Integrated Biological and Behavioral Surveillance (IBBS) Survey among People Who Inject Drugs (PWID-Male) in the Eastern Terai Highway Districts (Jhapa, Morang and Sunsari) of Nepal, 2015

Round VI

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This survey, conducted in accordance with National Plan on HIV and STI Surveillance, aims to support evidence generation towards HIV, STI, Hepatitis B, Hepatitis C, knowledge, related risk behavior, and prevalence trends by way of Integrated Biological and Behavioral Surveillance (IBBS) survey. The survey was carried out by National Institute for Development and Research (NIDR) under the leadership of National Centre for AIDS and STD Control (NCASC). Financial support for this survey was through Save the Children/Global Fund. We would like to thank all the survey participants for their support, participation and sharing their personal experience.

The NCASC's Strategic Information (SI) team helped ensure that the work was carried out efficiently as per the plan and standards. Mr. Bir Bahadur Rawal, Statistical Officer and SI Focal Person, in particular provided necessary support to ensure proper planning, monitoring and timely completion of the survey. Similarly, Dr. Ramesh Adhikari, Consultant from Saath–Saath Project provided technical support in the study. The survey has been successful with the support from various NGOs and community people working with people who inject drugs *namely Knight Chess Club (KCC), Kirat Yakthum Chumlung (KYC) Punarjiwan Kendra, Richmond Fellowship, Happy Nepal, Damak and Network of Organizations working on HIV Biratnagar*. Likewise, Nepal Public Health Laboratory (NPHL) supported in carrying out quality control assessments of serological tests of biological samples received during the study period. I thank all of them for their contributions to successfully completing this survey.

We are grateful to the Nepal Health Research Council (NHRC) for providing a professional review of the study proposal and providing ethical approval to carry out the study. We also must not forget that Nepal Police, District Public Health Office (DPHO), Chief District Officer (CDO) Morang, Sunsari and Jhapa districts, all helped ensure that the field survey took place safely and in a timely manner.

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We are confident that the findings of this important survey will provide crucial evidence of the ground realities, and that the results will help in framing policies in order to fight HIV, STI, Hepatitis B and C to improve HIV-related responses and planning.

Dr. Dipendra Raman Singh
Director, NCASC

TABLE OF CONTENT

LISTS OF TABLES

LIST OF FIGURES

ABBREVIATIONS

ABC	Abstinence, Being Faithful, Condom Use
AIDS	Acquired Immuno-Deficiency Syndrome
ASHA	Advancing Surveillance, Policies, Prevention, Care and Support to Fight HIV/AIDS
ART	Anti-Retroviral Therapy
BPKIHS	B.P. Koirala Institute of Health Sciences
BSS	Behavioral Surveillance Survey
CC	Community Centers
CHBC	Community and Home-Based Care
CE	Community Educators
CI	Confidence Interval
CMs	Community Motivators/Mobilisers
DIC	Drop-in-Centre
EQA	External Quality Assessment
EQAS	External Quality Assurance Scheme
FHI -360	Family Health International
FSWs	Female Sex Workers
GOs	Governmental Organizations
HTC	HIV Testing and Counselling
HIV	Human Immuno-Deficiency Virus
IBBS	Integrated Biological and Behavioral Surveillance
IC	Information Center
ID	Identifier
KAP	Key Affected Population
KCC	Knight Chess Club
KYC	Kirat Yakthum Chumlung
LSD	Lysergic acid diethylamide
MSM	Men who have Sex with Men
NCASC	National Center for AIDS and STD Control
NGO	Non-Governmental Organization
NHRC	Nepal Health Research Council
NIDR	Nepal Institute for Development and Research
NPHL	National Public Health Laboratory
OE	Outreach Educator
OST	Opioid Substitution Therapy
PE	Peer Educator
PHCC	Primary Health Care Center
PLHIV	People Living with HIV
PMTCT	Prevention of Mother to Child Transmission of HIV
PPS	Probability Proportional to Size
PRC	Punarjeev Rehabilation Center
PWID	People Who Inject Drugs
RDT	Rapid Diagnostic Test
RPR	Rapid Plasma Reagin
SGS	Second Generation Surveillance
SITWG	Strategic Information Technical Working Group
SPSS	Statistical Package for the Social Sciences
STI	Sexually Transmitted Infection

TPHA	Treponema Pallidum Hemagglutination Assay
TPPA	Treponema Pallidum Particle Agglutination
UNAIDs	Joint United Nations Programme on HIV/AIDS
UNGASS	United Nations General Assembly Special Session
USAID	United States Agency for International Development
WHO	World Health Organization

EXECUTIVE SUMMARY

Introduction

Under the support of the National Center for AIDS and STD Control (NCASC) and Save the Children this Integrated Biological and Behavioral Surveillance (IBBS) Survey was carried out by National Institute for Development and Research (NIDR). The existing National HIV and AIDS Strategy (2011-2016) identifies people who inject drugs (PWIDs), female sex workers (FSWs) and their clients and men who have sex with men (MSM) as key affected populations (KAP) at higher risk of spreading the HIV epidemic.

This is the sixth round of the IBBS study conducted among PWIDs in Eastern Terai Highway Districts. This survey is a part of the National HIV Surveillance Plan (2012) and National HIV and AIDS Strategy (2011-2016). In line with the objectives of the previous rounds of the IBBS, the sixth round of the survey was also undertaken primarily to determine the prevalence of HIV and STIs, assess HIV and STI related risk behaviours, drug injecting behaviours, the level of awareness about HIV/STIs, as well as their exposure to intervention programs among PWIDs in Eastern Terai Highway Districts. Moreover, this survey examined the prevalence of Hepatitis B and Hepatitis C among PWIDs for the first time.

Methodology

This cross-sectional study was conducted among PWIDs from the three districts namely Jhapa, Morang and Sunsari. For the purpose of this survey, the definition of PWIDs was 'those current injectors aged 16 years and above who have been injecting illicit drugs for at least three months prior to the date of the survey'.

Two-stage cluster sampling was used to recruit 360 PWIDs from study districts. A site or hotspots with at least 30 PWIDs was defined as a cluster. In the first stage, 30 clusters were selected using the probability proportional to size (PPS) method and in the second stage 12 PWIDs were chosen using systematic random sampling from each of the selected clusters.

The research was conducted in compliance with both ethical and human rights standards. Ethical approval for this survey was obtained from Nepal Health Research Council. Informed consent was obtained in the presence of witness who signed on behalf of the PWIDs prior to the interview and collection of blood samples. Study centers with laboratories/clinic were set up at easily accessible locations in all the study districts. Individual interviews, clinical examinations and blood collection were carried out in separate rooms in each of the study centers.

Laboratory Methods

HIV testing was done using Determine HIV 1/2 as first test to detect antibodies against HIV. If the first test showed a negative result, then no further test was conducted. However, if the first test was positive, a second test was performed using Uni-Gold. In case of a tie between the first two tests, a third test was performed using Stat Pak HIV 1/2 as a tie-breaker test. Syphilis was tested using the Rapid Plasma Reagin (RPR) test card and confirmed by means of the Serodia Treponema Pallidium Particle Agglutination test (TPPA) test. Serum samples that tested RPR positive with titer value above or equal to 1:8 were reported as active syphilis; titration less than 1:8 were reported as a case with a history of syphilis. Hepatitis B surface antigen (HbsAg) was detected by Rapid kit, HBSAg test strip (serum). It is an in-vitro diagnostic test based on immunochromatographic principle and gives qualitative visual read results. The presence of this colored line in the test region indicates a positive result, while its absence indicates a negative result. For the detection of Hepatitis C antibody, Hepatitis C

Test strep (serum) method was used. Similar to methods of Hepatitis B, colored line suggest positive result and no colored line suggest negative results.

Key Findings

Prevalence of HIV, STI, Hepatitis B and Hepatitis C

HIV prevalence among PWIDs is 8.3 percent (5.7% to 11.8% at 95% CI). HIV prevalence among PWIDs had remained stable from the consecutive two rounds of the survey (2012, 2015). Syphilis history was detected among 2.2 percent PWID, while 1.1 percent of PWIDs were active syphilis. Less than one percent of PWIDs (0.8%) tested Hepatitis B positive. However the prevalence of Hepatitis C is 47.5 percent (42% to 52% at 95% CI). The bi-variate analysis showed that HIV was significantly associated with Hepatitis C.

Background Characteristics

Majority of the PWIDs were below 30 years (71%) and literate (97%). Majority of PWIDs were from disadvantaged janajati ethnic groups (47%) and upper caste groups (26%). About 47 percent of PWIDs were married, of whom the median age at first marriage was 22 years. Majority of PWIDs were living in home (76%) and with family and wife (90%). About 68 percent of the PWIDs had been imprisoned or detained at least once and among them, less than half (49%) been imprisoned or detained in the past year. Forty-three percent (52) of PWIDs imprisoned of drugs related reasons and among them, 15 percent (8) of them had injected while they were in prison.

Alcohol Consumption, Oral Drugs Use and Drug Injecting Practice

Alcohol consumption was common among PWIDs as 67 percent of PWIDs consumed alcohol at least once in past month and 13 percent consumed alcohol every day. Most of the PWIDs had been injecting drugs for a fairly long time, with an average of nine years (105 months). The median age of the PWIDs the first time they injected drugs was 19 years and 54 percent of PWIDs were below 19 years when they injected for the first time. Similarly, the mean duration of injecting drugs was six years (75 months) and 49 percent of them injected drugs more than five years. Most of PWIDs (90%) injected drugs in the last month and among them 13 percent used non-sterile syringe/needle and 11 percent used non-sterile injecting equipment. The most used drugs were Marijuana (64%) and Nitrosun (26%) whereas Diazepam (73%) and Phenergan were most injected drugs. Moreover, most of PWIDs (96%) used a combination of drugs. About five percent of PWIDs possessed high-risk behaviors like the use of pre-used needles and syringe, use a needle/syringe given by friend/relative and used a needle/syringe picked it up from a public place in their last three injections. Majority of PWIDs preferred to inject alone in their last three injections. About 21 percent of PWIDs didn't inject drugs in last week. Among PWIDs who injected drugs last week, some PWIDs also followed some risky drug sharing practices in the past week such as using needle/syringe that had been used by someone else (9%), using needles/syringes left in public places (3%), and injecting with a pre-used needle/syringe (8%). Moreover, injecting with a syringe after drugs were transferred into it from another's syringe (9%), sharing bottle, spoon, cooker, vial/container, cotton/filter and rinse water (11%) and drawing drug solution from common container used by others (14%) was also prevalent among PWIDs.

Sexual Behavior and Condom Use

Most of the PWIDs (98%) have had at least one sexual contact with female partner with 84 percent of them had first sexual contact before they reach 20 years. The median age at first sex was 17 years. About 74 percent of PWIDs had sexual intercourse in last year. Half of PWIDs had one female sexual partner while one third of PWIDs (33%) had three and more

female sexual partners. About 60 percent of the PWIDs had sex with regular female sex partners in past year and among them 31 percent used condom during last sex. Similarly 17 percent of PWIDs had sex with regular female sex workers (FSWs) in past month and among them 73 percent used condom during last sex. About 30 percent of PWIDs had sex with non regular female sex partners and among them 58 percent used condom during last sex. Consistent use of condoms with regular sex partners was lowest, with only about 13 percent of PWIDs using condoms consistently in the past year. However, consistent condom use was higher in non regular female sex partners (32%) and among FSWs (53%). Most of the PWIDs were aware that condoms are available at the pharmacy (95%), hospital (38%) and clinic (27%). About 47 percent of PWIDs never obtained free condoms from any organization. Most of PWIDs (92%) said that the nearest place they could get condoms was up to 30 minutes away. About 32 percent of PWIDs carried condoms during the survey. The most common sources of information on condom were newspapers/posters (96%), television (95%), pharmacies (95%) and Radio (91%).

Sexually Transmitted Infection (STIs) Symptoms and Treatment

Most of PWIDs (92%) heard of STIs. Those who had heard about STIs, most commonly cited genital symptoms of STIs were genital ulcer/sore blister (37% in female and 53% in male) and genital discharge (35% in female and 44% in male) by PWIDs. About seven percent of PWIDs had genital discharge in the past year and among them, 35 percent had genital discharge at the time of the survey. About nine percent of PWIDs had genital ulcers/sore in the past year and among them, 50 percent had the symptom at the time of survey. Among PWIDs who had experienced STI, 57 percent had never sought any treatment. However, 38 percent had been to a private doctor and hospital/health post for treatment.

Awareness of HIV

All PWIDs had ever heard about HIV. The main source of knowledge on HIV was posters (97%), television (95%), newspapers (94%) and Radio (94%). Overall, 46 percent of PWIDs correctly identified all three A (abstinence from sex) B (being faithful to one partner/avoiding multiple sex partners) and C (consistent condom use or use of condom during every sex act) as HIV-preventive measures. However, comprehensive knowledge on HIV was comparatively higher among PWIDs as a 49 percent of them correctly identified all of 'BCDEF' (a healthy-looking person can be infected with HIV (D), HIV cannot be transmitted through mosquito bite – E; and that HIV cannot be transmitted while sharing a meal with a HIV-positive person-F).

