continue working unless very sick		
Yes	271	90.3
No	22	7.3
Don't know	4	1.3
No response	3	1.0
Children living with HIV should be able to attend school with children who are HIV negative		
Yes	269	89.7
No	9	3.0
Don't know	22	7.3

When asked either the health care needs of a HIV infected person is same, more or less than those required by someone with other chronic disease, 26 percent replied it to be same, while 60 percent believed that they required more intensive heath care. Most of them (90.3%) believed that an HIV infected person should be allowed to continue working unless s/he is very sick and 89.7 percent replied that children living with HIV should be able to attend school with children who do not have HIV.

7.5 Knowledge about Hepatitis C

During this survey knowledge regarding Hepatitis C was assessed for the first time. Less than half (43.7%) of the PWIDs replied that Hepatitis C could be transmitted through sex and the same percentage (43.7%) believed use of condoms during sex could protect against Hepatitis C.

Table 7.10 Knowledge about Hepatitis C

Knowledge about Hepatitis C	N (300)	%
Hepatitis C can be transmitted through sex		
Yes	131	43.7
No	42	14.0
Don't know	127	42.3
Condoms can protect against Hepatitis C		
Yes	131	43.7
No	51	17.0
Don't know	118	39.3
Hepatitis C can only occur if you have HIV		
Yes	51	17.0
No	123	41.0
Don't know	126	42.0
Hepatitis C can be transmitted by sharing needles		
Yes	205	68.3
No	10	3.3
Don't know	85	28.3
Hepatitis C can be transmitted through tattooing		
Yes	167	55.7
No	27	9.0
Don't know	106	35.3
Is there a medical treatment for Hepatitis C		
Yes	179	59.7
No	11	3.7
Don't know	110	36.7
Herbal remedies can cure Hepatitis C		
Yes	51	17.0
No	108	36.0
Don't know	141	47.0

More than two third PWIDs (68.3%) knew that hepatitis C could be transmitted by sharing needles and 55.7 percent were aware that hepatitis C could be transmitted through tattooing. Majority of them (59.7%) knew that medical treatment was available for Hepatitis C while 36 percent were aware that herbal remedies would not cure hepatitis C.

CHAPTER 8: EXPOSURE TO STI, HIVAND AIDS AWARENESS PROGRAMS

This chapter deals with the finding of the study related to exposure of PWIDs to various awareness programs related to STIs, HIV & AIDS targeted to PWIDs.

8.1 Peer/Outreach Education

The study revealed that sixty percent of the PWIDs had met PE/OE within the year of the survey. During the meeting they performed various activities (Table 8.1). Majority (87.3%) of them reported to have discussed about safe injecting behavior. Other common topics of discussion were about transmission of HIV and AIDS (72.4%) and condom use (42.5%).

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	180	60.0
No	120	40.0
Total	300	100.0
Activities performed while with PE/OE*		
Discussion on how HIV/AIDS is/isn't transmitted	131	72.4
Discussion on how STI is/isn't transmitted	37	20.4
Discussion on safe injecting behavior	158	87.3
Regular/non regular use of condom	77	42.5
Demonstration on using condom correctly	34	18.8
Others	2	1.1
Frequency of meeting with PE or OE		
Once	5	2.8
2 - 3 times	27	14.9
4 - 6 times	32	17.7
7 - 12 times	37	20.4
12 or more times	80	44.2
Total	180	100.0

***Note: Because of multiple responses the percentage may exceed 100**

Among the 180 PWIDs who had meet with PE/OE in the year of survey, almost two third (64.6%) had met them more than 7 times.

8.2 Drop-in-Centers

Among 300 surveyed PWIDs, 207 (69%) had visited Drop-in Centers (DICs) within the year of survey. The major reason of visiting the DIC was to get a new syringe (65.2%). Almost half (48.5%) of them had visited DIC to learn about safe injecting behavior. Other common reasons were to participate in discussion on HIV transmission (43.1%), to collect condoms (31.8%), to watch documentary on HIV/AIDS (25%) and to learn correct way of using condom (21.1%).

Table 8.2: DIC Visiting Practices in the Past Year

DIC Visiting Practices	N	%
Visited a DIC in the last 12 months		
Yes	207	69
No	93	31
Total	300	100
Participated activities at DIC*		
Went to collect condoms	65	31.86
Went to learn the correct way of using condom	43	21.08
Went to learn about safe injecting behavior	99	48.53
Went to watch film on HIV/AIDS	51	25.00
Participation in discussion on HIV transmission	88	43.14
Went to have new syringe	133	65.20
Others	5	2.45
Frequency of visits to the DICs		
Once	10	4.83
2 - 3 times	36	17.39
4 - 6 times	36	17.39
7 - 12 times	34	16.43
12 or more times	91	43.96
Total	207	100.00

***Note: Because of multiple responses the percentage may exceed 100**

Among the 207 PWIDs who had visited DIC in the past year, around 60 percent had visited there over 7 times, almost one in six of them had visited there 4-6 times and 2-3 times over the past year each.

8.3 STI Clinics

Among the 300 respondents, only 5 percent of them had visited the STI Clinics in the past year. The major reason of visiting the STI Clinics was to have blood tested for STI (73.3%) and to have a physical examination done for identification of STI (40%).

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	15	5.0
No	285	95.0
Total	300	100.0
Participated activities at STI clinic		
Blood tested for STI	11	73.3
Physical examination conducted for STI identification	6	40.0
Discussion on how STI is/isn't transmitted	1	6.7
Discussion on safe injecting behavior	2	13.3
Regular/Non regular use of condom	2	13.3
Took a friend with me	3	20.0
Frequency of visits to STI clinics		
Once	5	33.3
2 - 3 times	6	40.0
4 - 6 times	3	20.0
7 - 12 times	1	6.7
Total	15	100.0

***Note: Because of multiple responses the percentage may exceed 100**

Among the 15 PWIDs who had visited STI Clinics in the past year, majority (n=11, 73.3%) had visited there less than 3 times in the past year.

8.4 HTC Centers

Within the past year of the survey 34.7 percent of the PWIDs had visited HTC centre. The major reasons were to get an their HIV tested (84.3%) and to receive the HIV test result (76.4%). Other activities done during the visit were receiving post HIV and AIDS counseling (56.9%), receiving pre HIV and AIDS test counseling (28.4%) and around one in five of them went there to receive information on safe injecting behavior.

Table 8.4: VCT Visiting Practices in the Past Year

HTC Visiting Practices	N	%
Visited HCT center in the last 12 months		
Yes	104	34.7
No	196	65.3
Total	300	100.0
Participated activities at HTC*		
Received pre-HIV/AIDS test counseling	29	28.4
Blood sample taken for HIV/AIDS test	86	84.3
Received post HIV/AIDS test counseling	58	56.9
Received information on safe injecting behavior	21	20.6
Received HIV/AIDS result	78	76.5
Received counseling on using condom correctly in each sexual intercourse	6	5.9
Received information on HIV/AIDS window period	3	2.9
Took a friend with me	4	3.9
Frequency of visits to the DICs		
Once	30	28.8
2 - 3 times	51	49.0
4 - 6 times	14	13.5
7 - 12 times	2	1.9
12 or more times	7	6.7
Total	104	100

***Note: Because of multiple responses the percentage may exceed 100**

Among 104 PWIDs who had visited the HTC with the past year majority (77.8%) had visited it less than 3 times and 13.5 percent had visited it 4 to 6 times. Only 8.6 percent of them visited the HTC more than 7 times in the year of survey.

8.5 Participation in Opoid Substitution Therapy (OST)

Among the 104 PWIDs who had visited HTC in the past year, only 9.6 percent had ever been enrolled for Opoid Substitution Therapy (OST). Among them, only 3 had received OST in the past 12 month. Furthermore, two of them had received Methadone and one of them had received Buprenorphine.

Table 8.5 Enrolled for Opoid substitution Therapy (OST) Service

Ever enrolled into any Opoid substitution Therapy (OST)	**N**	**%**
Yes	10	9.6
No	86	82.7
Don't know	8	7.7
Total	104	100
Received any Opoid substitution therapy (OST) in the past 12 months		
Yes	3	30.0
No	7	70.0
Total	10	100.0
Which service have you received?		
Methadone	2	66.7
Buprenorphine	1	33.3
Total	3	100.0

8.6 Knowledge about HIV and AIDS related services

Various questions were asked to assess the knowledge of the PWID's about HIV and AIDS related services (Table 8.6). Nearly one third (31.7%) of the PWIDs reported that they had heard of PMTCT services for pregnant women and 80 (84.2 %) of them knew where the pregnant woman could receive PMTCT services.

Less than half (n=135, 45%) of the respondents had heard about the ART services for HIV positive individuals and among them, 108 (80%) knew where the ART services were available. Moreover, only 48 (16 %) of the PWIDs had ever heard of viral load testing for HIV positive individuals and 42 (87.5 %) of them knew where to get the viral load testing done. Similarly, less than half (43.3%) of the PWIDs were aware about the community home based care (CHBC) for HIV positive people.

Table 8.6 Knowledge about HIV and AIDS related services

Knowledge about HIV and AIDS related services	N	%
Ever heard about PMTCT services for pregnant women		
Yes	95	31.7
No	167	55.7
Don't know	38	12.7
Total	300	100.0
Knowledge about pregnant women can get PMTCT services		
Yes	80	84.2
No	13	13.7
Don't know	2	2.1
Total	95	100.0
Ever heard about ART services for HIV positive individuals		
Yes	135	45.0
No	140	46.7
Don't know	25	8.3
Total	300	100.0
Knowledge about HIV positive individuals can get ART services		
Yes	108	80.0
No	24	17.8
Don't know	3	2.2
Total	135	100.0
Heard of viral load testing services for HIV positive individuals		
Yes	48	16.0
No	216	72.0
Don't know	36	12.0
Total	300	100.0
Knowledge HIV positive individuals can get viral load testing services		
Yes	42	87.5
No	3	6.3
Don't know	3	6.3
Total	48	100.0
Heard of any CHBC services that are provided for HIV positive people		
Yes	130	43.3
No	170	56.7
Total	300	100.0

CHAPTER 9: COMPARATIVE ANALYSIS OF SELECTED CHARACTERISTICS

A comparative analysis has been made in this chapter comparing the various factors of all the five rounds of IBBS surveys conducted in PWIDs of Western to Far Western Terai highway districts of Nepal. The comparison has been made regarding the trends of HIV STIs, the socio-demographic characteristics, drug injecting practices, Needle/Syringe Using Practice in the Past Week and Consistent Condom use with different sex partners**.**

9.1 Socio-Demographic Characteristic

The socio-demographic characteristics of the PWIDs show that there has not been much change in age of the PWIDs. More than 50 percent of PWIDs in all the five rounds of the survey are of 25 years of age (58.7 % in 2005, 67.3 % in 2007, 63.7 % in 2009, 64.7 % in 2012 and 59.7 percent in 2016).

Table 9.1: Socio- Demographic Characteristics

Socio-demographic Characteristics	2005		2007		2009		2012		2016	
	N=300	%	N=300	%	N=300	%	N=300	%	N=300	%
Age										
<25 Years	124	41.3	98	32.7	109	36.3	106	35.3	121	40.3
>25 Years	176	58.7	202	67.3	191	63.7	194	64.7	179	59.7
Education										
Illiterate	34	11.3	42	14.0	19	6.3	27	9.0	45	15.0
Literate Only	14	4.7	15	5.0	16	5.3	37	12.3	3	1.0
Primary	78	26.0	77	25.7	81	27.0	44	14.7	49	16.3
Secondary	113	37.7	106	35.3	130	43.3	149	49.7	154	51.3
SLC above	61	20.3	60	20.0	54	18.0	43	14.3	49	16.3

The percentage of PWIDs who have attended secondary level of education has been increasing over time; 37.7 percent in 2005, 35.3 percent in 2007, 43.3 percent in 2009, 49.7 percent in 2012 and 51.4 percent in 2016. Though there was a declining trend seen in PWIDs who had completed education upto Grade 10 and above from first round to fourth round of survey, slight improvements have been observed in the fifth round of survey in comparison to the fourth round. The percentage of PWIDs who had attended education up to Grade 10 and above was 20.3

percent in 2005, 20 percent in 2007, 18 percent in 2009, 14.3 percent in 2012 and 16.3 percent in 2016.

9.2 Drug Injecting Practices

The drug injecting practices shows that the average duration of injecting drugs among PWIDs was 4.3 percent in 2005, 5.5 percent in 2007, 5.9 percent in 2009, 5.9 percent in 2012 and 5.7 percent in 2016. This has increased from 2005 to 2007 but is rather constant after that. The duration of drug injecting habit for two or less years and more than 2 years was assessed. The percentage of drug users for more than 2 years is greater than those using for 2 or less years and it was statistically significant (p<0.001).

Table 9.2 Drug Injecting Practices

Drug Injecting Practices	**2005**		**2007**		**2009**		**2012**		**2016**		**p-Value**
	N=300	**%**	**N=300**	**%**	**N=300**	**%**	**N=300**	**%**	**N=300**	**%**	
Duration of Drug Injecting Habit											
Up to 2 years	75	26.0	56	18.7	64	21.3	68	22.7	68	22.7	<0.001
2 years	225	75	244	81.4	236	78.6	231	77.2	232	77.3	
Average duration of years	**4.3**		**5.5**		**5.9**		**5.9**		**5.7**		
Age at first drug Injection											
Up to 20 years	126	42.0	116	38.7	139	46.3	124	41.3	142	47.3	>0.17
21 + years	174	58.0	184	61.3	161	53.7	176	58.7	158	52.7	

The comparison of age at first injection in the five rounds of the IBBS surveys shows that larger number of younger people (less than 20 years) inject drugs for the first time now than in the past. It was 42 percent in 2005, 38.7 percent in 2007, 46.3 percent in 2009, 41.3 percent 2012 and 47.3 percent in 2016 but the difference not statistically significant.

9.3 Needle/Syringe Using Practice in the Past Week

The practice of use of needle/syringe in the past week was assed among the PWIDs during the five surveys. The data shows that there significant changes have taken place overtime in needle exchange behavior which was 19 percent in 2005, 10.3 percent in 2007, 11.7 percent in 2009, 10.3 percent in 2012 and 12.7 percent in 2016. There is a significant difference between the number of people who have ever used needle/syringe and those who have never used needle/syringe in the past week. The difference is statistically significant ($p<0.005$).

Table 9.3 Needle/Syringe Using practice in the Past Week

Needle/Syringe use throughout the past week	2005		2007		2009		2012		2016		P-Value
	N=300	%	N=300	%	N=300	%	N=300	%	N=238	%	
Used a needle/syringe that had been used by another											
Ever Used	57	19.0	31	10.3	35	11.7	31	10.3	38	12.7	<0.005
Never Used	243	81.0	269	89.7	265	88.3	269	89.7	200	66.7	
Used a needle/syringe that had been kept in public place											
Ever Used	46	15.3	13	4.3	23	7.7	15	5.0	14	5.9	>0.30
Never Used	254	84.7	287	95.7	277	92.3	285	95.0	224	94.1	
Number of partners shared needle/syringe with											
None	212	70.7	265	88.3	266	88.7	271	90.3	195	87.4	>0.75
Two or more Partners	88	29.3	35	11.7	34	11.3	29	10.5	28	12.6	
Total	300	100	300	100	300	100	300	100	223	100	
Re-used needle/syringe in the past week											
Yes	116	38.7	66	22.0	46	15.3	18	6.0	24	10	<0.001
No	184	61.3	234	78.0	254	84.7	282	94.0	214	90	
Total	300	100	300	100	300	100	300	100	238	100	

The data shows that there has not been much changes overtime in using needle kept in public places in the past week of survey which was 15.3 percent in 2005; 4.3 percent in 2007, 7.7 percent in 2009, 5 percent in 2012 and 5.9 percent in 2016.

During the past five surveys there has not been much change in the number of partners sharing needle/syringe in the past week of survey in this population. The percentage of people who have never shared needle/syringe during the past week of survey was 70.7 percent in 2005, 88.3 percent in 2007, 88.7 in 2009, 90.3 percent in 2012 and 87.4 in 2016.

The percentage of re-use of needle/syringe in the past week was 38.7 percent in 2005, 22 percent in 2007, 15.3 percent in 2009, 6 percent in 2012 and 10 percent in 2016. The decline is statistically significant ($p<0.001$).

9.4 Condom Use with Different Partners

The study suggests that majority used condoms consistently with FSWs (52.1%), followed by with non-regular partners (35.7 %) and regular sex partners in 2016 (21.7%). The trend shows that there is a steady growth in the consistent condom users with regular partners over the years. The number was 3.9 percent in 2005, 7 percent in 2007, 8.7 percent in 2009, 42.9 percent in 2012 and 21.7 percent in 2016. The finding is statically significant (p<0.001). A similar trend has been observed in the consistent condom users with non regular partner. The data shows that the number was to be 31.5 percent in 2005, 39.3 percent in 2007, 37.3 percent in 2009, 64.8 percent in 2012 and 35.7 percent in 2016; and the finding is statically significant (p<0.001).

Table 9.4 Condom Use with Different Partners

Consistent Use of Condom	2005		2007		2009		2012		2016		p-Value
	N	%	N	%	N	%	N	%	N	%	
Use of condom with regular female sex partners during the past 12 months											
Consistent	5	3.9	10	7.0	11	8.7	60	42.9	46	21.7	p<0.001
Inconsistent	123	96.1	133	93.0	115	91.3	80	57.1	166	78.3	
Total	128	100	143	100	126	100	140	100	212	100	
Use of condom with non-regular female sex partners during the past 12 months											
Consistent	17	31.5	22	39.3	31	37.3	59	64.8	45	35.7	p<0.001
Inconsistent	37	68.5	34	60.7	52	62.7	32	35.2	81	64.3	
Total	54	100	56	100	83	100	91	100	126	100	
Use of condom with female sex workers during the past 12 months											
Consistent	47	46.5	44	48.4	49	51.0	78	70.3	37	52.1	p<0.005
Inconsistent	54	53.5	47	51.6	47	49.0	33	29.7	34	47.9	
Total	101	100	91	100	96	100	111	100	71	100	

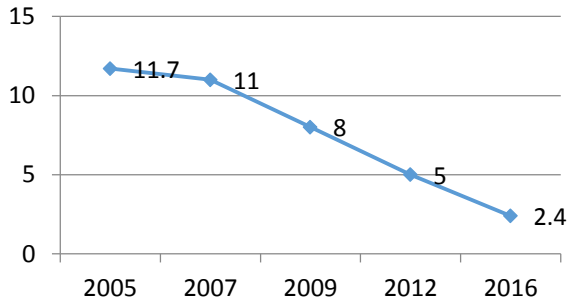
With FSWS, the consistent condom use was 46.5 percent in 2005, 48.4 percent in 2007, 51 percent in 2009, 70.3 percent in 2012 and 52.1 percent in 2016. The finding is statistically significant with a p value <0.005.

The comprehensive knowledge about HIV was found to be decreasing overtime. Knowledge of ABC (measures to prevent HIV) was 77.3 percent in 2007 and has decreased to 77.3 percent in 2009, 72 percent in 2012 and 43 percent in 2016. Similarly, the knowledge of BCDEF (major modes of HIV transmission has also been decreasing overtime. It was 57 percent in 2007, 56 percent in 2009, 43.3 percent in 2012 and has further decreased to 35.3 percent in 2016.

9.5 HIV Prevalence among PWIDS

The prevalence of HIV among PWIDs has been decreasing sharply overtime in the 7 Terai highway districts of Western to Far Western regions. It was 11.7 percent in 2005, 11 percent in 2007, 8 percent in 2009, 5 percent in 2012 and 2.4 percent in 2016.This shows that there has been a significant decrease in HIV prevalence over the period of time (p<0.001).

Figure 9.1: HIV Prevalence in PWIDS in the five round of IBBS Survey (p<0.001)



CHAPTER 10: CONCLUSIONS AND RECOMMENDATIONS

10.1 CONCLUSIONS

Based on the discussion of the data the following conclusions have been drawn from the study.

The age range of the PWIDs was from 17 to 51 years with the median age of 27 years. Over half (50.3%) of the PWIDs were of the age group 20 to 29 years old while 11 percent of them were 19 years or below.

Over half (50.3%) of the PWIDs were unmarried. The mean age at first marriage was 21 years (±SD=5) ranging of 13 to 36 years. Most of the PWIDs (88.3%) were found to be living with their family members.

The prevalence of HIV among the PWIDs of Western to Far Western region was 2.3 percent. It was 11.7 percent in 2005, 11 percent in 2007, 8 percent in 2009, 5 percent in 2012 and 2.4 percent in 2016. There has been a significant decrease in HIV prevalence over the period of time ($p<0.001$). The PWIDs who had ever got married had a higher (4 %) prevalence of HIV in comparison to unmarried ones (0.7%). The PWIDs who injected for longer duration (5 years) had higher prevalence (6 %) of HIV while those injecting for 2-5 years had only 0.8 percent HIV prevalence.

In 2016, only 0.3 percent of them had active Syphilis; the prevalence of Hepatitis B was 1.7 percent and the prevalence of Hepatitis C was 8 percent.

The prevalence of active Syphilis has been decreasing over time. It was 1.7 percent in 2009, 1.3 percent in 2012 and has further decreased to 0.3 percent in 2016.

The prevalence of HCV was higher in age group above 20 years (8 %) compared to those below 20 years (3 %) of age. Ever married PWIDs had higher prevalence of HCV (11.4 %) compared to those never married (4.6%) and it was found to be statistically significant ($p=<0.05$). The PWIDs who injected for longer duration (5 years) had higher prevalence (18 %) of HCV while those injecting for 2-5 years had only 3.8 percent HIV prevalence. This difference is statistically significant.

The average duration of drug injecting practice was 5.7 years and one third (33.3%) of them were injecting drugs for over 5 years. Nearly half (47.3%) of them started to inject drugs at the age below 20 years with median age of 21 years. The duration of drug injecting habit for two or less years and more than 2 years was assessed. The percentage of drug users for more than 2 years was greater than those using for 2 or less years and it was statistically significant ($p<0.001$).

The comparison of age at first injection in the five rounds of the IBBS surveys shows that greater number of younger people (less than 20 years) have started to inject drugs for the first time. It was 42 percent in 2005, 38.7 percent in 2007, 46.3 percent in 2009, 41.3 percent 2012 and 47.3 percent in 2016

During the last injection, 93.7 percent of them were practicing safe injecting behaviors. Among them 51.7 percent reported to be using needle/syringe by purchasing it themselves. Moreover, majority (over 90%) of the PWIDs have not injected in a group during all the past three injections taken.

Among 238 PWIDs who reported to have injected in the past week, a large majority 212 (89.1%) had not injected with a pre-filled syringe, 89.5 percent had injected with a syringe after the drugs were transferred into their syringe from other's syringe and 87 percent never "drew drug solution from a common container used by others". Sixty two percent of the PWIDs had injected in other parts of the country/out of the country within the year of survey.

Much change have taken place in recent years in needle exchange behavior. The percentage of people who exchanged needle was 19 percent in 2005, 10.3 percent in 2007, 11.7 percent in 2009, 10.3 percent in 2012 and 12.7 percent in 2016. There is a statistically significant difference ($p<0.005$) between the needle/syringe ever used and never used in the past week.

The percentage of re-use of needle/syringe in the past week was 38.7 percent in 2005, 22 percent in 2007, 15.3 percent in 2009, 6 percent in 2012 and 10 percent in 2016. This decline is statistically significant ($p<0.001$).

There have not been much changes in use of needle kept in public places in the past week of survey. The population doing so was 15.3 percent in 2005', 4.3 percent in 2007, 7.7 percent in 2009, 5 percent in 2012 and 5.9 percent in 2016.

Majority (95.7%) of the PWIDs had at least one sexual contact before the survey and 85.7 percent had their first sexual contact before they turned 20 years. The median age of first sexual contact among the PWIDs was found to be 17 years.

Among the 294 respondents who reported to have sexual intercourse within the past one year, 72.1 percent had sexual contact with a regular partner, 40.5 percent had sexual contact with a non- regular partner and 24.1 percent had sexual contact with FSWs. The consistent use of condom was 21.7 percent among regular sex partners, 35.7 percent among non-regular sex partners and 52.1 percent among FSWs. The trend of consistent use of condom among regular partners was to be 3.9 percent in 2005, 7 percent in 2007, 8.7 percent in 2009, 42.9 percent in 2012 and 21.7 percent in 2016. The difference is statically significant ($p<0.001$).

The trend of consistent use of condom with non-regular partner was found to be 31.5 percent in 2005, 39.3 percent in 2007, 37.3 percent in 2009, 64.8 percent in 2012 and 35.7 percent in 2016; and the finding is statically significant ($p<0.001$).

With FSWS, the consistent use of condom was 46.5 percent in 2005, 48.4 percent in 2007, 51 percent in 2009, 70.3 percent in 2012 and 52.1 percent in 2016. The finding is statistically significant with a p value <0.005.