Availability of HIV Testing Facilities

Majority of PWIDs (84%) knew about the existence of a confidential HIV testing facility in their community while 86 percent of them knew about a HIV testing center. About 64 percent had ever taken such test and among them, 48 percent had taken test in past 12 months. About 95 percent of them got their test results.

Exposure to HIV Awareness Programs

Majority of PWIDs were exposed to different HIV program components in the past year. For example, 43 percent interacted with peer/outreach educators/community mobilizer; 65 percent visited drop-in center (DIC) and 23 percent of PWIDs visited HIV Testing and Counseling (HTC). However, only four percent of PWIDs visited Sexually Transmitted Infection (STI) clinics.

Knowledge on Prevention of Mother to Child Transmission (PMTCT) services, Anti-Retroviral Therapy (ART) and Community and Home-based Care (CHBC)

One-fifth of PWIDs (20%) heard about PMTCT services. Half of PWIDs had heard about ART services for PLHIV. Among them, more than half (51%) of PWIDs know the place to obtained ART services and mentioned Government hospital (37%) and BPKIHS (50%) are providing ART services. Similarly 18 percent of PWIDs heard about viral load testing services for PLHIV and more than one third of PWIDs (34%) heard about CHBC service provided for PLHIV.

Stigma and Discrimination

Most of PWIDs (98%) were willing to take care of HIV positive relative and 97 percent of PWIDs were willing to take care of HIV positive female relative at their home. About 47 percent of PWIDs would disclose the HIV status of their family rather than keeping it a secret. Most of PWIDs (94%) would buy food from shopkeeper with HIV positive, 80 percent of the PWIDs said that PLHIV need same care as with other chronic condition and 95 percent of PWIDs agreed that PLHIV should continue to work if they are well. Most of PWIDs (98%) stated that children with HIV positive should attend school with other children.

CHAPTER I: INTRODUCTION

1.1 Background

Nepal is categorized as a country facing concentrated HIV epidemic. The National Centre for AIDS and STD Control (NCASC) has estimated that there were 39,249 people living with HIV (PLHIV) in Nepal in 2014 with adult HIV prevalence 0.20% (NCASC, 2014). The existing National HIV and AIDS Strategy (2011-2016) identifies people who inject drugs (PWIDs), female sex workers (FSWs) and their clients, migrant workers and their spouses and men who have sex with men (MSM) as key affected populations (KAP) at higher risk of spreading the epidemic (NCASC, 2012). The National HIV and AIDS Strategy have also guided to strengthen the Second Generation Surveillance (SGS) system as one of key principles of strengthening surveillance of HIV and STI in Nepal. One of the major components of SGS, and also strategic direction of the national strategy, is to conduct Integrated Biological and Behavioral Surveillance (IBBS) Survey among KAP at higher risk to HIV in selected high risk areas in regular interval based on the national plan on HIV and STI surveillance.

IBBS surveys help collecting two distinct types of data (HIV and STI biological and behavioural) from a single set of participants and also help 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 behaviours among the KAPs very effectively.

Nepal has had great experience of conducting IBBS surveys successfully among KAPs for almost 10 years. Up to 2012, 34 IBBS and 10 Behavioral Surveillance Surveys (BSS) are conducted among KAP funded by USAID, and managed by FHI 360 in close collaboration with NCASC and one IBBS among male labour migrants in Mid & Far Western Region in 2010 was conducted in Nepal funded by Global Fund and managed by Save the Children (FHI 360 and NHRC, 2014). However, from 2012, IBBS surveys implemented directly by NCASC with collaboration with key partners. This IBBS survey is under the leadership of NCASC and Save the Children through the support of Global Fund for AIDS, Tuberculosis and Malaria (GFATM).

IBBS surveys are regularly conducted among PWIDs. This is the sixth round of the IBBS study conducted among PWIDs in Eastern Terai Highway Districts. The table below sumarizes the previous IBBS surveys among PWIDs in Nepal.

Table 1.1 IBBS Surveys among PWIDs in Nepal

Study Sites	Rounds	Study Years
Kathmandu Valley	5	2002, 2005, 2007, 2009, 2011
Pokhara Valley	5	2003, 2005, 2007, 2009, 2011
Eastern Terai (3 districts)	5	2003, 2005, 2007, 2009,2012
West to Far Western Terai (7 districts)	4	2005, 2007, 2009,2012

Table 1.1 reveals that IBBS surveys are carried out in limited geographical areas of the country. Prior to the IBBS surveys, several rounds of behavirol surveillance survey (BSS) were conducted among PWIDs during 1998-2002 (FHI 360 and NHRC, 2014).

Globally, around 16 million people inject drugs and three million of them are living with HIV. On average, one out of every ten new HIV infections is caused by injecting drugs. PWIDs are at high risk of infection with blood-borne viruses including HIV, Hepatitis B and Hepatitis C, and are increasingly being targeted for preventing the spread of HIV (WHO, 2015). Approximately 10 percent of HIV infections worldwide are attributable to injecting drug use and in Nepal, HIV epidemics are confronting serious among PWIDs (Nelson *et.al*, 2011; Silverman *et.al*, 2008). IBBS surveys are regularly providing HIV-related risk behaviours among PWIDs. Evidences (e.g. different rounds of IBBS surveys carried out in Nepal) suggest that HIV prevalence is still high among PWIDs in all clusters and varies by location. These studies have also documented that the HIV prevalence among PWIDs is in a decreasing trend (2004-2011) in Kathmandu (NCASC and ASHA, 2011a), Pokhara (NCASC and ASHA, 2011a) and Western Terai Region (2003-2012) (NCASC and ASHA, 2012a), however the trends is constant in Eastern Terai Region (2003-2012) (NCASC and ASHA, 2012b). Moreover, PWIDs have regular female sexual partners (henceforth referred to as regular partners), most of whom are at high risk of HIV infection due to unprotected sex with their regular (injecting) partner/husband (NCASC and ASHA, 2012a; NCASC and ASHA, 2012b). Likewise, PWIDs also posses high risk behavior of sharing needles/syringes between different injecting partners and also re-using needles kept in public places. The crossover of drug use with sex work has also been found to be a major contributing factor to the spread of HIV to other at-risk populations and their partners (NCASC and ASHA 2011a; NCASC, 2012).

1.2 Objectives of the Study

In line with the objectives of the previous rounds of IBBS, this sixth round of the survey was also undertaken primarily to determine the trends of HIV and STI prevalence and to assess HIV and STI-related risk behavior among PWIDs in Eastern Terai. However, in this IBBS survey, prevalence of Hepatitis B and Hepatitis C among PWIDs were measured for the first time.

The primary objectives are:

- 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 among PWIDs

The secondary objectives are:

- To estimate the knowledge of HIV and STI as well as sexual and injecting behaviors among PWIDs;
- To explore associations between risk behaviors and infections with HIV or STI among PWIDs;
- To estimate the prevalence of STI syndromes among PWIDs**.**

1.3 Rationale of the study

IBBS surveys are stronger component of HIV surveillance and IBBS survey data are widely used for designing HIV response, to monitor HIV prevention, care, and treatment programs and for estimation and projection of HIV infections in many countries including Nepal. IBBS surveys results have been used by 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. IBBS are a major source of information for understanding the HIV dynamics including behavior as well as HIV and STI prevalence among KAP. Data on key national HIV indicators are based on IBBS surveys. IBBS survey is a key component of the national HIV surveillance plan of Nepal and is collected in regular intervals. Estimation and projection of HIV infections in the country are also heavily based on IBBS surveys data. Data on key National HIV Indicators (outcome and impact) are calculated from IBBS survey findings (Annex-4). Similarly key UNGASS indicators were also calculated and reported using the IBBS survey data (Annex-3). Likewise, National estimation and projections of HIV infections in the country are also heavily based on data from IBBS surveys. Indeed, IBBS has established its reputation of quality and is the major set of surveillance data in Nepal.

Indeed, IBBS survey has established its reputation of quality and is the major set of surveillance data in Nepal. With this view and importance, NCASC and Save the Children through the support of Global Fund for AIDS, Tuberculosis and Malaria (GFATM) conducted IBBS Surveys among PWIDs in eastern terai (Jhapa, Morang and Sunsari) districts of Nepal in 2015. It is anticipated that this survey will be utilized by all policy makers, program planners and implementers alike to plan the national HIV response and tailor the response to the HIV epidemic being faced by the country.

CHAPTER II: DESIGN AND METHODOLOGY

2.1 Survey design

The survey was cross-sectional in design.

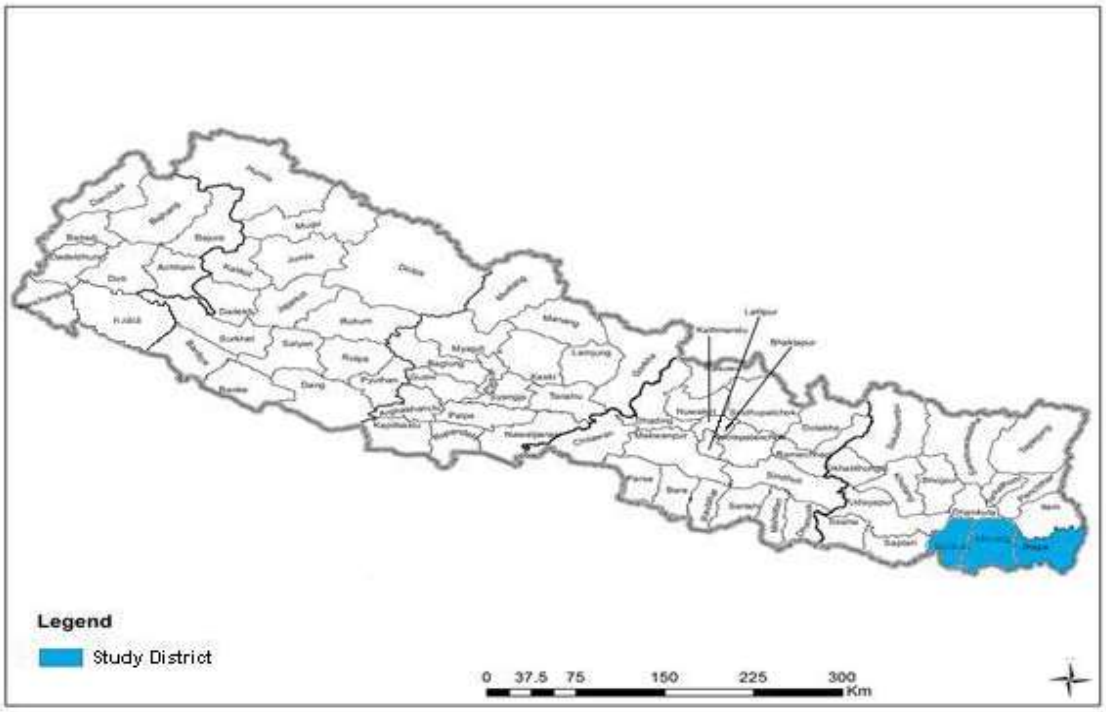
2.2 Survey Population

The study population of the study is *'those current injectors aged 16 years and above who have been injecting illicit drugs for at least three months prior to the date of the survey'*.

2.3 Survey Site

This survey was conducted in three districts of eastern terai region namely Sunsari, Morang and Jhapa districts of Nepal.

Figure 1: Map of Nepal showing survey districts



2.4 Survey Period

The fieldwork started on 1 July, 2015 and was completed on 25 July, 2015.

2.5 Sample Design

Two stage cluster sampling method were used for selecting PWIDs.

First Stage: Selection of Clusters

The information on the estimated size of the PWIDs within each district based on the operational mapping exercise served as sampling frames for cluster selection. Data for the mapping and size estimation exercise was collated by focusing Government Organization (GO) and Non Government Organizations (NGOs) working with PWIDs. The team collected information on number of PWIDs and possible clusters in consultation of local NGOs and finalized the number of PWIDs in each clusters using the tools and consultation with NGOs representatives.

A site or hotspots with at least 30 PWIDs was defined as a cluster. Both a maximum and a minimum number of PWIDs were listed for study districts. Based on the preliminary information collected during the mapping exercise, a list of locations and an estimated number of PWIDs in each location was prepared. Those sites with less than 30 estimated PWIDs were combined with the neighbouring site to make a cluster with a minimum size of 30 PWIDs. The clusters were arranged in serpentine order in basis of locations staring from Kakarvitta and ending to Dharan. Fifty clusters were identified from eastern terai region and among them, 30 clusters were selected using systematic random sampling with probability proportional to size (PPS) method from the study districts. The selected clusters along with map are presented in the annexure.

Second Stage: Selection of Respondents

The field teams visited each selected clusters to prepare a list of PWIDs who met the eligibility criteria for the study. Only those PWIDs who were available in the study districts cluster were included in the list. From the separate list created, 12 PWIDs were selected by systematic random sampling method from each of the respective clusters. This resulted in the selection of a total of 360 PWIDs.