Eighty seven percent of PWIDs had heard about STIs while sixty percent of the PWIDs were experiencing genital discharge during the time of survey and 43.5 percent of them were experiencing genital ulcer/sore blister but among them only 9 percent of them had sought medical treatment.

Overall, 43% had knowledge about how HIV transmission could be avoided (A, B, C) and 35.3% of them had Knowledge of BCDEF.

More than half (55.7%) knew that HIV transmission could be avoided by "abstinence of sexual contact (A)", 71.3% knew HIV transmission could be avoided by "being faithful to one partner (B) and 93.3% knew that HIV transmission could be avoided by "condom use during each sexual contact (C)".

Regarding perception, 85.3 percent knew that “a healthy-looking person can be infected with HIV (D), 65.7 percent of them knew that “a person cannot get the HIV virus from mosquito bite (E) and 89.9 percent of them knew that “sharing a meal with an HIV infected person does not transmit HIV virus (F)”.

Surprisingly, the comprehensive knowledge about HIV has been decreasing overtime. The data shows that knowledge of ABC (measures to prevent HIV) was 77.3 percent in 2007 and decreased to 77.3 percent in 2009, 72 percent in 2012 and 43 percent in 2016. Similarly, the knowledge of BCDEF (major modes of HIV transmission too has been decreasing overtime. It was 57 percent in 2007, 56 percent in 2009, and 43.3 percent in 2012 and has further decreased to 35.3 percent in 2016.

Less than half (43.7%) of the PWIDs replied that Hepatitis C could be transmitted through sex and the same percentage (43.7%) believed use of condoms during sex could protect against Hepatitis C. About two third PWIDs (68.3%) knew that hepatitis C could be transmitted by sharing needles and 55.7 percent were aware that hepatitis C could be transmitted through tattooing. More than half (59.7%) knew that there was medical treatment for Hepatitis C while 36 percent were aware that herbal remedies would not cure hepatitis C.

Sixty percent of the PWIDs had meet PE/OE, sixty-nine percent of them had visited Drop-in Centers, and 34.7 percent of them had visited HTC centre while only 5 percent of them had visited the STI Clinics in the year of the survey.

10.2 Recommendations

The following recommendations have been made based on the findings of the study

- It has been found that nearly half (47.3%) of the PWIDs started injecting drugs at the age below 20 years. So, it is recommended that a curriculum for harm reduction of drug injecting practices at secondary level of education should be developed. Educational materials should be designed in a way that can be understandable among PWIDs with no formal education.

- It was also found that among the surveyed PWIDs 95.7 percent of them had at least one sexual contact while 85.7 percent of them had their first sex below the age of 20 years. So, programs targeting the group below 20 years (IEC materials, free assess of condom) should be made more effective.

- The consistent use of condom was 21.7 percent among regular sex partners, 35.7 percent among non-regular sex partners and 52.1 percent among FSWs during this survey which is low compared to previous rounds of survey. There are already facilities of providing free condoms and they are easy to buy as well. But, the consistent use of condom is still very poor. The reason behind this should be explored further and strategies should be developed to mitigate this problem.

- The prevalence of HCV was 8 percent during the survey. Less than half (43.7%) of the PWIDs replied that Hepatitis C could be transmitted through sex and the same percentage

(43.7%) believed use of condoms during sex could protect against Hepatitis C. About two third PWIDs (68.3%) knew that hepatitis C can be transmitted by sharing needles and 55.7 percent were aware that hepatitis C could be transmitted through tattooing. More than half (59.7%) knew that medical treatment was available for Hepatitis C while 36 percent were aware that herbal remedies would not cure hepatitis C. Though the prevalence of Hepatitis C is high, the knowledge regarding prevention from Hepatitis C is poor. This calls for an immediate attention at national level. National level programs and strategies should be formed and disseminated to lower level authorities to further explore about the reasons of the problem; and develop effective programs to control the HCV infection.

- It was found that majority (90.7%) of the PWIDs having STI symptoms had not sought medical attention and their participation was found to be very low (5%) in STI Clinics during the year of survey. With the ongoing efforts on, new programs and strategies should be designed and implemented to make the PWIDs more aware about the location, facilities available in STI Clinics, HTC so that they are able to receive better care.

- Among the 300 surveyed PWIDs, only 3.3 percent had ever been enrolled into OST services. Among them only one percent had received treatment in the year of survey. Programs and strategies should be further improved to make the PWIDs realize the importance of OST and it is necessary to increase OST sites.

- The study showed that 69 percent of the PWIDs had visited DIC, 60 percent had met PE/OE, 34.7 percent had visited HTC and 5 percent had attended STI Clinics during the year of survey. It is recommended that proper plans should be made to increase the access of the PWIDs to these facilities more easily and to further improve the ability to cater services of these facilities.

- Since there is unsafe sex behavior among PWIDs, the programs for the spouses of the PWIDs must be introduced, as the PWIDs are inconsistent.

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New ERA/FHI/SACTS 2009 **Integrated Bio-behavioral Survey (IBBS) among MaleInjecting Drug Users (IDUs) in the Western and the Far-Western Terai**

Intrepid Nepal/NCASC 2012 **Integrated Biological and Behavioral (IBBS) Survey among People Who Inject Drugs (PWIDs) in Western to Far-Western Terai Highway Districts of Nepal**

Saath-SaathProject-FHI/NCASC 2014.**The National Guidelines on Case Management of Sexually Transmitted Infections**

ANNEXES

ANNEXE: 1 Questionnaires

NationalCentreforAIDSandSTDControl
MinistryofHealthandPopulation
GovernmentofNepal

IntegratedBiologicalandBehavioralSurveillanceSurveyamong

People Who Inject Drugs (PWIDs-Male)

Namaste!Mynameis .....,I amherefrom …….tocollectdataforaresearch survey.This survey is beingconductedbyNationalCentreforAIDSandSTDControl(NCASC),Ministryof HealthandPopulation. Duringthisinterview,Iwillaskyou some personal questionsthatwillbeaboutsexualbehavior,useandpromotionofcondoms, HIV/STI/HCV; anduseofdrugsandneedle/syringes. Youmayfeeluncomfortableto answersome questions relating to your personal behavior, but it is important that you provide correct information.Wewillalsotakeabout5-7mlbloodsamplefortestingHIV,syphilisinfection, Hepatitis B and Hepatitis C.IfitisdeterminedthatyouhaveanySTIsymptoms,wewillprovidetreatmentfreeofcharge.Wealso willtreatforsyphilisonthebasisofRPRtestonthesamedayofinterview.Theinformationgiven byyouwillbestrictlytreatedasconfidential.Nobodywillknowwhateverwetalkaboutbecause yournamewillnotbementionedonthisformandcollectedsamples.Allthementionedinformation willbeusedonlyforthesurveypurpose.Thissurveywilltakeaboutanhour.

Itdependsonyourwishtoparticipate inthissurveyornot.Youdonothavetoanswerthose questionsthatyoudonotwanttoanswer,andyoumayendthisinterviewatanytimeyouwantto. ButIhopeyouwillparticipateinthissurveyandmakeitasuccessbyprovidingcorrectanswersto allthequestions.

Wouldyoubewillingtoparticipate?

1.Yes2.No

Signatureoftheinterviewer:_____Date:____/___/2072

OperationaldefinitionofPWIDs:

"Current male druginjectorsaged16yearsorabovewhohadbeeninjectingdrugsfornon-medical purposesforatleastthreemonthspriortothedateofthesurvey"

Didtheintervieweeabandontheinterview?

1.Yes(Precisethenumberofthelastquestioncompleted:Q_)

2.No

InterviewerName:_____ CodeInterviewer:____

DateInterview:____/_____/2072

Checkedbythesupervisor:Signature:_____Date:_____/_____/2072

DataEntry#2:Clerk'sname Date / /2072

01. Hassomeoneinterviewedyoufrom……withaquestionnaireinlastfewweeks?

1.Yes 2.No(continueinterview)

↓

When?

_____Daysago(makesurethatitwasinterviewedby……andclosetheinterview)

002. Respondent'sID#: ☐☐☐☐☐☐

002.1 Didyoushareneedle/syringewiththefriend whobroughtyouhere?

1.Yes 2.No

002.2 Howlongyouhave been injecting drugs?

Years ☐☐ Months ☐☐

(NOTE: AFORMENTIONED QUESTIONS ARE THE SCREENING QUESTIONS.IFTHERESPONSEISLESSTHANTHREE MONTHS, STOPINTERVIEWBECAUSETHIS PERSONISNOTELIGIBLEFORINCLUSIONIN THESAMPLE)

003. InterviewLocation

(Tobefilledbyinterviewer)003.1 District: _____

003.2 VDC/Municipality: _____

1.0 BACKGROUNDOFRESPONDENT

Q.N.	Question	Coding Categories	Skipt
101	Whereareyoulivingnow? **(Writecurrent addressofresidency)**	003.1 District: _____ 003.2 VDC/Municipality : _____	
101.1	Howlonghaveyoubeenliving continuouslyat thesame address? **(Write995iflessthanonemonth)**	Months.....☐☐☐ Always(sincebirth).....0 Others(Specify)……96	
102	Howoldareyou?	Age.....☐☐ **(writethecompletedyears)**	

103	Whatisyoureducationalstatus? **(Circle'0'ifilliterate,'19'fortheliterate withoutattendingtheschool,andwrite exactnumberofthepassedgrade)**	Illiterate.....0 Literate.....19 Grade completed…....☐☐ **(writethecompletedgrade)**	
104	Whatisyourcaste? **(SpecifyCaste)**	Caste_____ CodeNo.....☐☐	
105	Whatisyourcurrentmaritalstatus?	Unmarried.....1 ⟶ Married…….…….2 Divorced/Permanentlyseparated.....3 Widor……4Living together……..5 Others*(specify)*……96	106
105.1	Howoldwereyouwhen youfirstgot married?	Age..... ☐☐ **(writethecompletedyears)**	
106	Which of the following best describes your current living status? **(Select only one option)**	Homeless on the street…....1 Living in own home……..…2 Living in a residential hotel...3 Rented apartment……4 Rented room..…..…….……5 Others *(specify)* …..……....96	
Q.N.	**Questions**	**CodingCategories**	**Skipt**
107	Withwhomyou areliving now?	Livingwithwife.....1 Livingwithfemalesexualpartner.....2 Livingwithoutsexualpartner.....3 Others*(Specify*)……..…….96 No response.....99	
107.1	How many dependents are there in your family?	Number: …….. ☐☐	

108	During thepastone-monthhowoftenhave you had drinkscontainingalcohol? **(Suchas alcohol, beer,local beeretc.)**	Everyday.....1 Morethan oncea week.....2 Onceaweek.....3 Neverdrink.....4 Others*(Specify*)……..96 Noresponse.....99	

2.0 DRUG USE

Q.N.	Questions	Coding Categories	Skipto
201	Howlonghaveyoubeenusingdrugs? **(DrugmeansmedicinenotusedfortreatmentpurposeratherusedforIntoxication**)	Years…..☐☐ Months…..☐☐ Noresponse.....99	
202	Howoldwereyou when youfirst injecteddrugs? **(Includeself-injectionorinjectionbyanother)**	Years…..☐☐ **(writethecompletedyears)**	
203	Howlonghaveyoubeeninjectingdrugs? **(Includeself-injectionorinjectionbyothers)**	Years.....☐☐ Months.....☐☐ Noresponse.....99	
203.1	Haveyouinjecteddrugs in thelastmonth?	Yes.....1 No.....2 →	204
203.2	If Yes, haveyouusednon-sterilesyringe/needleat any timeinthelastmonth?	Yes.....1 No.....2	
203.3	Haveyouusednon-sterileinjecting equipment atany timeinthelastmonth?	Yes.....1 No.....2	

204	Whichofthefollowingtypesofdrugshaveyouusedand/orinjectedin thepastone-week? **(Readthelist,multipleanswerpossible)**								
	Description	**UsedinLast-Week**				**InjectedinLast-Week**			
		YES	**NO**	**DK**	**NR**	**YES**	**NO**	**DK**	**NR**
	1.Tidigesic/Noorphine/Nufine/Lupegesic					1	2	98	99
	2. BrownSugar/White Sugar	1	2	98	99	1	2	98	99
	3.Nitrosun/Nitrovate	1	2	98	99	1	2	98	99
	4. Ganja/Chares	1	2	98	99				
	5.Phensydyl+Corex	1	2	98	99				
	6.Calmpose/Diazepam/Velium	1	2	98	99	1	2	98	99
	7.Codeine	1	2	98	99	1	2	98	99
	8.Phenergan/Stagon	1	2	98	99	1	2	98	99
	9.Cocaine/Cracks	1	2	98	99				
	10.Proxygin/Proxyvon	1	2	98	99	1	2	98	99
	11.Effidin	1	2	98	99	1	2	98	99
	12.LysergicAcidDithylamide(LSD)	1	2	98	99				
	13.Avil/Algic	1	2	98	99	1	2	98	99
	14. Amphetamine /Yava	**1**	2	98	99	1	2	98	99
	96.Others(*Specify)*_	1	2	98	99	1	2	98	99
204.0.1	Have you used these drugs in combination form?	Yes.....1 No.....2 →						204.1	
204.0.2	If yes, how many drugs have you used in combination form?	☐(numbers)							
204.0.3	What are the main drugs used in combination form?	……..(Specify)							
204.1	In the last month, did you switch from one drug to another?	Yes…..……1 No…….2 →						205	
204.1.1	If yes,which drug you left and which drug you started using?	Using before_____ Using now_____							