Table 2.1: An Overview of Number of Clusters Selected in Study Districts

Districts	Total no. of clusters	No. of clusters selected
Jhapa	11	7
Morang	23	14
Sunsari	16	9
Total	**50**	**30**

2.6 Sample Size

The sample size used in the previous rounds of IBBS in this site was used in this round also. Initially the sample size was determined by using a basic statistical formula which estimated a sample size of 360 PWIDs (Annex 2).

2.7 Recruitment

Using the information on locations and the estimated number of PWIDs in those locations, first-stage clusters were defined and 30 such clusters were selected using PPS method. Then from each of the first-stage clusters selected, 12 PWIDs were systematic randomly selected in the sample. The field teams along with community motivators visited selected clusters to prepare a list of PWIDs who met the inclusion criteria for the study and from the separate list created, 12 PWIDs were selected by systematic random sampling method from

each selected clusters. Then this 12 PWIDs form each clusters were invited for the study. In such situations, community mobilizers and peer educators of on-going HIV/AIDS programs, ex-PWIDs, social workers approached the selected PWIDs and invited for the study. At least three attempts were made to contact and include the person randomly selected. If this was not successful after three attempts, that person was replaced by the next randomly selected PWIDs in the cluster.

2.8 Data collection tools and techniques

Data collection included both biological and behavioral data, including handling of biological data for external quality assurance. This survey used structured questionnaire to assess background characteristic, drug injecting behaviours, sexual risk behavior, use of condom, knowledge and awareness of HIV and AIDS and STI, exposure to HIV and AIDs programs and stigma and discrimination. The questionnaire was developed in reference to the existing questionnaire used in the previous round (V) of IBBS among PWIDs in the same districts and necessary modification was made in the tools based on pretesting and in consultation with Strategic Working Technical Working Group (SITWG) members. All data collection tools were developed in Nepali. Interviews were conducted in Nepali by the same sex researchers.

2.9 Study Personnel

The study team comprised of team leader, research officer, database developer, data entry personnel, statistician, field researchers, lab technician, health assistant, counsellor, community motivators and support staff. The team leader was involved in overseeing the whole study. The field team included research officer, field researchers, lab personal, health assistant, counsellors and support staffs whereas the study team included database developer, data entry personnel and statistician.

2.10 Training of Field Team and Pretesting

A field team were provided with five-day training by National Institute for Development and Research (NIDR). The training was facilitated by the relevant experts from NCASC, Save the Children, FHI 360 and United States Agency for International Development (UNAIDS). The training covered Overview of IBBS, HIV Epidemic and Surveillance System in Nepal, Survey Design and Approaches, Sampling Approaches, Behavioural Interviews: Interview Process, administering Informed Consent/Assent, data collection tools and role and responsibilities of the team members. The training was followed by mock interview exercise in pairs and large group reflection and discussion on mock exercise. Additionally, expert from PWIDs network also shared their experience on working with PWIDs.

With the help of Save the Children implementing agencies (through their peer educators/outreach educators), PWIDs were contacted and invited for the pretest of the study tools. The pretest was carried out in a location agreed to by PWIDs (DIC of Sathi Samuha at Samakhusi) and consent was taken from all the study participants. Ten PWIDs were interviewed during the pretesting. The tools were revised based on pretesting and section such as depression and social support were removed in the tools as this information

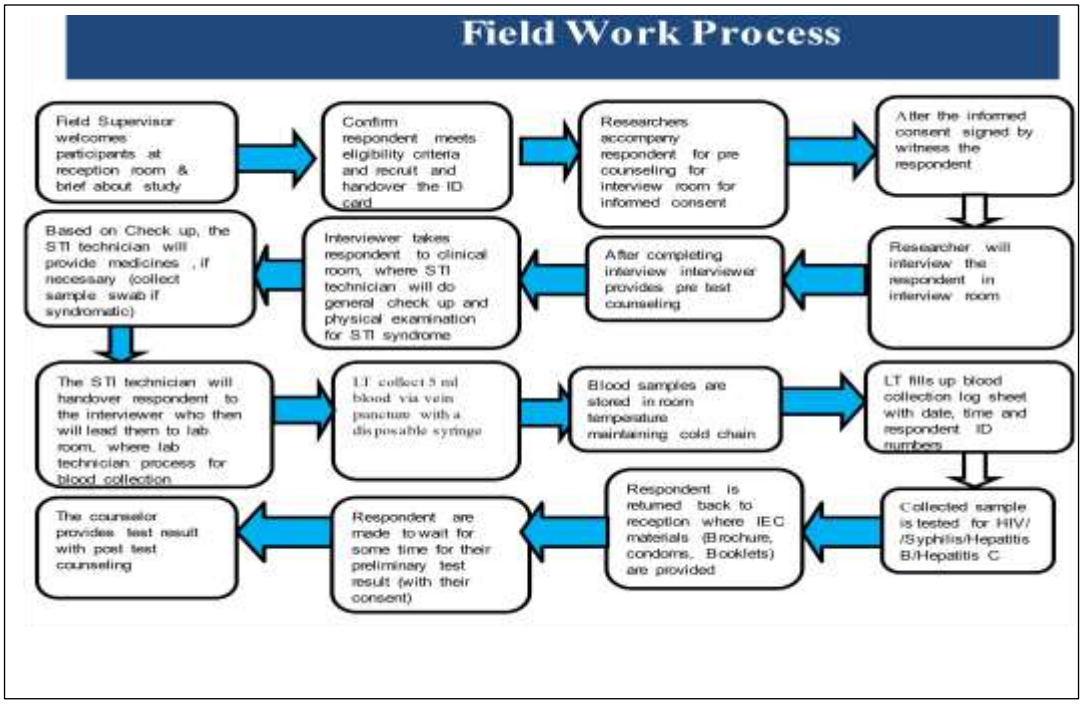
were not relevant and not match with objectives of IBBS survey. The revised tools were shared to SITWG members. The SITWG members finalized the tools based on the findings of pretesting. However, the information collected during the pretesting was not included in the main analysis.

2.11 Field Work

The field data collection from the respondents of the study was started from July 1, 2015 in Biratnagar, Morang District. Before the field work, a stakeholder meeting was conducted among representatives from government organizations (GOs), I/NGOs working with PWIDs. During the consultation meeting the team leader explained the purpose and objectives of the study, led the discussion towards the issues and challenges in the field work, and asked for their cooperation to make the study a success. During the meeting, participants shared their experiences and knowledge about different types of PWIDs, and further support for the study. After the consultation meeting, the study team contacted the potential CMs and equipped them with good knowledge about the target population of this study. The study team, with the help of CMs list the number of PWIDs in selected cluster. Five survey sites were selected in the study. The sites were Biratnagar, Dharan, Itahari, Damak and Birtamod. These centrally-located site were selected specifically for the convenience of meeting and bringing the PWIDs into the study sites. The field office had separate rooms for each activity, such as welcome and registration, interviews, general physical and STI examinations, blood drawing and laboratory testing of blood, and pre-testing and post-test counseling. Before the interview, PWIDs were informally asked certain questions in order to ensure that they met the eligibility criteria set for the study. Injecting marks were also observed in order to confirm their injecting behavior.

High level of confidentiality was maintained throughout the study process. All interviews were conducted by male researchers in a private room. No names were mentioned in the tools and notes. Instead, they were provided a unique ID number written on a plastic-coated card. The same number was marked on the questionnaire, on the medical records, and on the blood specimen of each respondent. This card was also used for the distribution of the test results. Only those participants who had the card were provided the HIV and syphilis test results verbally with post-test counselling. The entire field work was completed on July 25, 2015.

Figure 2: Field Work Process for IBBS Surveys



2.12 Refusal

All PWIDs participated voluntarily in the survey. There was no refusal from randomly selected 360 PWIDs.

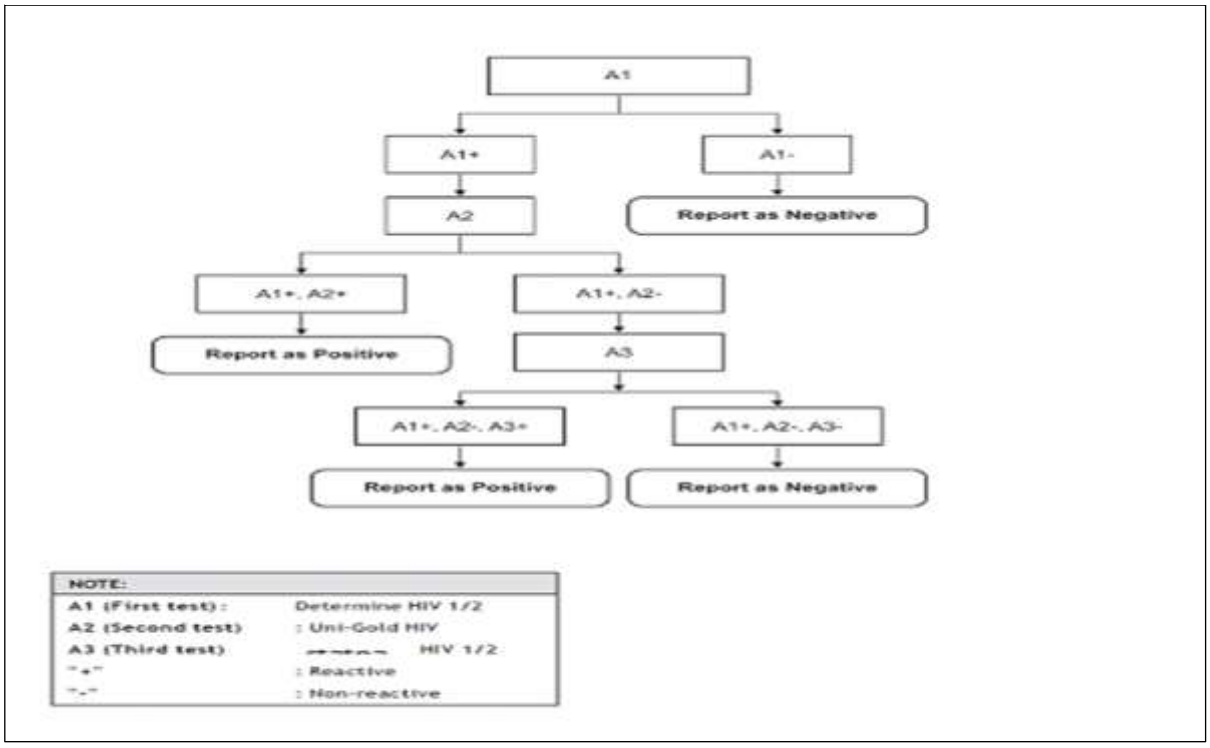
2.13 Clinical and Laboratory Procedure

PWIDs were clinically checked for any symptoms of STIs by the health assistant who also filled the checklist with the information provided by them. The clinical examination included a simple health check-up (measuring blood pressure, body temperature, weight, and pulse) and a symptomatic examination for STIs with syndromic treatment (NCASC, National guidelines on Case Management of sexually transmitted infections, 2014). Laboratory service entailed on-site rapid screening of HIV1/2, Hepatitis B, Hepatitis C and syphilis followed by a confirmation test. About 5 ml of whole blood was drawn from each PWIDs using disposable syringes. The blood sample was centrifuged to separate the blood cells from the serum. Each sample was labeled with the unique ID number of the PWIDs. All the tests, HIV rapid test, Hepatitis B, Hepatitis C test and RPR test were performed using serum by a lab technician. Universal precautions and safe waste management practices were followed. The stored samples were transported to the Sagarmatha Policlinic and Diagnostic Centre (SPDC) , a Laboratory partner of NIDR ,Kalimati to maintain cold chain and delivered all the positive and 10 percent of the negative samples of HIV, Hepatitis B, C and Syphilis to NPHL for external quality assurance .

HIV1/ 2

The HIV screening of the serum sample was performed using rapid test kits following the national HIV testing algorithm. Determine HIV ½ (Abbot, Japan), Uni-Gold HIV ½ (Trinity Biotech, Ireland), and Stat Pak HIV ½ (Chembio diagnostics) as per the national Voluntary Counseling Testing (VCT) guideline developed by NCASC in 2007 were used. All the kits were based on immunochromatography principle for detecting antibodies against HIV in the serum or blood. Serum that tested reactive with the initial kit was confirmed with the second kit. Samples that were found reactive on both tests were considered HIV positive. Samples that were non-reactive on the first test were considered HIV negative. Any sample that was reactive on the first test but nonreactive on the second was tested with the third "tie breaker" kit. Based on the result of the third kit, HIV status was determined; if third test gave reactive result, sample was considered as HIV positive and if result was non-reactive, sample was considered as negative. The internal quality of the assay was assured by the in-built control of each kit and external quality was assured by sending all positive cases and 10% of negative cases to reference lab (NPHL).