204.1.2	Whatisthereasonforswitching to another drug?	To decrease use of Tidigesic....1 Costly……...2 Difficult in finding drugs……..3 Others*(specify*)…….96	
205	Howmanytimesdid you inject drugsyesterday?	Times..... ☐☐ → 207 Notinjected.....0	

Q.N.	Questions	Coding Categories	Skipto
206	Wouldyouliketotell me about the reason why you did not injected drug yesterday?	Due to lack of Money……...1 Want to quit slowly……....2 Had taken Ganja……..…….3 Had taken Brown Sugar…….…..4 Had injected previous day……....5 Had taken alcohol……..6 Did not find Drugs……...7 Was under police custody……8 Had taken Nitrosun……..…….9 Was Sick…….…..10 Had taken other drugs……....11 Was busy in household activity…..12 Others *(Specify*)……..96	
207	Howmanydaysago had youinjected drugs?	Daysago..... ☐☐	

208	During thepastone-week, about howmany times had you injecteddrugs?	Onceaweek.....1 2-3timesaweek.....2 4-6timesaweek.....3 Onceaday.....4 2-3timesaday.....5 4ormoretimesaday.....6 Not injectedinthelastweek.....7 Don'tknow.....98 Noresponse.....99	
209	(Askwhethertherespondent waseverarrestedornotthenaskthefollowingquestions) Haveyou everbeenimprisonedordetained forany reason?	Yes.....1 No.....2 → 210 Noresponse.....99	
209.1	Inthepastyear,haveyoueverbeenimprisoned or detainedforanyreason?	Yes.....1 No.....2 → 210 Noresponse.....99	
209.2	Inthepastyear,haveyoueverbeen imprisonedfordrug-relatedreason?	Yes.....1 No.....2 → 210 Noresponse.....99	
209.3	Inthepastyear,howmanytimeshaveyou beento jail fordrug-relatedreason?	Times…..☐☐ Noresponse.....99	
209.4	Haveyou everinjecteddrugs while you were in jail?	Yes.....1 No.....2 Noresponse.....99	
210	How often did you cross the border (Indo-Nepal) to buy and use the illicit drugs in the past 12 months?	Always……1 Most of the time……..2 Sometimes……3 Never……..4 Don’t Know……98 No response……..……..99	

3.0 NEEDLE SHARING BEHAVIORS

Q.N.	Questions	Coding Categories	Skipto
301	Thinkabout thetimes,youhaveinjecteddrugs yesterday/lastday.Howmanytimesdidyouinject drugsonthatday? **(FillthenumberfromanswertoQ.205andverify byaskingtherespondent)**	Times..... ☐☐	
302	Thelasttimeyouinjected,howdidyouget thatsyringe/needle? **(Publicplacemeansplacesotherthanthe PWIDshomethatareusedto hide syringe/needle)**	My friend/relativegave it tome afterhisuse.....1 Unknownpersongaveit tomeafter heuse.....2 I pickedit upfromapublicplace where it wasleftttherebyothers..3 I pickedit upfromapublicplace where Ilefttthereby myself..... .4 I usedanewneedle/syringegiven by NGOstaff/volunteer …….... ..5 **(writethenameofOrganization)** I usedaneedle/syringe by purchasing.....6 Ireusedmyownneedle/syringe.....7 Myfriendgavenewneedle/syringe..... .....8 Others*(Specify*)…….…….....96 Don't know.....98 Noresponse.....99	
302.1	If youinjected drugs in group the last time,howmanydifferentpeoplein thegroup doyouthink usedthesamesyringe/needle?	No of person:..... ☐☐ Injectedalone.....95	

303	Thinkabout thetime just beforethelasttimeyou injected drugs,howdidyougetthatsyringe/needle ? **(Publicplacemeansplacesothert hanthePWIDshomethatareusedt ohide syringe/needle)**	My friend/relativegave it tome afterhisuse.....1 Unknownpersongaveit tome afterheuse.....2 I pickedit upfromapublicplace where it wasleftttherebyothers...3 I pickedit upfromapublicplace where Ilefttthereby myself.....4 I usedanewneedle/syringegiven byNGOstaff/volunteer…….....5 **(writethe nameofOrganization)** Iusedaneedle/syringewhichI purchased.....6 Ireusedmyownneedle/syringe....7 My friendgavenewneedle/Syringe.....8 Others(Specify) ……96 Don’tknow.....98 Noresponse.....99	
303.1	At thattime,ifyou wereinagroup,howmany differentpeopleinthegroupdoyou thinkhadusedthesameneedle?	No. of person …….. ☐☐ Injectedalone.....95	

Q.N.	Questions	Coding Categories	Skipto
304	Nowthinkaboutthetimebefore(beforeQ. 303),howdidyougetthatsyringe/needle? **(Publicplacemeansplacesothert hanthePWIDshomethatareusedt ohide syringe/needle)**	My friend/relativegave it tome afterhisuse.....1 Unknownpersongaveit tome afterheuse.....2 I pickedit upfromapublicplace whichwaslefttherebyothers.....3 I pickedit upfromapublicplace whichwaslefttthereby myself.....4 I usedanewneedle/syringegiven byNGOstaff/volunteer……..….5 **(WritethenameofOrganization)** I useda new needle/syringewhich I purchased.....6 Ireusedmyownneedle/syringe....7 My friendgavenewneedle/syringe.....8 Others(Specify) …..……...96 Don’tknow.....98 Noresponse.....99	
304.1	At thattime,ifyouwereinagroup,howmany differentpeopleinthegroupdoyouthink hadused thesameneedle?	Nos.....…… ☐☐ Injectedalone.....95	
305	Thinkabout thetimes,youhaveinjected drugs duringthepastone-week. Howoftenwasit withaneedleorsyringethat had previouslybeen usedbysomeoneelse?	Everytimes.....1 Almostevery-times.....2 Sometimes.....3 Neverused.....4 Not injectedinthelastweek.....5 → 312.1 Don'tknow.....98 Noresponse.....99	

305.1	Whenyou injecteddrug duringthepast week, howoftendidyouuseasyringe/needlethat hadbeen leftinpublicplace? **(Publicplacemeansplacesotherthanthe PWIDs homethatareusedtohidesyringe/needle)**	Everytimes.....1 Almostevery-times.....2 Sometimes……3 Never.....4 Don'tknow.....98 Noresponse.....99	
306	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)**	No. of partners…… ☐☐ Don't know……..……..98 No response……..….99	
307	Inthepastone-week,didyoueversharen eedlesandsyringeswithanyofthefollowing?		

Readoutlist.Multipleanswerspossibl	**Ye**	**No**	**DK**	**NR**
1.Yourusualsexualpartner	1	2	98	99
2.Asexualpartnerwhoyoudidnotknow	1	2	98	99
3.Afriend	1	2	98	99
4.Adrugsseller	1	2	98	99
5.UnknownPerson	1	2	98	99
96.Other*(Specify)*_____	1	2		

Q.N.	Questions	Coding Categories	Skipto
308	Inthepastone-week,howoftendidyougivea needleorsyringetosomeoneelse,afteryouhadalready usedit?	Everytimes.....1 Almostevery-times.....2 Sometimes…..……...…..3 Never.....4 Don'tknow.....98 Noresponse….....99	
309	In thepast-week,didyou everinject withapre-filled syringe? **(By thatImeanasyringethat wasfilledwithoutyou witnessingit)**	Yes.....1 No.....2 Don't'know ……..98 Noresponse……..99	

310	Inthepastone-week,howoftendidyou inject drugsusingasyringeaftersomeoneelseh ad squirted drugsintoit fromhis/herusedsyringe? **(Front-loading/back-loading/splitting)**	Every time.....1 Almostevery times.....2 Sometimes.....3 Never.....4 Don'tknow.....98 Noresponse.....99	
311	Inthepastone-week,when youinjecteddrugs, howoftendidyousharea cooker/ vial/container,cotton/filter,orrisewater?	Every time.....1 Almostevery times.....2 Sometimes.....3 Never.....4 Don'tknow.....98 Noresponse.....99	
312	Inthepastone-week,howoftenyoudrawupyour drug solutionfromacommoncontainer usedbyothers?	Every time.....1 Almostevery times.....2 Sometimes.....3 Never.....4 Don'tknow.....98 Noresponse.....99	
312.1	Inthepastoneyear, haveyouswitchedfrom sharingto non-sharingpractice of syringe?	Yes.....1 No.....2	
	Check Q no.305andthosewhohavenotinjectedinthelastoneweek gotoQ no.314		
313	Inthepastone-week,when youinjected withneedlesorsyringesthathadprevi ouslybeenused,howoftendid you cleanthemfirst?	Everytime.....1 Almostevery-times.....2 Sometimes.....3 Never.....4 Neverreused.....5	314

313.1	Ifcleaned,howdidyouusuallycleanthem?	Withwater.....1 Withurine.....2 Withsaliva.....3 Boilthesyringeinwater.....4 Withbleach.....5 Burningtheneedlewith matchstick.....6 Others*(Specify)*……..……....96	
Q.N.	**Questions**	**Coding Categories**	**Skipto**
314	Canyou obtainnew and unusedneedles and syringeswhenyouneedthem?	Yes.....1 No.....2 Don't'know.....98 Noresponse.....99	316
315	Wherecanyouobtainnew and unusedneedles and syringes? **(Donotreadoutlist.Multipleanswers possible.Probeonlywith"AnywhereElse?")**	Drugstore.....1 Othershop.....2 Healthworker.....3 Hospital.....4 Drugwholesaler/drugagency.....5 Family/relatives.....6 Sexualpartner.....7 Friends.....8 Otherdrugsusers.....9 Drugsseller.....10 Needle exchangeprogram..…….11 **(writethe nameofOrganization)** Steal fromlegitimatesource (hospitals/pharmacy).....12 Buyonstreets.....13 Other*(Specify)*…...……..…....96	

316	What do you usually do with your used needle/ syringe	Disposed …..……..……1 Gave to friend……..……...2 Kept/carry safely for another use…3 Hide in public places ……..…4 Threw anywhere (please specify)…….……5 Don't know ……..……..…98 Others (specify)……...96	
316.1	If disposed, how did you do?	Returned to DIC outreach ……..1 Thrown to Public place ……..2	
317	I nthepastone-year,didyoueverinjectdrugin anothercity/district(oranothercountry)?	Yes.....1 No.....2 Don't'remember.....98 Noresponse.....99	318
317.1	Ifyes,inwhichothercities/districtsdidyou inject including citiesinother countries?	Cities 1…… 2……. 3……. Districts 1……. 2……. 3……. Country 1……. 2…….. 3……..	
317.2	Thinkabout thetimesyouinjecteddrugsinanothercity /district(includingabroad)howoftenwasit withasyringe/needlethathad previouslybeenusedbysomeone else?	Everytimes.....1 Almostevery-times.....2 Sometimes.....3 Never.....4 Don'tknow….....98 Noresponse….....99	

Q.N.	Questions	Coding Categories	Skipto
317.3	Whenyou injecteddrugs in another city,how oftendidyougiveasyringe/needletosomeoneelse?	Everytimes.....1 Almostevery-times.....2 Sometimes.....3 Never.....4 Don'tknow.....98 Noresponse.....99	
318	Areyoucurrently undertreatment(orreceiving help)orhaveyoueverreceivedtreatment(orhelp)becauseofyourdruguse?	Currentlyundertreatment.....1 Wasintreatmentbutnotnow.....2 Haveneverreceivedtreatment.....3 Noresponse.....99	320
319	Howmanymonthsago did youlastreceive treatmentorhelpforyourdruguse?	Months..... ☐☐ Don'tknow.....98 Noresponse.....99	
320	In the last 12 months, have any of an outreach worker, a peer educator or a staff from a needle exchange program has given you a new needle/syringe?	Yes..... 1 No ..... 2 Don’t' remember..... 98 No response..... 99	