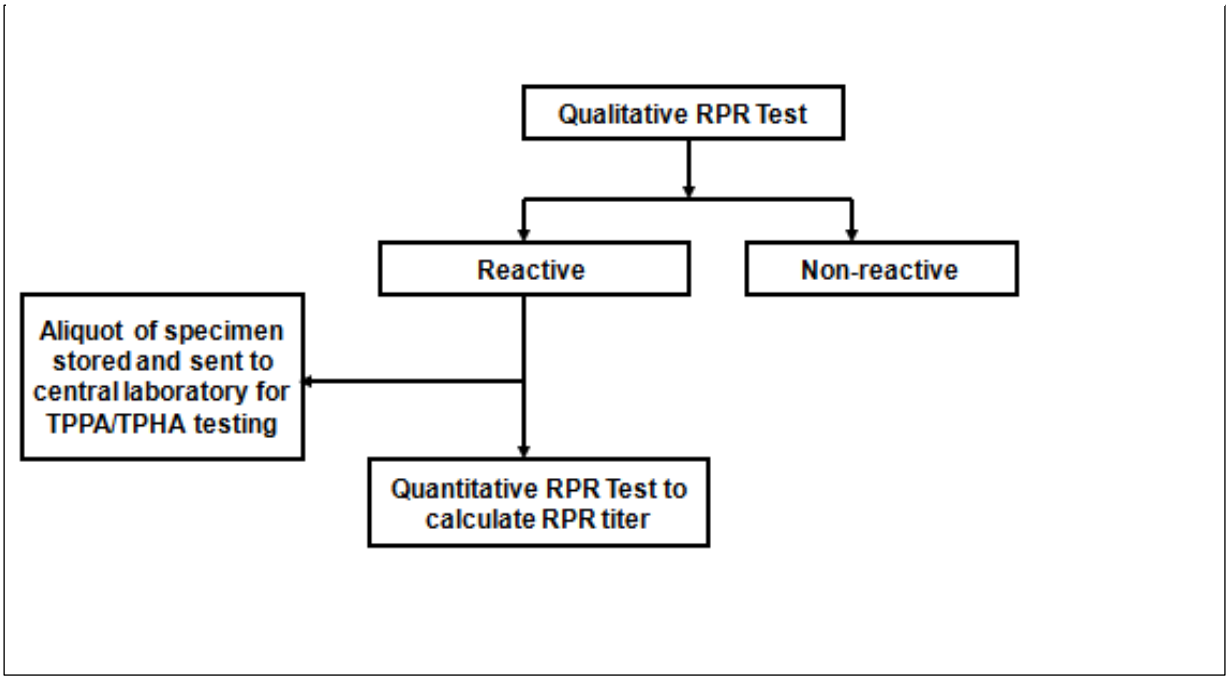
Figure 3 : HIV Testing Algorithm



Syphilis

A syphilis diagnosis was done following the National guideline on case management of sexually transmitted disease, NCASC, 2009). The serum was tested for nonspecific and specific treponemal agents. A non-treponemal test Rapid Plasma Reagin (RPR) [WAMPOLE Impact RPR card test, Alere] was used for both qualitative screening and semi-quantitative titration. All RPR reactive serum was confirmed using the specific Treponema Pallidum Particle Agglutination (TPPA) test (Fujirebio Inc. Serum samples that tested RPR positive with titer value above or equal to 1:8 were reported as active syphilis; titration less than 1:8 were reported as a case with a history of syphilis. The quality of regents and test cards of the RPR test kit was assessed daily on-site using a set of strong and moderate positive and negative controls. Internal controls (positive and negative) were used to ensure the kits are working well and all reactive/positive samples and 10% of non-reactive/negative samples were send to NPHL for retesting as a part of external quality assurance.

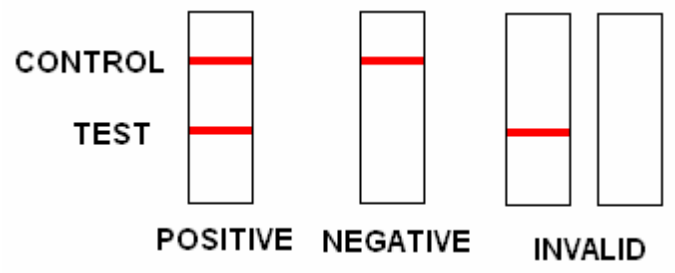
Figure 4: Syphilis Testing Algorithm



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 Serum/Plasma Dipstrip (Orgenics, Israel) was used. It is an in-vitro diagnostic test based on immunochromatographic principle and gives qualitative visual read results. The presence of HBsAg in serum or plasma is an indication of an active Hepatitis B infection. The test utilizes a combination of monoclonal and polyclonal antibodies to selectively detect elevated levels of HBsAg in serum or plasma. The HBsAg Test Device (Serum/Plasma) is a qualitative, lateral flow immunoassay for the detection of HBsAg in serum or plasma. The membrane is pre-coated with anti-HBsAg antibodies on the test line region of the test. During testing, the serum or

plasma specimen reacts with the particle coated with anti-HBsAg antibody. The mixture migrates upward on the membrane chromatographically by capillary action to react with anti-HBsAg antibodies on the membrane and generate a colored line. 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 has been added and membrane wicking has occurred.



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) will vary depending on the concentration of HBsAg present in the specimen. Therefore, any shade of red in the test region (T) should be considered positive.

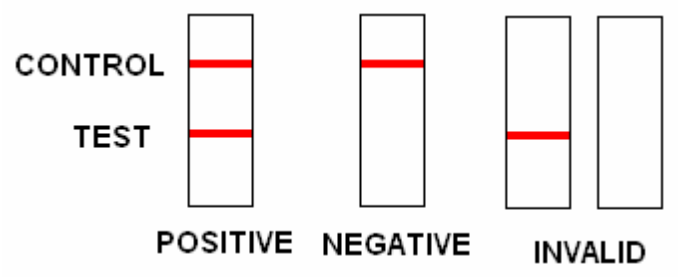
NEGATIVE: One red line appears in the control region (C). No apparent red or pink line appears in the test region (T).

INVALID: Control line fails to appear. Insufficient specimen volume or incorrect procedural techniques are the most likely reasons for control line failure. Review the procedure and repeat the test with a new test device. If the problem persists, discontinue using the test kit immediately and contact your local distributor.

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.

Hepatitis C

For the detection of HCV antibody, HCV Whole Blood/Serum/Plasma Dipstrip (Orgenics, Israel) was used. Serum sample was used to diagnosis the infection of Hepatitis C. With the application of sample to test kit followed with buffer, HCV antigen-Colloidal Gold conjugate embedded in the sample pad reacts with the HCV antibody present in serum or plasma, forming conjugate/HCV antibody complex. As the mixture is allowed to migrate along the test strip, the conjugate/HCV antibody complex is captured by an antibody-binding protein immobilized on a membrane forming a colored band in the test region. A negative sample does not produce a test line due to the absence of Colloidal Gold conjugate/HCV antibody complex. The antigens used in the test are recombinant proteins corresponding to highly immune-reactive regions of HCV. A colored control band in the control region appears at the end of the test procedure regardless of the test result. This control band is the result of CoIloidal Gold conjugate binding to an anti-HCV antibody immobilized on the membrane. The control line indicates that the Colloidal Gold conjugate is functional. The absence of the control band indicates that the test is invalid.



2.14 Quality Control of Laboratory Tests

Quality control was strictly maintained throughout the process of the collection of the specimens, as well as the handling and testing stages. All the tests were performed using internal controls. In-built controls in Rapid Diagnostic Test (RDT) and known external controls (positive and negative) for RPR and TPPA were used for ensuring the validity of the test. These controls were recorded with all the laboratory data. For external quality control assurance, all positive, and a 10 percent sample of the negative serum collected were submitted to the NPHL to test for HIV, syphilis, Hepatitis B and Hepatitis C. The same test kits and testing protocols were used in the NPHL for quality assurance.

2.15 External Quality Assessment

External quality assessment (EQA) is evaluation of the performance of a testing laboratory by an external agency. An External Quality Assurance Scheme (EQAS) is very essential in such studies to determine the quality of testing. All HIV, Hepatitis B, Hepatitis C positive and RPR reactive and 10 percent of HIV, Hepatitis B, Hepatitis C negative and RPR non-reactive were retested at NPHL in this survey as an EQA. Aliquots of selected serum specimens were prepared in the field and sent to NPHL maintaining cold chain system within a week. Same was followed for Hepatitis B and C. The test kits as those used in the field were also provided to the NPHL.

2.16 Field Work Supervision and Monitoring

The progress of the fieldwork was closely monitored throughout the survey period. The team leader visited survey sites on an ongoing basis for monitoring, supervision and assistance purposes. A tracking sheet was developed to track the number of interviews per day in each site.

Similarly, quality of the data collected was maintained throughout the study period. The team leader and research officer were involved in the quality control from the initial stage of the field work. They reviewed forms to ensure that, 1) the correct clusters have been surveyed; 2) correct number of PWIDs have been interviewed ; 3) correct administration of the questionnaires and recording have been carried out. They also randomly checked completed forms and provide feedback, and made random re-visits to ensure data quality. External monitors from NCASC, Save the Children, FHI 360 consultant also monitored the fieldwork.

2.17 Data management

Size estimation of the study population and their distribution in the study areas were collected. Lists and maps were generated from the operational mapping exercise. The completed questionnaires were re-checked regularly by field researcher and field supervisor to ensure that the questionnaires were properly filled.

A software package (Epi-data) for data entry was developed. The data were entered using double entry approach for better accuracy and the dataset were then transferred into Statistical Package for the Social Sciences (SPSS). A number of quality check mechanisms such as range checks, logical checks and skip instructions were developed which helped to detect the errors during the data entry stage. If any inconsistencies in the two data files were found, it was verified with the data in the actual questionnaires and corrected and saved as a third data file.

To ensure confidentiality, each PWIDs was given an identity number. The numbers were coded in each questionnaire. This numbers, however, were not corresponding to the study participants name, contact and address. Data coding and data entry were done by the trained staff of NIDR. All entered data were kept secure in password protected computers at the research organization.

2.18 Data analysis

Data were analyzed using descriptive statistics and bivariate analysis. Data were entered into the EPI-data and analyzed using SPSS and R Program for statistical analysis. Descriptive analysis of background characteristics, drug injecting behaviours, sexual behaviour and sexual intercourse, HIV risk behaviours and knowledge of HIV and STI, use and availability of condom and Knowledge on HIV and AIDS awareness program were explored. Bi-variate analysis of the key indicators with HIV related risk behaviors were performed. Chi-square test values were also calculated to measure the statistical association between cross-tabulated categorical variables. Trend of key indicators such as HIV prevalence, drug injecting behaviours, sexual behaviour, condom use and comprehensive knowledge on HIV and AIDS were also performed using Chi-square test for trend. A p-value less than 0.05 was considered as statistical significant. R program was used for creating graphs.

2.19 Ethical Considerations

The study was conducted in compliance with all human rights and ethical standards required by health researchers conducting studies in human subjects on sensitive issues such as HIV and AIDS. The study protocol was approved by Nepal Health Research Council (NHRC).

Informed consent was obtained from PWIDs prior to the interview. There may be a risk of identifying the PWIDs through their signatures if written consent was used. The informed consent was taken in the presence of a witness (community motivators or another member of the study team) who then signed the consent form. Study procedure was designed to protect participants' privacy allowing for anonymous and voluntary participation. No names and personal identifiers were used in the data collection. Prior to conducting the

interview, the purpose and benefit of this study was explained to each participant. They were provided with information about the study risks, confidentiality and compensation. The participants were given the opportunity to ask questions about the study and to decide whether they would like to participate in the study. During the consent process, it was made clear to the participants that they were free to refuse to participate and if they decided not to participate, they could stop at any time. Although the risk of participating in this study was minimal, there were some questions that could make the study subjects uncomfortable. They were clearly informed that in such a situation they were free not to answer such questions and could also stop to participate in the study at any time. Best efforts were made to minimize risks associated with study participants. During the analysis and presentation of the study findings, no names or addresses of the PWIDs was mentioned.

2.20 Post-Test Counseling and Test Result Distribution

All the PWIDs who went to receive their test results with their ID card were provided the HIV and syphilis test results along with post-test counselling by a trained counselor from Richmond Fellowship, Kirat Yakthum Chumlung (KYC) and Knight Chess Club (KCC). Post-test counselling and individual report dissemination was given to the PWIDs on the same day of interview. All PWIDs tested obtained the test results. The counselling session was provided by trained counsellors and focused on high-risk behavior and other aspects of STIs and HIV. Some participants were also referred to other health facilities for further services.

2.21 Limitations of the survey

- This survey was conducted in three districts including Jhapa, Sunsari and Morang. The analysis and results presented in this report are, therefore, confined to the above three districts, and may not be generalized to the other districts or any other parts of the country.
- So far IBBS has adopted cross-sectional sampling designs, which means it gives a snap shot scenario of the study population. Thus, the findings provide evidence of statistical association between those items and the risk behavior; it cannot show a cause-effect relationship.
- There may be possibility of response bias. PWIDs supposed to provide honest response to the questions asked; however, in some circumstances this assumption may be bleached.
- This survey could not recruite hidden PWIDs since all PWIDs are enrolled in the study with the help of community motivators.

CHAPTER III: RESULTS

The results comprise of biological and behavioural components. The biological components include prevalence of HIV, Syphilis, Hepatitis B and Hepatitis C. The behavioural components consists of background characteristics, drug injecting behaviours, sexual behaviors and condom use, knowledge of HIV, exposure to HIV program and sigma and discrimination among PWIDs.