4.0 SEXUAL HISTORY

Q.N.	Questions	Coding Categories	Skipto
401	Howoldwereyou at yourfirstsexual Intercourse?	Years old …….. ☐☐ ***(Writecompletedyears)*** Neverhadsexualintercourse.....0 → 601 Don'tknow.....98 Noresponse.....99	
402	Haveyouhadsexualintercourseinthelast 12 months?	Yes.....1 No.....2 Noresponse.....99	404
403	Intotal,howmanydifferentfemalesexual partnershaveyouhadsexinthelast12months?	Number……. ☐☐☐	
403.1	Howmanywerefemale"regularpartners"? **(Your wifeorlive-insexualpartners)**	Number…….. ☐☐ Don't know……98 No response……..…..99	
Q.N.	**Questions**	**CodingCategories**	**Skipto**
403.2	Howmanywerefemale"sex worker"? **(Partnerstowhomyouboughtorsoldsexinexchangeformoneyor drug)**	Number…….. ☐☐ Don't know……98 No response……..…..99	
403.3	Howmanywerefemale"non-regularpartners"? **(Sexualpartners,youarenotmarriedtoandhaveneverlivedwithanddidnothavesexinexchangeformoney)**	Number…….. ☐☐ Don't know……98 No response……..…..99	
404	Wehavejusttalked aboutyourfemalesexual partners.Haveyoueverhadanymalesexualpartnersalso?	Yes.....1 No.....2 Noresponse.....99	501

404.1	Ifyes,haveyouhadanalsexwith any ofyour malepartnersinthelast 12months?	Yes.....1 No.....2 Noresponse.....99	501
404.2	Withhowmanydifferent malepartnershave youhadanal/oralsexinthelast 12 months?	Number…….. ☐☐ Don't know……98 No response……..…..99	
404.3	Thelasttimeyouhadanal/oralsex withamalesex partnerdid youandyourpartneruseacondom?	Yes….....1 No.....2 Don'tKnow.....98 Noresponse.....99	
404.4	Howoftenhaveyouusedacondominanana nal/oralsex with malesexpartnerinthepast12months	Everytimes.....1 Almostevery-times.....2 Sometimes.....3 Never.....4 Don'tknow.....98 Noresponse.....99	

5.0 NUMBERS AND TYPES OF PARTNERS

(Check Q. 403.1 and circle the response of Q.501 if necessary you may need to ask403.1once again and correct the response)

Q.N.	Questions	Coding Categories	Skipto
501.	Did youhave sex withfemaleregularpartner (wifeorlive-inpartner)duringlast12months?	Yes.....1 No.....2 →	502
501.1	Thinkabout yourmostrecentfemaleregularsexual partner.Howmanytimesdid youhave sexwithherduringlast one-month?	Number…….. ☐☐ Don't know……98 No response……..…..99	

Q.N.	Questions	Coding Categories	Skipto
501.2	Thelasttimeyouhadsexwithafemaleregular partnerdid youor yourpartneruseacondom?	Yes.....1 No.....2 Don'tknow.....98 Noresponse.....99	→ 501.4 501.4
501.3	Whydidnotyouoryourpartneruseacondom that time? **(Do notreadthepossibleanswers,multipleanswerpossible)**	Notavailable.....1 Tooexpensive.....2 Partnerobjected.....3 Don'tlikethem.....4 Usedothercontraceptive.....5 Didn'tthink it wasnecessary..... .6 Didn'tthinkofit.....7 Other(Specify) ……..96 Don'tknow..... .98 Noresponse.....99	
501.4	Howoftenhaveyouusedacondomwith female regularpartnersinthepastyear?	Everytime.....1 Almostevery-times.....2 Sometimes.....3 Neverused.....4 Don'tknow.....98 Noresponse.....99	
501.5	Did yourfemaleregularpartneralso injectdrugs?	Yes.....1 No.....2 Don'tknow.....98 Noresponse.....99	
501.6	Haveyou everhadanalsex with yourfemale regularpartners?	Yes.....1 No.....2 Don'tknow.....98 Noresponse.....99	 502

501.7	Thelasttimeyouhadanal-sexwithafemale regularpartnerdidyouoryourpartneruse acondom?	Yes.....1 No.....2 Don'tknow.....98 Noresponse.....99	
501.8	Howoftenhaveyouusedacondominana nal-sexwithfemaleregularpartnersinthepast 12months?	Everytime.....1 Almostevery-times.....2 Sometimes.....3 Neverused.....4 Don'tknow.....98 Noresponse.....99	
502	Did youhaveasexualintercoursewithafem alesex workerinlast 12 months? **(Check403.2 andcircletheresponseofQ. 502*ifnecessaryyoumayneedtoask 403.2onceagainandcorrecttheresp*)**	Yes.....1 No.....2 →	503
502.1	Thinkabout thefemalesexworkersthat youhavehadsex inthepast one-month. Intotal howmanyfemalesexworkersyouhads ex inexchangeformoneyordrugs?	Number..... ☐☐ Don'tknow.....98 Noresponse.....99	

Q.N.	Questions	Coding Categories	Skipto
502.1.1	Withhowmanysexworke rsyouhadsex in lastmonth bypayingthemmoneyord rugs?	Number..... ☐☐ Don'tknow.....98 Noresponse.....99	

502.1.2	Wheredidyouhavesexwithalastsex worker?	Hotel/lodge.....1 Ownhouse.....2 Sexworker'shouse.....3 Injectingsite.....4 Teashop.....5 Park/garden.....6 Dancerestaurant.....7 Massageparlor.....8 Bhattipasal.....9 Dohorirestaurant.....10 Other(Specify)……..……...96 Don'tKnow.....98 Noresponse.....99	
502.2	Thinkabout yourmostrecentfemalesex worker.Howmanytimesdidyouhavesex ualintercoursewithherinthepast one-month?	Times..... ☐☐ Don'tknow.....98 Noresponse.....99	
502.3	Thelasttimeyouhadsex withafemalesex workerdid youor yourpartneruseacondom?	Yes.....1 → 502.5 No…..…..…2 Don't know.....98 → 502.5 No response.....99 → 502.5	
502.4	Whydid not youor yourpartneruseacondom that time? **(Do notreadthepossibleanswers,multipleanswerpossible)**	Notavailable.....1 Tooexpensive.....2 Partnerobjected.....3 Don'tlikethem.....4 Usedothercontraceptive.....5 Didn'tthink it wasnecessary.....6	
502.5	Howoftenhaveyouusedacondomwith femalesex workersinthepastyear?	Every times…..1 Almostevery time….....2 Sometimes.....3 Neveruse.....4	

502.6	Doyouknowwhetherfemalesex workerwith whomyouhadsexalsoinjecteddrugs?	Yes.....1 No.....2 Don'tknow.....98 Noresponse.....99	
502.7	Haveyou everhadanalsexwithyourfemale sexworkers?	Yes.....1 No.....2 Don'tknow.....98 Noresponse.....99	503
502.8	Thelasttimeyouhadanal-sexwithafemalesexworkerdid youuseacondom?	Yes.....1 No.....2 Don'tknow.....98 Noresponse.....99	

Q.N.	Questions	Coding Categories	Skipto
502.9	Howoftenhaveyouusedacondominan analsex with femalesex workersinthe past12months?	Everytimes.....1 Almostevery-times.....2 Sometimes.....3 Neverused.....4	
503	Did youhaveasexualintercoursewithafemal e non-regularsexpartnerduringlast12months? **(Check403.3andcircletheresponseof Q.503*ifnecessaryyoumayneedtoask 403.3 onceagainandcorrecttheresponse)***	Yes.....1 No.....2 →	504
503.1	Thinkabout yourmostrecentfemalenon-regularsexualpartner.Howmanytimesdi d youhavesexual intercoursewithheroverthe pastone-month?	Times..... ☐☐ Don'tknow.....98 Noresponse.....99	
503.2	Thelasttimeyouhadsexwithafemalenon - regularpartnerdidyouoryourpartneruse acondom?	Yes.....1 → No.....2 Don'tknow.....98 Noresponse.....99	503.4 503.4

503.3	Whydid not youor yourpartneruseacondomthat time? **(Don'treadthepossibleanswers, multipleanswerpossible)**	Notavailable.....1 Tooexpensive.....2 Partnerobjected.....3 Don'tlikethem.....4 Usedothercontraceptive.....5 Didn'tthink it wasnecessary.....6 Didn'tthinkofit.....7 Other(Specify)_____.……...96 Don'tknow.....98 Noresponse….....99	
503.4	Howoftenhaveyouusedacondomwitha femalenon-regularpartnerinthepastyear?	Everytimes.....1 Almostevery-time.....2 Sometimes.....3 Neverused.....4	
503.5	Did you knowwhetheryourfemalenon-regular partnersalsoinjecteddrugs?	Yes.....1 No.....2 Don'tknow.....98 Noresponse.....99	
503.6	Haveyou everhadanalsexwithyourfemale non-regularpartners?	Yes.....1 No.....2 Don'tknow.....98 Noresponse.....99	504
503.7	Thelasttimeyouhadanalsex withafemale non-regularpartner didyouand yourpartneruse acondom?	Yes.....1 No.....2 Don'tknow.....98 Noresponse.....99	

Q.N.	Questions	Coding Categories	Skipto
503.8	Howoftenhaveyouusedacondominana nal-sex withfemalenon-regularpartnersinthepastyear?	Everytimes.....1 Almostevery-times.....2 Sometimes.....3 Neverused.....4	

504	Haveyouhadanalsexwithamalepartneri n the pastoneyear? **(SeetheresponseinQ.404.1andcircle Q.504response*ifnecessaryyoumayn eedto ask404.1onceagainandcorrectthe response)***	Yes.....1 No.....2	→505
504.1	Thinkofyourlastmalesexpartnerwithwh om youhadanalsex: in thelast one month,howmany timesyouhadanalsexwith him?	Times..... ☐☐ Don'tknow.....98 Noresponse.....99	
504.2	Thelasttimeyouhadanalsex withhim;didyou use condom? **(CheckanswerinQno404.3)**	Yes.....1 No.....2 Don'tknow.....98 Noresponse.....99	→ 504.4 504.4
504.3	Whydidn'tyouusecondomatthat time? **(Don'treadpossibleanswer,multiple answerpossible)**	Notavailable.....1 Tooexpensive.....2 Partnerobjected.....3 Don'tlike.....4 Usedothercontraceptive.....5 Didn'tthink it wasnecessary.....6 Didn'tthinkofit.....7 Other*(Specify)*……..96 Don'tknow.....98 Noresponse.....99	
504.4	Howoftenhaveyouusedacondomduring anal sex withamalepartneristhepastyear? **(CheckQno.404.4)**	Everytime.....1 Almostevery-times..... 2 Sometimes.....3 Neverused.....4 Don'tknow.....98 Noresponse.....99	

504.5	Doyouknowifyourmalepartnerwith whom youhadanalsex alsoinjecteddrugs?	Yes.....1 No….....2 Don'tknow.....98 Noresponse.....99	
504.6	Haveyou everhadsexinexchangeformoney orsomecommodities?	Yes.....1 No.....2 →	505
504.7	Beforestartinginjectingdrugsdidyouhav esexinexchangeformoneyorsomecom modities?	Yes.....1 No.....2	
504.8	Afterstartinginjectingdrugsdid youhavesex in exchangeformoneyorsomecommoditie s?	Yes.….....1 No.....2	
Q.N.	**Questions**	**Coding Categories**	**Skipto**
504.9	Did youhave sexinexchangeformoneyor somecommoditiesinthelast12months?	Yes.....1 No.....2 →	505
504.10	Inthelast12monthhowmanysuchsexual contactsdidyouhave?	Number..... ☐☐	
504.11	Inthelast12monthhowmanysuchpartn ersdidyou sellsexto?	Number..... ☐☐	
505	Haveyouhadsexualintercourseinthelast month?	Yes.....1 No.....2 Don'tknow.....98 Noresponse.....99	507
505.1	Ifyes,didyouoryourpartneruseacondom whenyouhadlastsexinthelast month?	Yes.....1 No.....2 Don'tknow.....98 Noresponse.....99	

506	Inthelast month,howoften did youoryour partneruseacondomwhenyouhadsex?	Everytimes.....1 Almostevery-times.....2 Sometimes.....3 Neverused.....4 Don'tknow.....98 Noresponse.....99	
507	Withwhomdidyouhavethelastsexual intercourse?	FSW.....1 Regularpartner.....2 **(Wifeorliveinsexualpartner)** Otherfemalefriend.....3 Malefriend.....4 Did nothavesexualcontact in thepastyear.....5 Don'tKnow.....98 Noresponse.....99	→ 601
508	Did you usecondominthelast sexualintercourse?	Yes.....1 No.....2	

6.0 USEANDAVAILABILITYOFCONDOM

(CheckresponsesinQ.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 andcircleresponsesinQ.601&602andProbeiftheresponseiscontradictory)

Q.N.	Questions	CodingCategories	Skipto
601	Haveyou everheardofacondom? **(Showpictureorsampleofcondom)Probe ifthe responseisNo**	Yes.....1 No.....2 Don'tknow.....98 Noresponse.....99	701
602	Haveyou everusedacondom?	Yes.....1 No.....2	

603	Doyouknowofany placeorpersonfromwhich youcan obtain condom?	Yes.....1 No.....2 Noresponse.....99	701
604	Fromwhich placeorpeople,can you obtain condoms? **(Multipleanswerpossible.Don'treadthelistbut probe)**	Shop.....1 Pharmacy.....2 Clinic.....3 Hospital. .....4 Familyplanning center.....5 Bar/Guesthouse/Hotel.....6 Healthworker.....7 PeerEducator/Outreachdoctor.....8 Friend.....9 PanPasal.....10 Others*(Specify*)……96 Noresponse. 99	
604.1	Didanyorganizationgiveyou condominthe last12months?	Yes,freeofcost.....1 Yes,bytakingmoney.....2 No.....3	
605	Howlong would ittake**(fromyourhouseortheplacewhereyouwork)**toobtaina condom?	Lessthan30minutes.....1 Morethan30minutes .....2 Don'tknow.....98 Noresponse.....99	
606	Doyouusuallycarry condomwithyou?	Yes.....1 No.....2	
607	Atthismomenthowmanycondomsdoyou haveat-hand with you? **(Observeandwrite)**	Numbers…… ☐☐	

7.0 KNOWLEDGEANDTREATMENTOFSTIs

Q.N.	Questions	Coding Categories	Skipto
701	Haveyou everheardofdiseasesthatcanbe transmittedthroughsexualintercourse?	Yes.....1 No.....2 Noresponse.....99	704
Q.N.	**Questions**	**CodingCategories**	**Skipto**
702	Canyoudescribeanysymptomsof STIs inwomen? **(Donotreadpossibleanswers, multipleanswerspossible.)**	Lowerabdominalpain.....1 Genitaldischarge.....2 Foulsmelling.....3 Burningpainonurination.....4 Genitalulcers/sore.....5 Swellingingroinarea.....6 Itching.....7 Other*(Specify)* ……..96 Don'tknow.....98 Noresponse.....99	
703	Canyoudescribeanysymptomsof STIs inmen? **(Donotreadpossibleanswers, multipleanswerpossible)**	Genitaldischarge.....1 Burningpainonurination.....2 Genitalulcers/soreblister.....3 Swellingsingroinarea.....4 Others*(Specify)*……96 Don'tknow. .....98 Noresponse.....99	
704	Haveyouhadgenitaldischarge/burning urinationduringthelast 12 months?	Yes.....1 No.....2 Don'tknow.....98 Noresponse.....99	705
704.1	Currently,doyouhavegenital discharge/burningurinationproblem?	Yes.....1 No.....2 Don'tknow.....98 Noresponse.....99	

705	Haveyouhadagenitalulcer/soreblisterduring thelast 12months?	Yes.....1 No.....2 Don'tknow.....98 Noresponse.....99	706
705.1	Currently,doyouhavegenitalulcer/soreblister?	Yes.....1 No.....2 Don'tknow.....98 Noresponse.....99	
706	Last timeyouhadagenitaldischarge/burning urinationoragenitalulcer/soreblister,wheredidyou gofor treatment?	Didnotseektreatment.....1 Withprivatedoctor.....2 Inhospital.....3 Neverhadsuchsymptoms. . .....4 Others*(Specify)*……...96	

8.0 KNOWLEDGE,OPINIONSANDATTITUDESONHIV

Q.N.	Questions	CodingCategories	Skipto
801	Haveyou everheardofHIVorthediseasecalled AIDS? **(Probeiftheresponseif No)**	Yes.....1 No.....2 Noresponse.....99	
802	Doyouknowanyonewhois infectedwithHIV or whohasdiedofAIDS?	Yes.....1 No.....2 Noresponse.....99	804
803	Doyouhavecloserelativeorclosefriend who isinfected withHIVorhasdiedof AIDS?	Yes,acloserelative.....1 Yes,aclosefriend.....2 No.....3 Noresponse.....99	

Q.N.	Questions	CodingCategories	Skipto
804	Canapersonprotecthimself/herselffrom HIV, the virusthatcausesAIDS byusingacondomcorrectly duringeachsexualact?	Yes.....1 No.....2 Don'tknow.....98 Noresponse.....99	
805	Canapersonget HIV,frommosquitobites?	Yes.....1 No.....2 Don'tknow.....98 Noresponse.....99	
806	Canapersonprotecthimself/herselffrom HIV byhaving onlyoneuninfectedfaithful sexpartner?	Yes.....1 No.....2 Don'tknow.....98 Noresponse.....99	
807	Canapersonprotecthimself/herselffrom HIV byabstainingfromsexualintercourse?	Yes.....1 No.....2 Don'tknow.....98 Noresponse.....99	
808	Canapersonget HIV,bysharinga meal with someonewhoisinfected?	Yes.....1 No.....2 Don'tknow.....98 Noresponse.....99	
809	Canapersonget HIV,bygettinginjectionswith a needlethatisalreadyusedbysomeoneelse?	Yes.....1 No.....2 Don'tknow.....98 Noresponse.....99	
810	Canapersonwho injectdrugprotect himself/herselffromHIV, thevirusthatcausesAIDS,byswitchingto non-injectingdrugs? **(Oralorinhalingdrugs)**	Yes.....1 No.....2 Don'tknow.....98 Noresponse.....99	

811	CanapregnantwomaninfectedwithHIV transmitthevirustoherunbornchild?	Yes.....1 No.....2 Don'tknow.....98 Noresponse.....99	→ 813
812	Whatcanapregnantwomandotoreduce the risk oftransmission ofHIVtoherunborn child? **(Do notreadthepossibleanswers,multipleanswerpossible)**	Takemedication(Antiretroviral)….1 Don'tknow.....98 Noresponse.....99 Others*(Specify)*……..….96	
813	CanwomenwithHIVtransmitthevirusto hernewbornchildthroughbreast-feeding?	Yes.....1 No.....2 Don'tknow.....98 Noresponse.....99	
813.1	Doyouthinkahealthy-lookingpersoncan be infected withHIV?	Yes.....1 No.....2 Don'tknow.....98	
813.2	Canapersonget HIVbyshakinghand with aninfected person?	Yes.....1 No.....2 Don'tknow.....98	
813.3	Canbloodtransfusionfromaninfectedperson tothe othertransmit HIV?	Yes.....1 No.....2 Don'tknow.....98	

Q.N.	Questions	CodingCategories	Skipto
814	Isitpossibleinyourcommunityforsomeone to haveaconfidentialHIVtest? **(Byconfidential,Imeanthat no onewillknowtheresultifyoudon'twanthimorhertoknowit.)**	Yes.....1 No.....2 Don'tknow.....98 Noresponse.....99	

814.1	DoyouknowwheretogoforHIVtest?	Yes.....1 No.....2	
815	HaveyoueverhadanHIVtest?	Yes.....1 No.....2 Noresponse.....99	901
816	Did you voluntarilytakeup theHIVtest,or were yourequiredtohavethetest?	Voluntary.....1 Required.....2 Noresponse.....99	
817	Whendid youhaveyourmostrecent HIVtest?	Withinthepast12months.....1 Between13-24months.....2 Between25-48months.....3 Morethan48months.....4 Don'tknow.....98 Noresponse.....99	
817.1	How many times have you undergone for HIV test within the last 12 months?	Times…… ☐☐	
818	Didyoufind out theresult ofyourHIVtest?	Yes.....1 No.....2 Noresponse.....99	818.1 901
818.1	What was the result of your last test?	Positive……1 Negative……..2 Uncertain……..3 Result not received……..4	901
818.2	Did you go to HTC for HIV care once you knew you were HIV positive?	Went……..1 Did not go……2 Don't know……98 No response……99	901

818.3	Why didn't you go to HTC for HIV care even after knowing you were HIV positive?	Felt I was healthy……...1 Others might know……....2 Had to pay…….3 Bad attitude of healthcare provider……..4 Long waiting time/Could not manage with Clinic opening time……..5 Don't know……98 No response……..……...99 Others *(Specify*)……...96	901
819	Whydidyounotreceivethetestresult?	Sureofnotbeinginfected.....1 Afraidofresult.....2 Felt unnecessary.....3 Forgotit.....4 No response.....99 Others*(Specify)* ……..96	

9.0 KNOWLEDGEOF HEPATITIS C

I am going to ask you to answer some questions about your general knowledge of Hepatitis C.

Q.N.	Questions	Response categories	Skipto
901	Can Hepatitis C be transmitted through sex?	Yes .....1 No .....2 Don't know 98	
902	Can Condoms protect you against hepatitis C?	Yes .....1 No .....2 Don't know 98	
903	Can Hepatitis C only occur if you have HIV?	Yes .....1 No .....2 Don't know 98	
904	Can Hepatitis C be transmitted by sharing needles?	Yes .....1 No .....2 Don't know 98	
905	Can Hepatitis C be transmitted through tattooing?	Yes .....1 No .....2 Don't know 98	
906	Is there a medical treatment for hepatitis C?	Yes .....1 No .....2 Don't know 98	
907	Can herbal remedies cure hepatitis C?	Yes .....1 No .....2 Don't know 98	

10. KNOWLEDGEANDPARTICIPATIONINSTIANDHIVPROGRAMS

Q.N.	Questions	CodingCategories	Skipto
1001	Haveyou metordiscussedorinteractedwithPeer Educators(PE)orOutreachEducators(OE)or CommunityMobilizes(CM)or CommunityEducators(CE)inthelast12 months?	Yes.....1 No.....2 → 1004 Noresponse.....99	
1002	WhatactivitiesdidthesePEorOEsinvo lveyouin whenyou metthem? **(Multipleanswers.DONOTRE ADthe possibleanswers)**	DiscussiononhowHIV and AIDS is/isn'ttransmitted.....1 DiscussiononhowSTIis/isn't transmitted….....2 Discussiononsafeinjecting behavior.....3 Regular/non-regularuseof condom.....4 Demonstrationonusing condomcorrectly.....5 Others*(Specify)*……..….96	
1003	HowmanytimeshavethesePE,OE,CM and/orCEmetyouinthelast12months?	Once.....1 2-3times.....2 4-6times.....3 7-12times.....4 Morethan12times.....5	
1004	Haveyouvisitedorbeentoanyoutreach center(DIC,ICorCC)inthelast12month s? Drop-InCenter(DIC),InformationCenter(IC), Counseling Center(CC)	Yes.....1 No.....2 → 1008	

1005	Whatdidyoudo whenyou went to theoutreach center (DIC,ICorCC)inthe12lastmonths? **(Multipleanswers.DONOTRE ADthe possibleanswers)**	Wenttocollectcondoms.....1 Wenttolearnthecorrectway of usingcondom.....2 Wenttolearnaboutthesafe injectingbehavior.....3 WenttowatchfilmonHIV/AIDS.....4 Participated indiscussionon HIVtransmission.....5 Wenttohavenewsyringe.....6 Other*(Specify)*.....96	
1006	Doyouknowwhichorganizationsruntho seoutreachcenter(DIC, ICorCC)? **(Multipleanswers.DONOTRE ADthe possibleanswers)**	NGOs (Specify).....1 Other (specify)..... .....96 Don't Know 98	
1007	Howmanytimeshaveyou visitedoutreach centers(DIC,ICorCC)inthelast12 months?	Once.....1 2-3times.....2 4-6times.....3 7-12times.....4 Morethan12times.....5	
1008	HaveyouvisitedanySTIclinicinthelast 12 months?	Yes.....1 No.....2 →	1011
Q.N.	**Questions**	**CodingCategories**	**Skipto**

1009	Whatdidyoudo whenyou visitedsuchSTI clinic? **(Multipleanswers.DONOTREADthe possibleanswersgivenbelow)**	BloodtestedforSTI.....1 Physicalexaminationconducted forSTIidentification.....2 DiscussiononhowSTIis/isn't transmitted.....3 Discussiononsafeinjecting behavior.....4 Regular/non-regularuseof Condom.....5 Tookafriendwithme.....6 Other*(Specify)* ……..……...96	
1010	Howmanytimeshaveyou visitedSTIclinicinlast12months?	Once.....1 2-3times.....2 4-6times.....3 7-12times.....4 Morethan12times.....5	
1011	Haveyouvisitedany HTC center in last 12 months? (Health Counselling Testing)? **(Multipleanswers.DONOTREADthe possibleanswersgivenbelow)**	Yes.....1 No.....2	→1014