3.1 Prevalence of HIV, STI, Hepatitis B and Hepatitis C

About 8.3 percent of the PWIDs tested HIV-positive (95% CI, 5.7% to 11.8%). History of syphilis was found among eight (2.2%) of the PWIDs, while four (1.1%) were currently infected with active syphilis. Less than one (0.8%) tested Hepatitis B positive. However, 47.5 percent (95% CI, 42% to 52%) of PWIDs tested positive for Hepatitis C.

Table 3.1 HIV, STI, Hepatitis B and Hepatitis C Prevalence

Prevalence	Number (N=360)	Percent	95% CI
HIV	30	8.3	5.7 -11.8
Syphilis History	8	2.2	1.0-4.0
Active Syphilis	4	1.1	0.35-3.01
Hepatitis B	3	0.8	0.2 – 2.0
Hepatitis C	171	47.5	42.0-52.0

3.2 Background Characteristics

Detailed information on background characteristics of the PWIDs (N=360) included in the survey is presented in Table 3.2. As it shows, nearly half (47%) were from Morang district, while 30 percent of PWIDs were from Sunsari district and remaining (23%) were from Jhapa district. A large majority (76%) of the PWIDs had been born and always resided in the districts under study, while the rest had migrated from other districts. The median age of the PWIDs was 25 years ranging from 16 to 50 years. Majority of the PWIDs were in the age group of 20-29 years (60%) followed by 30 years and above (29%). About 47 percent of PWIDs were from disadvantaged janajati ethnic groups followed by upper caste groups (26%). Large numbers of PWIDs were literate (97%). About 42 percent of them had secondary education and 39 percent of them had higher secondary and above. Half of PWIDs (51%) were unmarried and 43 percent were married, with small percent of divorced (6%) and widower (0.6%). Among married PWIDs, nearly half (50%) were married between 20-24 years and 23 percent of them were married before reaching 20 years. The median age at marriage among PWIDs was 22 years. Majority of PWIDs (76%) were living in home followed by rented apartment/ home (19%). Similarly more than half of PWIDs (55%) were living with family and 35 percent were living with wife.

Table 3.2 Background characteristics of PWIDs

Background Characteristics	Number (N=360)	Percent
District		
Jhapa	84	23.0
Sunsari	108	30.0
Morang	168	47.0

Background Characteristics	Number (N=360)	Percent
Duration of stay		
Since birth	273	75.8
≤2 years	30	8.4
More than 2 years	57	15.8
Age		
≤19 years	38	10.6
20-29 years	216	60.0
30 years and above	106	29.4
Mean ± SD	26.7±6.5	
Median Age (Range)	25(16-50)	
Ethnicity		
Dalits	21	5.8
Disadvantaged Janajatis	168	46.7
Disadvantaged non-dalit	30	8.3
Relatively advantaged Janajatis	40	11.1
Upper caste groups	95	26.4
Religious minority	6	1.7
Education		
Illiterate	12	3.3
Literate, no schooling	16	4.5
Primary	42	11.7
Secondary	151	41.9
Higher Secondary and above	139	38.6
Marital status		
Unmarried	183	50.8
Married	155	43.0
Divorced/Permanently separated	20	5.6
Widower	2	0.6
Age at first marriage (n=177)		
≤19 years	40	22.6
20-24 years	88	49.7
25 and years above	49	27.7
Mean ± SD	22.55 ± 4.2	
Median Age (Range)	22(14-34)	
Current living situation		
Homeless on the street	4	1.3
Living in own home	276	76.4
Rented apartment/home	68	18.9
Friends/Relatives	9	2.5
Others(alone, rehabilitation, hotel)	3	0.,9
Current living status		
Living with wife	127	35.2
Living with family	198	55
Living alone	15	4.2
Living with relatives/friends	17	4.7
Rehabilitation center	3	0.9

3.3 Alcohol Consumption

About 67 percent of PWIDs had consumed alcohol at least once in the past month. Almost 13 percent of them consumed alcohol every day.

Table 3.3 Alcohol consumption among PWIDs

Alcohol Consumption	Number (N=360)	Percent
Everday	47	13.1
More than once a week	111	30.8
Less than once a week	75	20.8
Once a month	7	2.0
Never drink	120	33.3

3.4 History of Imprisonment

Majority of PWIDs (68%) reported having ever been imprisoned or detained for any reasons by police and among them 49 percent been imprisoned or detained in the past year. Of the 120 PWIDs who were imprisoned or detained in the past year, 43 percent imprisoned because of drugs related reasons. About, 15 percent of the PWIDs had injected drugs while they were in prison. Majority of PWIDs (88%) cross the border to buy and use the illicit drugs, 26% of them cross everyday. Among the PWIDs crossing boarder everyday, about 69 percent were from Morang district (data not shown).

Table 3.4 History of Imprisonment among PWIDs

Imprisonment Characteristics	Number (N=360)	Percent
Ever been imprisoned or detained for any reason		
Yes	245	68.1
No	115	31.9
Ever been imprisoned or detained for any reason in past year (n=245)		
Yes	120	49.0
No	125	51.0
Ever been imprisoned for drug-related reason in past year (n=120)		
Yes	52	43.4
No	68	56.6
Ever injected drugs while in prison in past year (n=52)		
Yes	8	15.4
No	44	84.6
Cross the border (Indo-Nepal) to buy and use the illicit drugs in the past 12 months		
Always	95	26.4
Most of times	121	33.6
Sometimes	100	27.8
Never	44	12.2

3.5 Drugs injecting practices

This section deals with the drug-using behavior of the PWIDs; oral and injecting drug use and needle sharing behavior among PWID and any kind of treatment sought by the PWIDs in order to quit drugs. Most of the PWIDs (76%) had been using drugs for a long duration, with an average of 105 months. Majority of PWIDs (69%) had been injecting drugs for more than five years. The median age of the PWIDs the first time they used drugs intravenously was 19 years. More than half PWIDs (54%) were below 20 years when they

injected for the first time. The mean duration of injecting drugs was 75 months. Nearly half of PWIDs (49%) injected drugs more than five years. Most of PWIDs (90%) injected drugs in the last month and among them 13 percent used non-sterile syringe/needle at any time and 11 percent used non-sterile injecting equipment at any time in the last month.

Table 3.5 Drug Injecting Practice among PWIDs

Drug Injecting Practice	Number (N=360)	Percent
Duration of using drugs		
Less than 24 months	34	9.4
25-59 months	77	21.4
60 months and more	249	69.2
Mean ± S.D	105 ± 64	
Median (Range)	96(6-384)	
Age at first drug injection		
Less than 20 years	196	54.4
20-24 years	101	28.1
25-29 years	40	11.1
30 years and above	23	6.4
Mean ± S.D	20.33 ± 5.064	
Median (Range)	19(11-41)	
Duration of Injecting drugs		
Less than 24 months	86	23.9
25-59 months	97	26.9
60 months and more	177	49.2
Mean ± S.D		75±56
Median (Range)	60(3-264)	
Injected drugs in the last month		
Yes	325	90.3
No	35	9.7
Used non-sterile syringe/needle at any time in the last month (n=325)		
Yes	41	12.6
No	284	87.4
Used non-sterile injecting equipment at any time in the last month (n=325)		
Yes	36	11.1
No	289	88.9

3.6 Types of Drugs Used Orally or Injected in Past Week

PWIDs preferred and use various types of drugs. The most used drugs orally were Marijuana (64%), Nitrosun (26%), Phensydyl (17%), Nitrovate (7%) and Brownsugar (7%). The most injected drugs were diazepam (73%), Phenergan (47%), and Tidigesic (24%). None of the PWIDs used Lysergic acid diethylamide (LSD).

Table 3.6 Types of Drugs Used Orally or Injected in Past Week

Types of drugs	Used Orally		Injected	
	Number (N=360)	Percent	Number (N=360)	Percent
Tidigesic			86	23.9
Brown sugar	24	6.7	10	2.8
Nitrosun	93	25.8	6	1.7
Marijuana (Ganja)	229	63.6		

Types of drugs	Used Orally		Injected	
	Number (N=360)	Percent	Number (N=360)	Percent
Chares	16	4.4		
White sugar	2	0.6		
Phensydyl	61	16.9		
Clampose	3	0.8	1	3.1
Diazepam	1	0.3	262	72.8
Codeine	13	3.6		
Phenergan	4	1.1	168	46.7
Cocaine	4	1.1		
Proxygin	17	4.7	6	1.7
Effidin	1	0,3	2	0.6
Velium	3	0.8	2	0.6
Lysergic acid diethylamide (LSD)	0	0		
Nitrovate	25	6.9	1	0.3

3.7 Use of drugs yesterday and last day

A large majority of PWIDs (96%) used combination of different drugs. More than half of PWIDs (58%) injected drug the day before interview, with 55 percent injecting drugs one to three times. Regarding the reasons for not injecting drugs, 50 percent of PWIDs stated minimize the use followed by lack of money (23%) and busy in household work (11%). Majority of PWIDs (63%) injected less than two weeks. As for the frequency of injections on the last day, more than a quarter (27%) of PWIDs injected one time whereas 14 percent had three or more shots.

Table 3.7 Use of drugs day before interview and last day

Use of drugs	Number (N=360)	Percent
Use of drugs in combination form		
Yes	346	96.1
No	14	3.9
Number of drug injected yesterday		
1-3 times	197	54.7
More than 3 times	13	3.6
Not injected	150	41.7
Reason for not injected (n=150)		
Lack of money	34	22.7
Minimize the use	75	50.0
Busy in Household work	17	11.3
Used Marijuana	7	4.7
Did not get drugs	4	2.7
Sick/not in mood	5	3.4
Injected prior day	3	2.0
Rehabilitation centre	2	1.2
Others (used Brown Sugar, Nitrosun)	3	2.0
Number of day injected before (n=150)		
Less than one week	71	48.7
One to two week	21	14.0
More than two week to one month	32	21.3
More than one month	26	16.0
Frequency of drug injections on the last day		
Not injected	150	41.7
1 time	98	27.2

Use of drugs	Number (N=360)	Percent
2 times	63	17.5
3 times and more	49	13.6

3.8 Syringe Sharing Habits

Syringe use and needle sharing habits were assessed in terms of their last three injections. PWIDs were specifically asked about the sources of the needle/syringe used in their three most recent injections. Answers provided by the PWIDs was categorized as low risk (used a new needle/syringe given by NGO staff, used a purchased new needle or syringe and used a new needle/syringe given by friend) or high risk (use a needle/syringe given by friend/relative, used a needle/syringe picked it up from a public place, used own previously used needle/syringe, Don't know/No response/Others) injecting behavior in the following table (Table 3.8). This method of analysis was used in previous rounds of IBBS among PWIDs.

Most of the PWIDs possess low risk behaviors in their last three injections i.e. 96 percent, 93 percent and 94 percent in the first, second and third most recent injections respectively. Majority of PWIDs used a purchased new needle or syringe in their last three injections. Using new needles provided by an NGO staff or friends for each of their last three injections was eight percent, nine percent and seven percent respectively. However, five percent of PWIDs had high-risk behaviors like the use of pre-used needles and syringe, use a needle/syringe given by friend/relative and used a needle/syringe picked it up from a public place in their last three injections. About nine out of 10 PWIDs (92%) had injected their last three injections alone. Around seven percent of PWIDs injected drugs in groups in their last three injections.

Table 3.8: Syringe Use and Sharing Behavior during the Last Three Injections

Needle/Syringe Use During Recent Drug Injections	Drug injecting acts					
	Most recent		Second most recent		Third most recent	
	Number (N=360)	%	Number (N=360)	%	Number (N=360)	%
Needle/syringe used						
Low risk behavior						
Used a new needle/syringe given by NGO staff	19	5.3	19	5.3	18	5.0
Used a purchased new needle or syringe	317	88.1	303	84.2	315	87.5
Used a new needle/syringe given by friend	9	2.5	13	3.5	6	1.7
Low risk total	345	95.9	335	93	339	94.2
High risk behavior						
Use a needle/syringe given by friend/relative	2	0.6	2	0.6	3	0.8
Used a needle/syringe picked it up from a public place	1	0.3	4	1.1	2	0.6
Used own previously used needle/syringe	9	2.5	6	1.7	13	3.6
Don't know/No response/Others	3	0.8	13	3.6	3	0.8
High Risk total	15	4.1	25	7	21	5.8
Persons in the group using the same						

Needle/Syringe Use During Recent Drug Injections	Drug injecting acts					
	Most recent		Second most recent		Third most recent	
	Number (N=360)	%	Number (N=360)	%	Number (N=360)	%
needle/syringe						
1-2 person	22	6.2	21	5.8	17	5.0
3 or more persons	5	1.3	7	2	8	2.3
Alone	333	92.5	331	91.9	333	92.1
Others/Don't know			1	0.3	2	0.6

3.9 Past Week's Syringe Use and Sharing Behavior

PWIDs were further explored on needle/syringe behavior in the last week. About 21 percent of PWIDs didn't inject drugs in last week. Majority of PWIDs (70%) had never used a needle/syringe that had been used by someone else. Among PWIDs injected last week, most PWIDs never used needles/syringes left in public places (97%) and never injected with a pre-filled needle/syringe (91%), never shared needle or syringe to someone else after using it (88%), never injected with a syringe after drugs were transferred into it from another's syringe (91%), never shared a bottle, spoon, cooker, vial/container, cotton/filter and rinse water (89%) and never drew drug solution from a common container used by others (87%).

However, some PWIDs had followed some risky drug sharing practices in the past week; nine percent used a needle/syringe that had been used by someone else, three percent used needles/syringes left in public places and eight percent injected with a pre-filled needle/syringe. Similarly, nine percent injected with a syringe after drugs were transferred into it from another's syringe, 11 percent shared a bottle, spoon, cooker, vial/container, cotton/filter and rinse water and 14 percent drew drug solution from a common container used by others. Most of PWIDs (89%) injected alone while nine percent of PWIDs injected in groups. Majority of PWIDs never used previously used needle/syringe in the past week (69%). However, there are two percent of PWIDs who never cleaned previously used needle/syringe in the past week. Among the PWIDs who clean previously used needle/syringe, only two percent had cleaned the needle/syringe with bleach, 40 percent had cleaned them with saliva, water, and urine.

Table 3.9: Past Week's Syringe Use and Sharing Behavior

Needle/Syringe Use Throughout the Past Week	Number (N=360)	Percent
Used a needle/syringe that had been used by someone else		
Every times	1	0.3
Almost every-times	3	0.8
Sometimes	27	7.5
Never used	253	70.3
Not injected in the last week	76	21.1
Used a needle/syringe that had been kept in public place (n=284)		
Sometimes	8	2.8
Never used	275	96.8
No Response	1	0.4
Number of needle/syringe shared partners (n=284)		

Needle/Syringe Use Throughout the Past Week	Number (N=360)	Percent
None	252	88.7
Two partners	14	4.9
Three or more partners	12	4.2
No response	6	2.2
Share needle or syringe to someone else, after you had already used it (n=284)		
Almost every-times	6	2.1
Sometimes	27	9.5
Never shared	250	88
No response	1	0.4
Injected with a pre-filled syringe (n=284)		
Yes	23	8.1
No	261	90.9
Injected with a syringe after drugs were transferred into it from another's syringe (n=284)		
Almost every-times	1	0.4
Sometimes	25	8.8
Never used	258	90.8
Shared a bottle, spoon, cooker, vial/container, cotton/filter and rinse water (n=284)		
Almost every-times	1	0.4
Sometimes	30	10.6
Never used	253	89.0
Drew drug solution from a common container used by others (n=284)		
Every times	2	0.7
Almost every-times	2	0.7
Sometimes	34	12.0
Never used	246	86.6
Cleaned previously used needle/syringe in the past week (n=284)		
Every time	9	3.2
Almost every-times	20	7.4
Sometimes	51	18.0
Never	6	2.1
Never reused	197	69.3
Ways of cleaning needle/syringe (n=80)		
With water	6	7.5
With urine	16	20
With saliva	11	13.7
Boil the syringe in water	12	15.0
With bleach	2	2.5
Burning the needle with matchstick	2	2.5
Others (clean with Avil, alcohol pad)	28	35
Don't know	1	1.3
No response	2	2.5

3.10 Switching Practice from Sharing to Non-Sharing Behavior in the Past Year

Information on switching from sharing to non-sharing among PWIDs in past year was collected. It was found that 82 percent of the PWIDs ever switched from sharing to non sharing needle/syringe habits. However, this switching was reported by PWIDs and may or may not reflect to actual switch.

Table 3.10: Switching Practice from Sharing to Non-Sharing Behavior in the Past Year

Injection Sharing to Non-sharing Behavior	Number (N=360)	Percent
Switching from sharing to non sharing behavior In past year		
Yes	297	82.5
No	63	17.5

3.11 Availability of New Syringes

Almost all PWIDs knew that they could obtain new needles/syringes from various sources. Among them, most of PWIDs (91%) stated that they could get a new needle/syringe from a drugstore. More than half of PWIDs (53%) mentioned that could obtain new syringes from needle exchange program or from outreach worker/peer educators in the past year. Most of the PWIDs (89%) injected drug in another city/country and among them, six percent used syringe/needle by someone and seven percent shared the syringe/needle to someone else when injected drugs in another city/country.

Table 3.11: Availability of New Syringes

Availability of New Syringes	Number (N=360)	Percent
Could obtain new syringe		
Yes	359	99.7
No	1	0.3
Could obtain syringe from (n=359)*		
Drugstore	327	91.1
Other shop	3	0.8
Health worker	5	1.4
Hospital	90	25.1
Drug wholesaler/drug agency	30	8.4
Friends	25	7.0
Other drugs users	2	0.6
Drugs seller	132	36.8
Needle exchange program	192	53.3
Given new needles/syringes by outreach worker/peer educators or obtained from needle exchange program in the past year		
Yes	192	53.3
No	166	46.1
Don't remember/no response	2	0.6
Ever inject drug in another city/country		
Yes	321	89.2
No	39	10.8
Frequency of previously been used syringe/needle by someone else in another city/country (n=321)		
Almost every-times	3	0.9
Sometimes	18	5.6
Never	300	93.5
Share the syringe/needle to someone else when injected drugs in another city/district/country (n=321)		
Every time	1	0.3
Sometimes	21	6.5
Never	298	92.9
No response	1	0.3

Availability of New Syringes	Number (N=360)	Percent
* Percent adds up to more than 100 due to multiple responses		

3.12 Treatment Received

It was found that 46 percent of PWIDs had not received any kind of treatment so far. Regarding treatment received, nearly half of PWIDs (49%) received treatment within one year. About 31 percent of PWIDs were helped for *cold turkey* without medicine. Around nine percent of PWIDs had been treated under residential rehabilitation programs.

Table 3.12: Treatment Received by PWIDs

Treatment Received	Number (N=360)	Percent
Treatment status		
Currently under treatment	21	5.8
Was in treatment but not now	171	47.5
Have never received treatment	167	46.4
No response	1	0.3
Duration of treatment(n=192)		
Within 12 months	95	49.5
13 months -24 months	38	19.8
25 months-36 months	21	10.9
36 months-48 months	19	9.9
Above 48 months	17	8.8
No response/Don't know	2	1.1
Types of treatment received (n=192)		
Outpatient counseling	25	13.0
Self-help groups	5	2.6
Detoxification w/methadone	23	12.0
Maintenance w/methadone	28	14.6
Detoxification w/other drugs	20	10.4
Detoxification with no drug	11	5.7
Residential rehabilitation	18	9.4
Helped for *cold turkey* without medicine	60	31.3
Forced for *cold turkey* by others without treatment	2	1.0

3.13 Sexual Behavior

These findings describe sexual behavior of the PWIDs, including their sexual relationship, age at first sexual intercourse and sexual practices with different sexual partners. Most of the PWIDs (98%) have had at least one sexual contact with a partner. Nearly 44 percent of the PWIDs who had at least one sexual intercourse had their first sexual contact at the age of 16 years or earlier. The median age of the PWIDs at first sexual intercourse was 17 ranging from 9 to 32 years. Majority of PWIDs had sexual intercourse in last year (74%). About one third of PWIDs had three and more female sexual partners. Majority of PWIDs (60%) had regular female sex partners. One fourth of PWIDs had regular female sex workers (FSWs). About 30 percent of of PWIDs had non regular female sex partners.

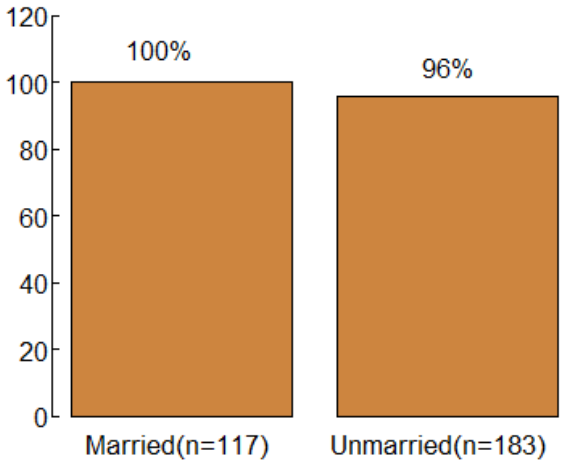
Table 3.13 Sexual Behaviours of PWIDs

Sexual Behaviour	Number (N=360)	Percent
Ever had sexual contact		
Yes	351	97.5
No	9	2.5
Age at first sexual contact (n=351)		
≤16 years	155	44.2
17-19 years	139	39.6
20-25 years	50	14.2
>25 years	7	2.0
Mean ± S.D	17.45±5.2	
Median (Range)	17(9*-32)	
Sexual intercourse in the last year (n=351)		
Yes	259	73.8
No	92	26.2
Total number of sexual contact with female sexual partners in past year (n=259)		
1	132	51.0
2	44	17.0
3	33	12.7
4 and more	50	19.3
Mean ± S.D	2.42±2.4	
Median (Range)	1(1-21)	
Number of sexual contact with female regular partners (wife or live-in sexual partners) (n=210)		
1	175	83.3
2	20	9.5
3	10	4.8
4 and more	5	2.4
Mean ± S.D	1.29±0.8	
Median (Range)	1(1-21)	
Number of sexual contact with FSWs (n=64)		
1	29	45.3
2	19	29.7
3	2	3.1
4 and more	14	21.9
Mean ± S.D	2.5±2.2	
Median (Range)	2(1-16)	
Number of sexual contact with non regular female sex partners (n=106)		
1	55	51.9
2	30	28.3
3	9	8,5
4 and more	12	11.3
Mean ± S.D	1.91±1.3	
Median (Range)	1(1-8)	
Number of sexual contact with male sexual partners (n=2)		
1	1	50.0
3	1	50.0
Mean ± S.D	2±1.4	
Median (Range)	2(1-3)	

Note: *6 PWIDs reported age at first sexual contact as less than 13 years of age.

Figure 5 distributes the PWIDs exposure to sexual contact by their marital status. Overall, 51 percent of PWIDs who participated in the survey were unmarried. As evident from the figure, pre-marital sexual relationship is common among PWIDs since over most of unmarried PWIDs (96%) had at least one sexual contact (Figure 5).

Figure 5:Ever had sexual contact by martial status



The sex partners of the PWIDs were categorized under regular female sex partners, FSWs and non-regular female sex partners. A 'regular female sex partner' is defined as spouse or any sexual partner living together with the PWIDs. FSWs were defined as those who sell sex in exchange for cash, kind, or drugs. 'Non-regular female sex partners' were defined as those with whom the PWIDs were not married or living together. They may include girl friends or other female friends with whom they have sexual relationship.

3.14 Sexual Contact with Regular female sexual partners

Majority (60%) of PWIDs reported of sexual contact with their regular female sex partners (wives/live in partner) in the past year. Over half of the PWIDs (53%) had more than four sexual contacts with their wives/live in partner in the past month. However, the findings showed that condom use with wives/live in partner is low. About one in three PWIDs used condom with them. On the reasons for not using condom always, majority (60%) of PWIDs reported it was not necessary. Moreover, the survey result showed that consistent use of condoms by the PWIDs with their wives/live in partner is low. Only 13 percent of the PWIDs had consistently used condoms every time they had sex with them in the past year. Five percent of PWIDs reported that their partners had also injecting behaviours. Similarly six percent of PWIDs had anal sex with regular female sex partners in past year and among them, 33 percent used condom.

Table 3.14 Sexual Contact with Regular female sex partner

Sexual Contact	Number (N=351)	Percent
Had sex with regular female sex partners in past year		
Yes	210	59.8
No	141	40.2
Number of sexual contacts with regular female sex partners in past month (n=210)		
1 to 3	63	30.0
4 and more	112	53.3
No sexual contacts	35	16.7
Use of condom during last sex with regular female sex partners (n=210)		
Yes	65	31.0
No	145	69.0

Sexual Contact	Number (N=351)	Percent
Reason for not using condom (n=145)*		
Not available	11	7.7
Partner objected	9	6.3
Don't like them	46	32.2
Used other contraceptive	10	7.0
Didn't think it was necessary	86	60.1
Didn't think of it	4	2.8
Other	1	0.7
Frequency of use of condom with regular female sex partner in the past year (n=210)		
Every time	28	13.3
Most of the time	32	15.3
Sometimes	68	32.4
Never	82	39.0
Injecting behaviour of regular female sex partners (n=210)		
Yes	10	4.8
No	110	95.2
Ever had anal sex with regular female sex partners (n=210)		
Yes	12	5.7
No	198	94.3
Use of condom during anal sex with regular female sex partners (n=12)		
Yes	4	33.3
No	8	66.7
Frequency of use of condom during anal sex with regular female sex partner in the past year (n=12)		
Every time	2	16.7
Most of the time	1	8.3
Sometimes	3	25.0
Never	6	50.0

* Percent adds up to more than 100 due to multiple responses

3.15 Sexual Contact with FSWs

Around 18 percent of the PWIDs reported ever having sex with FSWs. Majority (70%) of PWIDs had sexual intercourse with FSWs in hotel/lodge followed by FSWs home (12%). About three percent of PWIDs had sex with FSWs in injecting site. Forty four of these PWIDs (69%) had visited FSWs in the last month preceding the survey and among them, 73% of PWIDs used condom. Reasons for not using condom were don't like (59%) and not available (29%). Among PWIDs who had been to a sex worker in past year, 53% had consistently used condom during sexual intercourse with FSWs in the past year while 14 percent of them had never used condom. Nearly 16 percent of PWIDs (10) reported that FSWs had also injecting behaviours. About eight percent of PWIDs had anal sex with FSWs in past year and among them, 80 percent used condom.