1012	Whatdidyoudo whenyou visitedsuch HTCs? **(Multipleanswers.DO NOTREADthe possibleanswers)**	Receivedpre-HIV/AIDStest counseling.....1 Bloodsampletakenfor HIV/AIDStest.....2 ReceivedpostHIV/AIDStest counseling.....3 Receivedinformationonsafe injectingbehavior.....4 ReceivedHIV/AIDStestresult.....5 Receivedcounseling onusing condomcorrectlyin eachsexual intercourse.....6 ReceivedinformationonHIV/AIDS windowperiod.....7 Tookafriendwithme.....8 Other*(Specify)*.....96	
1013	ForhowmanytimeshaveyouvisitedHTC centerinthelast 12 months?	Once.....1 2-3times.....2 4-6times.....3 7-12times.....4 Morethan12times.....5	
1013.1	Have you ever enrolled into any Opioid substitution Therapy (OST): Methadone and Buprenorphine?	Yes.....1 No.....2 Don't Know.....98 No response 99	1014
1013.2	Have you received any Opioid substitution Therapy (OST) in the past 12 months?	Yes.....1 No.....2 Don't Know.....98 No response 99	1014
1013.3	Which service have you received?	Methadone .....1 Buprenorphine.....2 Others *(Specify)*..... 96	

Q.N.	Questions	CodingCategories	Skipto
1013.4	Are you still in therapy?	Yes.....1 No.....2 Don't know……98	1014
1 013.5	What amount have you been receiving per day?	Methadone ……..mg Or Buprenorphine …..….. mg	
1013.6	How long have you been in this therapy?	☐☐ Years ☐☐ Months	
1014	Have you ever heard about prevention of mother to child transmission services (PMTCT) for pregnant women?	Yes.....1 No.....2 Don't know…….....98 No response ……..……99	1015
1014.1	Do you know from where pregnant women can get PMTCT services? (Prevention of Mother To Child Transmission)	Yes.....1 No.....2 Don't know…….98 No response ……..……...99	1015
1014.2	If Yes, please specify	Government organization *(Specify*) …… NGO's *(Specify)* ……. Others *(Specify*) ……..…	
1015	Have you ever heard about anti-retroviral therapy (ART) services for HIV positive individuals?	Yes.....1 No.....2 Don't Know……98 No response ……..……..…99	1016
1015.1	Do you know from where HIV positive individuals can get ART services?	Yes.....1 No.....2 Don't know ……..……..98 No response ……..……..99	1016

1015.2	If Yes, please specify	Government organization *(Specify)* ……. NGO's *(Specify)* ……. Others *(Specify*) ……	
1016	Have you heard of viral load testing services for HIV positive individuals?	Yes.....1 No.....2 Don't know ……..……98 No response ……....99	1017
1016.1	Do you know from where HIV positive individuals can get viral load testing services?	Yes.....1 No.....2 Don't know ……..……..98 No response ……..…99	1017
1016.2	If Yes, please specify	Government organization *(Specify*) …… NGO's *(Specify)* ……. Others *(Specify*) ……..…	
1017	Haveyouheardof any CommunityHome BasedCare(CHBC)servicesthat areprovided for HIV positivepeople?	Yes.....1 No.....2	

11. STIGMA AND DISCRIMINATION

Q.N.	Questio	CodingCategories	Skip
1101	Ifa malerelativeofyoursgetsHIV,wouldyoubewilling totakecareofhiminyour household?	Yes.....1 No.....2 Don'tknow.....98	
1102	Ifafemale relativeofyoursgetsHIV,would youbewillingtotakecareofherin yourhousehold?	Yes.....1 No.....2 Don'tknow.....98	
1103	If amemberofyourfamilygets HIV, wouldyou want tokeepitasecret?	Yes.....1 No.....2 Don'tknow.....98	
1104	Ifyouknewashopkeeperorfoodsellerhad HIV, wouldyoubuyfoodfromhim/her?	Yes.....1 No.....2 Don’tknow.....98 Noresponse.....99	
1105	DoyouthinkapersonwithHIVshouldget the same,moreorlesshealthcarethansomeonewithanyother chronicdisease?	Same.....1 More.....2 Less.....3 Don’tknow.....98 Noresponse.....99	
1106	Ifoneofyourcolleagueshas HIVbuthe/sheis notverysick,Doyouthink he/sheshouldbeallowedtocontinueworking?	Yes.....1 No.....2 Don’tknow.....98 Noresponse.....99	
1107	Do you think children living with HIV should be able to attend School with children who are HIV negative?	Yes.....1 No.....2 Don’tknow.....98 Noresponse.....99	

Thank You!!

ANNEXE 2: CLINICAL CHECKLIST

INTEGRATED BIOLOGICAL AND BEHAVIORAL SURVEILLANCE SURVEY (IBBS) AMONGPEOPLE WHO INJECT DRUGS (MALE) IN WESTERN AND MID TO FAR WESTERN REGION OF NEPAL, 2015-2016

Clinical/Lab Checklist for People who inject drugs (Male)

Respondent ID Number:

Name of Clinician: _____ Date: 2072/_____/_____

Name of Lab Technician: _____

(A) Clinical Information

Weight: _____ Kg.

Blood collected for
B.P: _____mm of Hg.

Date and place for
Pulse: _____

Condom given

Temperature: ……..º F

Vitamins given

Gift Given

IEC materials given

(B) Specimen collection

	Yes	No
Pre test counseled	1	2
HIV/VDRL/Hepatitis B/Hepatitis C test	1	2
Post-test results given	1	2
Condom given	1	2
Vitamins given	1	2
Gift Given	1	2
IEC materials given	1	2

1.0 Syndromic Treatment Information

101. Did you have discharge from your penis or burning sensation when you urinate in the past one-month? 1. Yes 2. No

(If yes, give treatment for gonorrhea and Chlamydia)

102. Did you have sore or ulcer or warts round your genitals in the past one-month?
1. Yes 2. No
(If yes, Refer)

Respondents ID Card

ID:
Date:
Consented for Laboratory Test: Yes No
Consented for Interview: Yes No
Respondent wants consultation with STI Technician: Yes No

If yes, Which services were asked? .....

Interviewer Name:

Respondents ID Card

ID:
Date:
Consented for Laboratory Test: Yes No
Consented for Interview: Yes No
Respondent wants consultation with STI Technician: Yes No
Interviewer Name:

ANNEXE 3: FIELD MONITORING CHECKLIST

Monitoring Checklist for IBBS among People Who Inject Drugs (PWIDs)

Name of Research Organizations:		**Site Name:**	
Assessment team member:		**Date:**	

PART A: RESEARCH MONITORING

S.No.	Activity	Method	Observation and comments
1	Check and note # of field staff visited at the study site: • Research assistant/field supervisor, • interviewers (4) • health assistant (HA)/staff nurse, • lab technician, • counselor, • runner and • local motivators	O	
2	Check and note # of field staff reported to be in the field at time of visit	O and SI	
3	Check the # of rooms used for the study	O	
	Recruitment of study participants		
4	Ask research Field Coordinator to briefly explain the research design and note his/her response • Definition of the study population – inclusion criteria • Samples to be collected from this site • Geographical areas to be covered by this site • Recruitment method - Two stage cluster sampling • Recruitment process o How are the PWID	SI	

S.No.	Activity	Method	Observation and comments
	recruited? ○ Local NGO/CBO involvement in PWID identification? • Describe the flow of the study process once an PWID arrives at the study site ○ Is it according to the study protocol		
5	Check whether there is a map being used showing locations selected for the sample and the numbers of respondents to be recruited from the locations selected Does this map appear to be used by all research staff?	O	
6	**Check and describe the physical settings of the study sites** • Atmosphere of the reception, medical/physical examination room, counseling room and interview room (comfortable seating arrangements, cleanliness, privacy, etc.) • Materials on display in the reception ○ NHRC approval letter ○ IEC materials on HIV and STI and Hepatitis B & C ○ Informational posters on the wall ○ Map of the study site ○ Chart to monitor study progress ○ Flow chart of study process • Laboratory room cleanliness and organization ○ Is the laboratory room clean? ○ The lighting in the room? ○ Is there any food item in the lab? • Is cold chain maintained? ○ Is the ice box filled with enough ice packs to maintain the required 2-8 degree Celsius temperature	O	

S.No.	Activity	Method	Observation and comments
	○ During transportation of collected serum, are samples removed from cold box and sent to main lab for storage at the end of the day? ○ How often are the serum samples sent to the research laboratory in Kathmandu? ○ Who checks the temperature of the refrigerator used for storage at the main laboratory and how often? ○ Has there been any reported failure of the cold chain system? If so, for what reason(s)? ○ Are the samples appropriately labeled during storage? ○ How are the reagents stored? • Presence and correct usage of disposal system for used syringes and gloves used in the laboratory and physical examination room ○ Is there a red waste bin with lid, labeled infectious waste? ○ Does the lab technician dispose of all infectious waste as per protocol every day? ○ Where does the infectious waste get transported to for autoclaving and disposal and when? • Availability and reliability of electrical backup for load shedding and sudden power cut problems? Any problems in running the electric laboratory equipments?		
	Interview process monitoring		
7	If interview of a respondent is going on at the time of your field visit, observe the interview	O	

S.No.	Activity	Method	Observation and comments
	process with the permission of the respondent. Note the key findings related to asking the questions in an appropriate manner, interpersonal communication skills, reaction of respondent to mannerisms of interviewer etc. Also note that observation should not be longer than 5 minutes and should be done in a favorable environment so that respondents will not feel disturbed and in turn responses will not be biased. **[Please note that IBBS surveys are done with the hidden and stigmatized groups, so confidentiality of the information provided by them is a top priority. Do not write down or tell anyone the answers/information given]**		
8	Informed consent process • Is the consent form read to the respondent in Nepali? ○ Observe and note the manner in which consent is taken • Who is the witness? Is the consent form signed and dated by both the interviewer and a witness before the beginning of the interview? • Does the interviewer perform pre-test counseling?	O or R	
9	Interview room set-up: ○ Comfortable and clean setting? ○ Flow chart in every room? ○ Interview guidelines in the rooms?	O	
10	**Tablet and E-App**		

S.No.	Activity	Method	Observation and comments
	Perform the following checks on the Tablet being used for Data collection. • Battery Levels and time of day • No. of Data remaining to be synced at that time • Apps that are open in the tablet • Balance left in the SIM card Ask the Data collector the following things • How he/she is managing battery and power backups • How many data collected so far • Have they encountered any issues/problems • Regarding performance of the tablet and app in general	O/SI	
	Counseling process		
11	Ask the counselor to explain the counseling process and show the counseling guidelines	SI	
12	Ask who gives her the test results	SI	
13	Counseling room set-up: o Comfortable and clean setting? o Flow chart in the room? o HIV flip chart used during counseling? o Dildos, condoms and IEC materials used for counseling?	O and SI	
	Meeting with all field staff		

S.No.	Activity	Method	Observation and comments
14	[Note: If Part B of the checklist will be monitored, then please fill this section *after* completing Part B] Conduct a meeting with all field staff and discuss the problems, if any, they are facing in the field • Related to the recruitment of respondents • Related to incentives • Related to the reaction of local people and local government and non government authorities towards the study • Any other issues List the suggestions provided after the meeting with the study field team	SI	

PART B: TECHNICAL MONITORING (CLINIC AND LAB)

S.No.	Activity	Method	Observation and comments
	STI clinic monitoring		
1	STI treatment guidelines (IBBS) available at the site?	O	
2	The clinic staff has read the STI treatment guidelines (IBBS)?	SI	
3	Is there a flow chart displayed in the medical examination room?	O	
4	**Check the medicines for Syndromic treatment and the expiration date chart:**		

S.No.	Activity	Method	Observation and comments
		O	
	Azithromycine 500 mg		
	Acyclovir 200 mg		
	Cefixime 400 mg		
	Tinidazole 500 mg		
	Fluconazole 150 mg		
	Doxycycline 100 mg		
	Metronidazole 400 mg		
	Other Medicine		
	Scareb Ointment		
	Vitamin B Complex (Nepali) For FSWs		
	Paracitamol Tablet		
	Tab. Decold		
	Povidine Iodine solution 450ml		
	Povidine Iodine ointment		
	Sarcobex lotion (for scabies)		
	Iron tablets Foe FSWs		
	Equipment and materials		
	Weighing Machine		
	B.P. Instruments		
	Stethoscope		
	Thermometer		
	Chital Forceps		
	Steel Kidney tray		
	Steel tray with cover		
	Mask		
	Pressure cooker		
	Stove		