Table 3.15: Sexual Contact with FSWs

Sexual Contact	Number (N=351)	Percent
Sex with FSWs in the past 12 months		
Yes	64	18.2

Sexual Contact	Number (N=351)	Percent
No	287	81.8
Number of FSWs sold sex in exchange for money or drugs (n=64)		
1 -3	13	20.3
More than 3	1	1.6
Didn't sell sex	50	78.1
Number of FSWs in last month (n=64)		
1 -3	38	59.4
More than 3	6	10.3
Didn't have sex	20	31.3
Place for sexual intercourse with FSWs (n=64)		
Hotel/lodge	45	70.3
Own house	4	6.3
Sex worker's house	8	12.5
Injecting site	2	3.1
Park/Garden	5	7.8
Number of sexual contact with FSWs in past month (n=64)		
1 -3	34	53.1
More than 3	10	15.6
Didn't had sex	20	31.3
Use of condom during last sex with FSW(n=64)		
Yes	47	73.4
No	17	26.6
Reason for not using condom (n=17)*		
Not available	5	29.4
Don't like them	10	58.8
Didn't think it was necessary	2	11.8
Didn't think of it	1	5.9
Frequency of use of condom with FSWs in the past year (n=64)		
Every time	34	53.1
Most of the time	7	10.9
Sometimes	14	21.9
Never used	9	14.1
Injecting behaviour of FSWs (n=64)		
Yes	10	15.6
No	31	48.4
Don't know	23	36
Ever had anal sex with FSWs (n=64)		
Yes	5	7.8
No	59	92.2
Use of condom during anal sex with FSWs (n=5)		
Yes	4	80.0
No	1	20.0
Frequency of use of condom during anal sex with FSWs in the past year (n=5)		
Every time	3	60.0
Most of the time	1	20.0
Never	1	20.0

* Percent adds up to more than 100 due to multiple responses

3.16 Sexual Contact with Non Regular female sexual partners and Condom Use

About 30 percent of the sexually active PWIDs had other female friend with whom they had sexual relationship. Among them, 60 percent of PWIDs reported having had sexual contact with such female partners in the past month. Fifty eight percent of the PWIDs had used condom during sexual intercourse with such female friends in last month. Reasons for not using condom were explored. Major reasons were don't think it is necessary (30%) and don't like (27%) and not available (18%). About 34 of 106 PWIDs (32%) who had sex with other female friends in the past year used condom consistently during all such sexual encounters. About nine percent of PWIDs (10) reported that their female friends had also injecting behaviors. About seven percent of PWIDs shad anal sex with their female friends in past year and among them, 50 percent used condom.

Table 3.16 Sexual Contact with Non Regular female sexual partners

Sexual Contact	Number (N=351)	Percent
Had sex with non-regular female sex partners in past year		
Yes	106	30.2
No	245	69.8
Number of sexual contacts with regular female sex partners in the past month (n=106)		
1 to 3	47	44.4
4 and more	17	16.0
No sexual contacts	42	39.6
Use of condom during last sex with non-regular female sex partners (n=106)		
Yes	62	58.5
No	44	41.5
Reason for not using condom (n=44)*		
Not available	8	18.2
Partner objected	3	6.8
Don't like them	12	27.3
Used other contraceptive	1	2.3
Didn't think it was necessary	15	30.1
Didn't think of it	8	16.2
Frequency of use of condom with non-regular female sex partner in the past year (n=106)		
Every time	34	32.1
Most of the time	18	17.0
Sometimes	39	36.8
Never	15	14.1
Injecting behaviour of non-regular female sex partners (n=106)		
Yes	10	9.4
No	84	79.3
Don't know	12	11.3
Ever had anal sex with non-regular female sex partners (n=106)		
Yes	8	7.5
No	98	92.5
Use of condom during anal sex with non-regular female sex partners (n=106)		
Yes	4	50
No	4	50

Sexual Contact	Number (N=351)	Percent
Frequency of condom use in anal sex with non-regular female sex partner in past year (n=8)		
Every time	2	25
Sometimes	5	62.5
Never	1	12.5
* Percent adds up to more than 100 due to multiple responses		

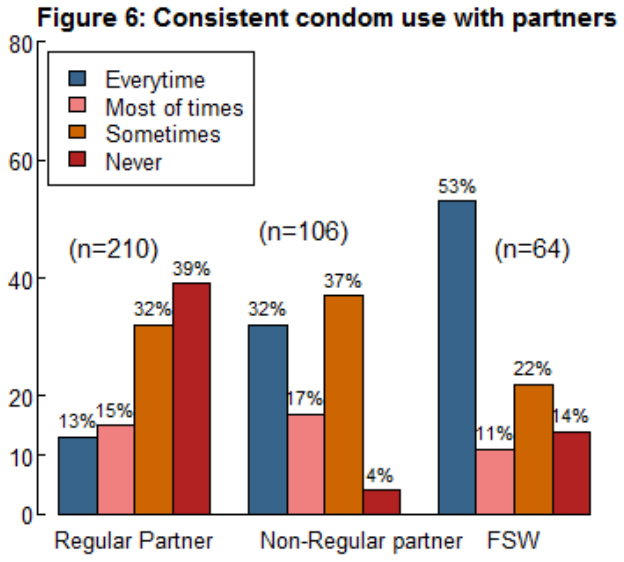
3.17 Sexual Contact with Male Partner and Condom Use

Two of the 360 PWIDs (1%) who participated in the survey ever had sex with a male partner past year. Among them, condom used was 100%.

Table 3.17 Sexual Contact with Male Partner and Condom Use

Sexual Contact	Number (N=351)	Percent
Had sex with a male partner in the past year		
Yes	2	0.6
No	349	99.4
Number of sexual contacts with male partners (n=2)		
1	1	50.0
3	1	50.0
Use of condom during sex with male partner (n=2)		
Yes	2	100.0

Figure 6 examines the use of condom by the PWIDs in the past year with different partners in Nepal. As evident from the Figure 6, PWIDs are careful regarding the use of condom with FSWs. The consistent condom use during sexual intercourse in the past year was relatively high with FSWs (53%) followed by with non-regular female sex partner (32%). At the same time, the consistent condom use was least reported with wives/live in partners (13%). Likewise, those PWIDs reporting never use of condom during sexual intercourse with non regular female sex partners was comparatively much lower (4%) than with FSWs (14%) and finally with their wives/live in partner (39%).



3.18 Last sexual intercourse and condom use

The survey also tried to explore further on the sexual intercourse in past month, last sexual partners and condom used in last sex of the PWIDs. Majority of PWIDs (59%) had sexual

contact on past month and among them 42% used condom. More than half (53%) PWIDs have had their last sexual relationship with their regular female partners (wives/live in partner). About 19% reported other female friends and FSWs (10%) as their last sex partners. Condom use during last sex was reported as 38 percent of the PWIDs.

Table 3.18 Last Sexual Intercourse and Condom Used

Last sexual intercourse and condom used	Number (N=351)	Percent
Sexual intercourse in last one month		
Yes	207	59.0
No	144	41.0
Use of Condom in last sexual intercourse in one month (n=207)		
Yes	86	41.5
No	121	58.5
Frequency of Condom use in last one month (n=207)		
Every time	35	16.9
Most of the times	32	15.5
Sometimes	80	38.6
Never used	60	29.0
Type of Sex partner in the last sexual intercourse		
Female sex worker	37	10.5
Regular female partner	187	53.3
Other Female Friend	68	19.4
No sexual contact within one year	58	16.5
Don't know	1	0.3
Use of Condom in Last sexual intercourse (n=292)		
Yes	111	38.0
No	181	62.0

3.19 Availability of Condom

HIV awareness and prevention campaigns focus on promoting condom use by raising awareness and facilitating easy access to free condoms. These findings are related to availability, usual mode of obtaining condom, and sources to get condoms. All PWIDs had heard about condom. Most of the PWIDs (83%) had ever used condom. All PWIDs (99%) knew the place to obtain condom. Majority of the PWIDs were aware that condoms are available at the pharmacy (95%), hospital (38%) and clinic (27%). On the information of mode of obtaining free condoms from any organization, more than half of PWIDs (52%) usually obtained condoms free of cost and 47 percent of PWIDs never obtained free condoms. PWIDs were also asked about time needed to obtain condoms. Most of PWIDs (92%) said that the nearest place to get condoms was up to 30 minutes away. About 32 percent of PWIDs carried condoms. Furthermore, the sources on the knowledge on the condoms were also explored. The most common sources of information were newspapers/posters (96%), television (95%), pharmacies (95%), and Radio (91%), billboards/signboards (91%) and Health post (91%).

Table 3.19 Availability of Condom

Availability of Condom	Number (N=360)	Percent
Ever used condom		
Yes	300	83.3
No	60	16.7
Know the place/person to obtain condom		
Yes	356	98.9
No	4	1.1
Place/person from where condom can be obtained (n=356)*		
Shop	81	22.7
Pharmacy	340	95.2
Clinic	95	26.6
Hospital	136	38.1
Family planning center	55	15.4
Bar/Guest house/Hotel	2	0.6
Health worker	26	7.3
Peer Educator/Outreach Educator	90	25.2
Friend	53	14.8
Pan Pasal	55	15.4
Get free condom from any organization in the last 12 months		
Yes, free of cost	189	52.5
Yes, by paying money	2	0.6
No	169	46.9
Time taken to obtain condom		
< 30 minutes	331	91.9
≥ 30 and more minutes	16	4.4
Don't know	10	2.8
No response	3	0.8
PWIDs mostly carry condom		
Yes	116	32.2
No	244	67.8
Sources of Knowledge of Condom (n=360)*		
Radio	327	90.8
Television	343	95.3
Pharmacy	341	94.7
Health Post	326	90.6
Health Center	312	86.7
Hospital	338	93.9
Health Workers/Volunteers	299	83.1
Friends/Neighbors	328	91.1
NGOs	296	82.2
Newspapers/Posters	344	95.6
Video Van	66	18.3
Street Drama	244	67.8
Cinema Hall	198	55
Community Event/Training	219	60.8
Bill Board/Sign Board	326	90.6
Comic Book	175	48.6
Community Workers	243	67.5
Message from the advertisement (n=360)*		
Condoms should be used to prevent HIV	359	99.7
Condoms should be used to prevent STI	211	58.6
Condoms should be used for family Planning	141	39.2

Availability of Condom	Number (N=360)	Percent
Condom should be used together with other FP methods.	44	12.2
* Percent adds up to more than 100 due to multiple responses		

3.20 Awareness of HIV and Source of Knowledge

HIV is crucial to reduce the risk of HIV transmission. These findings deal with the level of knowledge among PWIDs regarding HIV. PWIDs were also explored to know the source of HIV. The most common sources of information on HIV were posters (97%), television (95%), newspapers (94%), Radio (94%), friends/relatives (92%) and billboards/signboards (90%). In the past year PWIDs received HIV related materials from different sources. Majority of PWIDs (72%) received information on HIV while 60 percent had received information related to condoms. PWIDs were also asked if they knew any person living with HIV or anyone who had died due to AIDS. About 68 percent of the PWIDs mentioned that they knew such a person. Among them, around 62 percent of them know someone with HIV and has died of AIDS while nine percent of them had a close relative infected with HIV or who had died of AIDS.

Table 3.20 Awareness of HIV and Source of Knowledge

Awareness of HIV and Source of Knowledge	Number (N=360)	Percent
Source of information on HIV (n=360)*		
Radio	339	94.2
Television	343	95.3
Newspapers/Magazines	339	94.2
Pamphlets/Posters	349	96.9
School/Teachers	280	77.8
Health Worker/Volunteer	300	83.3
Friends/Relatives	333	92.5
Work Place	219	60.8
People from NGO	292	81.1
Video Van	78	21.7
Street Drama	254	70.6
Cinema Hall	212	58.9
Community Event/Training	223	61.9
Bill Board/Sign Board	323	89.7
Comic Book	177	49.2
Community Workers	242	67.2
Received information or items in the past year (n=360)*		
Condom	217	60.3
Brochure/Booklets/Pamphlets About HIV/AIDS	253	70.3
Information about HIV/AIDS	260	72.2
Know someone died with AIDS related deaths		
Yes	244	67.8
No	115	31.9
No response	1	0.3
Close friend/relative died of AIDS (n=244)		
Yes	21	8.6
No	152	62.3
Don't Know	71	29.1
* Percent adds up to more than 100 due to multiple responses		

3.21 Comprehensive Knowledge on HIV

Table 3.21 further analyzes the comprehensive awareness of HIV among the PWIDs. The proportion of PWIDs reporting to be aware of **A** (abstinence from sex), **B** (monogamy or being faithful to one partner or avoiding multiple sex partners), and **C** (consistent and correct condom use or use of a condom during every sex act) as HIV preventive measures were 57 percent, 87 percent and 89 percent, respectively. Additionally, 93 percent knew that a healthy-looking person can be infected with HIV **(D)**, 65 percent of them identified that a person cannot get HIV from a mosquito bite **(E),** and 88 percent knew that one cannot get HIV by sharing a meal with an HIV-infected person **(F)**. Overall, 46 percent of the PWIDs correctly identified all three **A, B,** and **C** as HIV preventive measures while 49 percent of the PWIDs were aware of all the five major indicators i.e. **BCDEF**.