S.No.	Activity	Method	Observation and comments
	Disposable gloves		
	Torch light		
	Bandage		
	Virex		
	Red Gloves		
	Waste buckets with cover		
	Soap and case		
	Towel		
	Bed Cover plastic		
	Jug/Mug		
	Curtain		
	Dettol liquid		
	Cotton		
	Scissor		
	Pen holder		
	Clip File		
	Register		
5	Correct diagnosis and treatment was given by the Staff Nurse based on the STI case management guidelines (observe and check randomly selected records)	R	
	Lab Monitoring (HIV, Hepatitis B/C and Syphilis testing)		
6	Guidelines for following activities available at the site. a. Specimen collection b. HIV and RPR testing c. selection, collection, storage and transportation of EQAS samples d. universal precaution e. waste management	O	

S.No.	Activity	Method	Observation and comments
	f. Post exposure prophylaxis		
7	Are following laboratory equipments and consumables available at the site? a. Centrifuge b. RPR Rotator c. Needle Destroyer d. Micropipette e. Refrigerator or Cold Box f. Ice packs g. Test tubes h. Cryo box and cryo vials i. Gloves j. Pipette tips k. Timer l. Disposable syringes m. Band aids n. Ethanol o. Cotton balls p. Tourniquet q. Supportive cushion r. Sodium Hypochlorite Solution	O	
8	All the three types of rapid HIV test kits, Hep. B/C test kits and RPR test kit with required reagents are available at the site and stored at temperatures as recommended by manufacturers.	O	
9	All kits and reagents used are not expired.	O	
10	Laboratory staff follows the HIV testing, Hep. B/C testing and Syphilis testing algorithm as recommended by study protocol.	O/SI	
11	Laboratory staff wears lab coats and gloves during specimen collection, processing and	O	

S.No.	Activity	Method	Observation and comments
	testing.		
12	Venipuncture site was cleaned with alcohol swab and the arm was placed on fixed surface for the procedure (table or arm rest of phlebotomy chair).	O	
13	After completion of veni puncture, band aid/tape was used to stop bleeding.	O	
14	The primary sample, subsequent testing device (centrifuge tube, slides, RPR card) and sample aliquots are labeled with the proper ID No.	O	
15	Tests are performed as per the guidelines and using appropriate internal controls as recommended in the guidelines.	O/SI	
16	Kits are taken out of the refrigerator or ice box and brought to room temperature before use	O/SI	
17	Measures for preventing needle stick injuries are followed. Needles of syringes are destroyed using needle destroyer.	O	
18	Tests are performed correctly using appropriate amount of reagents as recommended in the guidelines.	O/SI	
19	All biological specimens remaining after the test are disposed as per the guidelines.	O	
20	Laboratory register book containing the daily test results with remarks, if necessary, is available.	O/R	
21	Laboratory staff select specimen for EQAS as recommended in the guidelines.	O/SI	
22	Laboratory staff follows procedures as recommended in guidelines for collection, storage and transportation of EQAS specimens.	O/SI	
23	EQAS form is available at the site and is filled properly.	O/R	

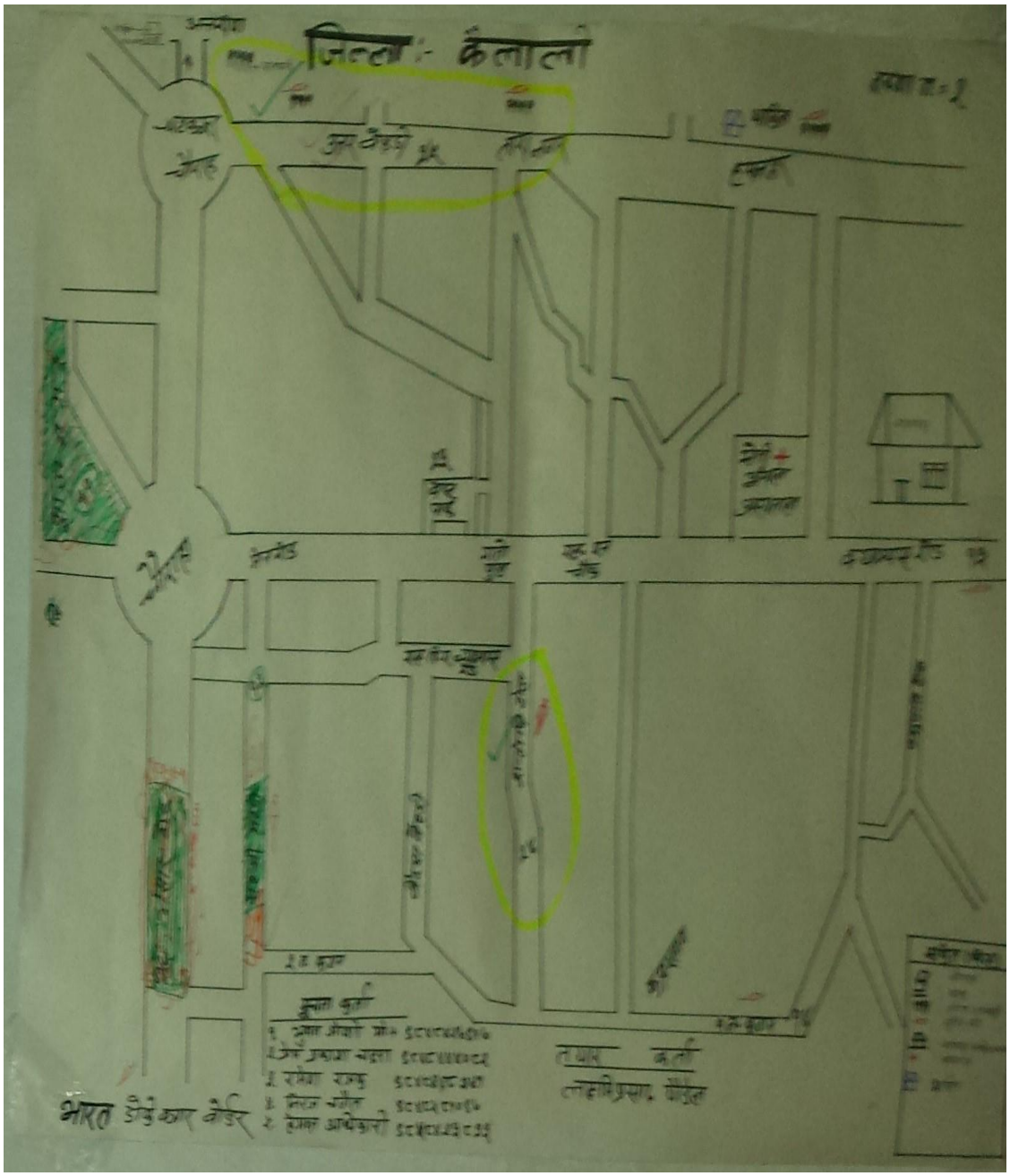
S.No.	Activity	Method	Observation and comments
	(make sure the test result is not mentioned in EQAS form)		
24	Waste bins for biodegradable, infectious and non-infectious materials and a sharp collection container are available. Wastes are collected properly in the allocated containers.	O	
25	Blood specimens remaining after the test are disposed of after decontamination in sufficient amount of 0.5% sodium hypochlorite solution.	O/SI	
26	Working surface is wiped with sodium hypochlorite solution after completion of the work.	O/SI	
27	PEP drugs (starter pack) and flow chart are available at the site. Name and contact information of the PEP focal person (i.e. Lab tech) written on the flow chart	O	
	Note: After completion of PART B, please follow the instruction in No. 13 in Part A		

Monitoring visit by: NCASC_____Save the Children _____

SPMER _____ Others_____

NOTE: Methods O: Observation, SI: Staff Interview, R: Records Review

ANNEXE 4: Survey Site MAP



Annex 5: Details of Clusters

Districts	Cluster Numbers
Rupandehi	9
Kapilbastu	5
Dang	2
Banke	7
Bardiya	0
Kailali	4
Kanchanpur	3
Total	**30**

District	SN	Cluster	Locations
Rupandehi	1	Belaliya Mandir and DIC area	Around Belaliya Kotiamy Mandir , Around DIC area (Belaliya)
	2	Eye hospital Aera	Around Eye hospital, Behind Bhanu School, Danda Khola area
	3	Paklihawa and Bank Koleni	Paklihawa, Around Hatbazer, Gallamandi, Around Bank Kolani
	4	Buddha Chowk	Thutepipal, Parsari, Around Buddha Chowk
	5	Chidiya khola	Chidiyakhola, Gopalpark, Around Hartbazaar
	6	Paributawal	Parbutwal (Ward 1,2,3,4)
	7	West Butawal	Tamnagar, Deepnagar, Shivanagar, Hillpark, Sinamaina
	8	Devinagar	Devinagar
	9	Devdaha	Devdaha
Kapilbastu	1	Buspark to Khuunuwa	Around Buspark, Khunuwa, Somari (India Border)
	2	Jeetpur Gageda	Jeetpur to Gageda
	3	Rajpur area	Upta, Rajpur, Burchi,Jhunga
	4	Laxminagar puspark	Around Old Film Hall, Laxminagar, Around Buspark
	5	Jayanagar motipur	Chakalchauda, Jayanagar, Monitpur, Dohani
Dang	1	Birendra Chowk, Ghorahi	Aound Anchal hospital, Around shiva mandir, Damar Ganu, Around Nayabuspark, Mahendra school area, Aroud Raptai

			babai campus, Around Airport, Sitalpu, Belawa
	2	Bijauri Lamahi	Parseni, Bijauri, Hemantapur, Satbariya, Lamahi main bazar area, Koliabas, Sisaniya, Bhaluwang
Banke	1	Newroad area	New Road area, Biskorian Tole, Triweni Mode area, Salyani Bagh area, Around Naya baspark
	2	BP Chowk	Muktipur, Karmouna, Indrapur, Korinpur, Bhawani bagh area, Around Sristi film hall, Around Sanjimandi
	3	Traffic Chowk	Gosain gaon, Trafic Chowk area, Around Mahakali Mill
	4	Chaulika	Mahendra Campus area, Tankapasari, Mahendranagar, Balegaun, Jamunah, Jayaspur
	5	Ranjha airport	Manikapur, Ganapur, Nayabasti, Surjigaun, Lagdahawa, Bhujahgaun, Samjhana Chowk(Way to Airport)
	6	Kohalpur Chisapani	Chisapani, Baniyatar, Koushilanagar, Shantinagar, Bardahawa, Kirannala, Belanpur, Bankatuwa
	7	Tribhuvan School Kohalpur	Dhakeri, Chappargadi, Mahadev Chowk, Kohalpur Chauraha, Pipal chautara, Chatar, School area, Kalikanagar, Jhandahawa,hawaldarpur
Kailali	1	Dhangadi Chauraha	Bisalnagar, Around Sabji Mandi
	2	Bhansar Road	Bhansar Road
	3	Santoshi Tole	Santoshi Tole (Around Kailali Nala)
	4	Utter behedi	Tara Nagar (Salghari)
Kanchanpur	1	Suda	Suda (Area around Pul)
	2	Film Hall (Tallo)	Film Hall (Tallo)/Around Film Hall
	3	Kalia/Shiva Mandir	Around Kalika temple, Area around Nahar, Around Shiva Mandir

Annex 6: KEY INDICATORS

Prevalence	**%**
HIV	2.3
Syphilis history	1.7
Active syphilis	0.3
HCV	1.7
HBV	8
HIV among those injecting for less than a year	0
Duration of injection and injecting behavior	
Turnover: median duration of injecting drugs	5.7 years
Aged <20 years	47.3
People injecting more than once every day (in the past week)	19
People injecting every day (in the past week)	24.3
Shared needle in the past week	12.7
Shared injecting equipment in the past week	76.4
Sexual behavior	
Currently married	48.3
STI symptoms experienced in the past year	16
Unprotected sex with FSWs in the past year	47.9
Unprotected sex with casual partners in the past year	64.3
Unprotected sex with regular partner in the past year	78.3
Knowledge of HIV and STI	
Ever heard of HIV	99.3
Comprehensive knowledge	43
Know that HIV is transmitted through stained needles	94.3
Know people living with HIV/AIDS or died	66.3
Uptake of HIV and STI services	
Needles obtained from needle exchange program in the last injection	42
Received HIV test in the past 12 months and received results	66
Met/discussed/interacted with PE or OE in the last 12 months	60
Visited a DIC in the last 12 months	69
Visited any STI clinic in the last 12 months	5
Visited HTC center in the last 12 months	34.7