Table 3.21 Comprehensive Knowledge of HIV

Comprehensive Knowledge of HIV	Number (N=360)	Percent
A. Can protect themselves through abstinence from sexual contact	204	56.7
B. Can protect themselves through monogamous sexual contact	312	86.7
C. Can protect themselves through condom use every time during sex	321	89.2
D. A healthy-looking person can be infected with HIV	335	93.1
E. A person cannot get the HIV virus from mosquito bite	233	64.7
F. A person cannot get HIV by sharing meal with an HIV infected person	316	87.8
Knowledge of all the three indicators: **ABC**	165	45.8
Knowledge of all five indicators: **BCDEF**	175	48.6

3.22 Awareness of Modes of HIV Transmission

The PWIDs understanding of HIV and its different modes of transmission were further tested with the help of certain questions. Nearly all (99%) PWIDs perceived that HIV could be transmitted through the transfusion of blood from an infected person to another and through the use of pre-used needles/syringes (97%). A majority of them (94%) mentioned that holding an HIV infected person's hand does not pose a risk of HIV transmission. Similarly, 45 percent of them mentioned that an HIV infected mother could transmit the virus to her child during breastfeeding while 77 percent also said that an infected pregnant woman could transmit the virus to her unborn child. Furthermore, among those PWIDs who said that an infected mother could transmit the virus to her unborn child, 48 percent of them mentioned of taking antiretroviral drugs while 37 percent of them said that seeking treatment or hospital would be helpful. Around 15 percent were unaware of any such measures that could minimize such risk.

Table 3.22 Awareness of Modes of HIV Transmission

Awareness of Modes of HIV Transmission	Number (N=360)	Percent
A person cannot get HIV by shaking hands with an HIV infected person's hand	338	93.9
A person can get HIV, by using previously used needle/syringe	350	97.2
Blood transfusion from an infected person to transmit HIV	358	99.4

Awareness of Modes of HIV Transmission	Number (N=360)	Percent
A woman with HIV can transmit the virus to her new-born child through breastfeeding	161	44.7
A pregnant woman infected with HIV can transmit the virus to her unborn child	276	76.7
Ways by which a pregnant woman can reduce the risk of transmission of HIV to her unborn child (n=276)		
Take medication (Antiretroviral)	132	47.8
Seek treatment/Hospital	103	37.3
Don't know	40	14.5
No response	1	0.4

3.23 Awareness and Availability of HIV Testing Facility and HIV Testing Status

After assessing their level of knowledge about HIV and its modes of transmission, the PWIDs were asked if they knew about any HIV testing facilities and whether or not they had taken up such test. Majority of PWIDs (84%) knew about confidential HIV testing in their community and 86 percent knew about a HIV testing facility. Additionally, 64 percent of the PWIDs had ever tested themselves for HIV. Most of them (80%) had taken up the test voluntarily. About 48 percent had ever taken the test during the last 12 months preceding the survey, while others had done so more than a year before. Most of PWIDs (95%) obtained test results. Among the PWIDs not obtaining the results, the major reasons were not given by lab (33%) and pending results (25%)

Table 3.23 Awareness and Availability of HIV Testing Facility and HIV Testing

Awareness and Availability of HIV Testing Facility and HIV Testing Status	Number (N=360)	Percent
Confidential HIV test facility available in the community		
Yes	304	84.4
No	44	12.2
Don't know	11	3.4
Know a place to go for HIV test		
Yes	308	85.6
No	52	14.4
Ever had HIV test		
Yes	231	64.1
No	129	35.9
Voluntarily underwent the test or because it was required (n=231)		
Voluntarily	186	80.5
Required	45	19.5
Most recent HIV test (n=231)		
Within the past 12 months	111	48.1
Between 13-24 months	65	28.0
Between 25-48 months	29	12.6
More than 48 months	26	11.3
Number of times for HIV test within the last 12 months (n=111)		
One time	63	56.8
Two times	35	31.5
Three times	9	8.1
Four and more times	4	3.6

Awareness and Availability of HIV Testing Facility and HIV Testing Status	Number (N=360)	Percent
Received HIV test result (n=231)		
Yes	219	94.8
No	12	5.2
Reason for not receiving the test result (n=12)		
Sure of not being infected	1	8.3
Afraid of result	1	8.3
Felt unnecessary	1	8.3
Forgot it	2	16.7
Pending result	3	25.0
Lab didn't give	4	33.4

3.24 Knowledge of STIs, Experienced Symptoms, and Treatment in the Past Year

The study assesses the knowledge of STIs among the PWIDs and their experience of STIs if any in the past year and at the time of the survey. These findings include PWIDs' knowledge level on STI, its symptoms, PWIDs' experience of the symptom and treatment sought. A large majority of PWIDs (92%) heard of diseases transmitted through sexual intercourse. PWIDs who had heard of STIs were further explored on general understanding of male and female STI symptoms. The most commonly cited symptoms in female were genital ulcer/sore blister (37%), genital discharge (35%) and foul smelling (34%). Similarly the most commonly cited symptoms in male were genital ulcer/sore blister (53%), genital discharge (44%) and pain during urination (27%). PWIDs were asked if they had ever experienced symptoms like genital discharges and/or genital ulcers/sores in the past year. About seven percent of PWIDs said that they have experienced genital discharge in the past year. Among those PWIDs who reported having had genital discharge in the past year, 35 percent (9) said that they were experiencing genital discharge at the time of the survey. About nine percent of PWIDs said that they have experienced genital ulcers/sore in the past year. Similarly, among those PWIDs who had had genital ulcers/sores in the past year, 50 percent (17) reported having the symptom at the time of survey. Among PWIDs who had experienced STI, 57 percent had never sought any treatment. However, 38 percent seek treatment from private doctor and hospital/health post.

Table 3.24 Knowledge of STIs, Experienced Symptoms and Treatment in the Past Year

STI Symptoms	Number (N=360)	Percent
Heard of diseases transmitted through sexual intercourse		
Yes	332	92.2
No	28	7.8
Knowledge of female STI symptoms (n=332)		
Lower abdominal pain	32	9.7
Genital discharge	117	35.5
Foul smelling	111	33.6
Burning pain on urination	57	17.3
Genital ulcers/sore	122	37.0
Swelling in groin area	32	9.7
Itching	68	20.6
Other (Specify)	9	2.7
Don't know	125	37.9

STI Symptoms	Number (N=360)	Percent
Knowledge of male STI symptoms (n=332)		
Genital discharge	143	44.1
Burning pain on urination	87	26.9
Genital ulcers/sore blister	173	53.4
Swellings in groin area	56	17.3
Others (Specify)	19	5.9
Don't know	128	39.5
Had genital discharge in the past year		
Yes	26	7.2
No	334	92.8
Currently, had genital discharge/burning urination problem (n=26)		
Yes	9	34.6
No	17	65.4
Had a genital ulcer/sore blister during the last 12 months		
Yes	34	9.4
No	324	90.0
Don't know	2	0.6
Currently, had genital ulcer/sore blister (n=34)		
Yes	17	50.0
No	17	50.0
Treatment for STI (n=44)		
Did not seek treatment	25	56.8
With private doctor	9	20.5
In hospital	8	18.2
Others (Specify)	2	4.5

* Percent adds up to more than 100 due to multiple responses

3.25 Exposure to ongoing HIV Awareness Program

These findings explore the exposure of PWIDs on ongoing HIV awareness programs and their participation in those activities. PWIDs in the survey were asked on important components of current HIV and AIDS related programs run by several organizations. Information provided by them has been analyzed in the following sections.

3.26 Exposure to Peer/Outreach Educator/Community Mobilizer

One of the major components of the ongoing STI, HIV and AIDS intervention is the mobilization of outreach and peer educators (OEs and PEs) to educate the target population on STI, HIV and AIDS and preventive measures. About 43 percent of PWIDs had met with PE/OE in the last 12 months. Among them, most of PWIDs (94%) met them more than once. During their interaction, 98 percent of PWIDs had discussed safe injecting behaviors while 91 percent of PWIDs discussed on transmission of HIV. About 13 percent of PWIDs discussed on giving up the drugs. The majority of OE/PE/CM were from Richmond Fellowship (35%) and KYC (8%).

Table 3.25 Exposure to Peer/Outreach Educator/Community Mobilizer

Exposure to PE/OE/CM	Number (N=360)	Percent
Met or discussed or interacted with PE or OE in the last 12 months		
Yes	156	43.3
No	204	56.7
Number of times these PE, OE, CM and/or CE met you in the last 12 months (n=156)		
Once	10	6.4
2-3 times	49	31.4
4-6 times	30	19.3
7-12 times	15	9.6
More than 12 time	52	33.3
Activities carried out with OE/PEs (n=156)*		
Discussion on how HIV is/isn't transmitted	125	91.1
Discussion on how STI is/isn't transmitted	46	29.9
Discussion on safe injecting behavior	154	98.0
Regular/non-regular use of condom	34	22.1
Demonstration on using condom correctly	27	17.5
Discussion on giving up drugs	20	12.8
Organizations represented by OE/PEs (n=156)		
Richmond Fellowship	96	61.5
Knight Chess Club (KCC)	6	3.8
Kirat Yakthum Chumlung (KYC)	13	8.3
New life	6	3.8
Sahara Nepal	3	1.9
Green cross	8	6.5
Don't know	24	3.8

* Percent adds up to more than 100 due to multiple responses

3.27 Drop-In Center (DIC)

Majority of PWIDs (65%) had visited a DIC in the past year and among them most of them (97%) had visited more than once. Majority of PWIDs (76%) had been to a DIC to get a new syringe. About 39 percent of PWIDs had been there to collect condom and 30 percent had been informed about safe injecting behaviors at the DIC. Majority of DIC they visited were run by Richmond Fellowship (37%), New Life (16%) and KYC (7%). About 37 percent of PWIDs don't know the name of DIC they visited.

Table 3.26 DIC Visiting Practices in the Past Year

DIC Visiting Practices in the Past Year	Number (N=360)	Percent
Visited to any out-reach center (DIC, IC or CC) in the last 12 months		
Yes	235	65.3
No	125	34.7
Number of times visited out-reach centers (DIC, IC or CC) in the last 12 months (n=235)*		
Once	7	3.0
2-3 times	45	19.1
4-6 times	47	20.0
7-12 times	33	14.1
More than 12 times	103	43.8

DIC Visiting Practices in the Past Year	Number (N=360)	Percent
Participated activities at DIC (n=235)*		
Went to collect condoms	89	39.4
Went to learn the correct way of using condom	34	15.0
Went to learn about the safe injecting Behavior	69	30.5
Went to watch film on HIV	25	11.1
Participated in discussion on HIV transmission	50	22.1
Went to have new syringe	171	75.7
Organizations represented by DIC (n=235)		
Richmond Fellowship	88	37.4
New life	37	15.7
KYC	17	7.2
Sahara Nepal	17	7.2
KCC	8	3.4
Green cross	6	2.6
Others	4	24.7
Don't know	58	37.4
* Percent adds up to more than 100 due to multiple responses		

3.28 Sexually Transmitted Infection (STI) Clinic

About four percent of PWIDs visited a STI clinic in the past year (15). Among them, 93 percent visited for blood test for STI and 62 percent for physical examination for STI identification. Most of PWIDs visited B.P. Koirala Institute of Health Sciences (BPKIHS) (20%), Richmond Fellowship (13%) and Koshi hospital (13%).

Table 3.27 STI Clinic Visiting Practices in the Past Year

STI clinic	Number (N=360)	Percent
Visited any STI clinic in the last 12 months		
Yes	15	4.2
No	345	95.8
Number of visits to STI clinics (n = 15)		
Once	8	53.3
2-3 times	4	26.7
4-6 times	2	13.3
More than 12 times	1	6.7
Participated activities at STI clinic(n=15)*		
Blood tested for STI	14	93.3
Physical examination conducted for STI identification	10	62.5
Discussion on how STI is/isn't transmitted	3	18.8
Discussion on safe injecting behavior	4	25
Regular/non-regular use of Condom	3	18.8
Name of organizations that run STI clinic visited by them (n=15)		
BPKIHS	3	20.0
Koshi hospital	2	13.3
Richmond Fellowship	2	13.3
Private Clinic	2	13.3
Others(Help Nepal, New life, PHCC)	3	20.0
Don't know	2	13.3
* Percent adds up to more than 100 due to multiple responses		

3.29 HIV Testing and Counseling Centers (HTC)

About 23 percent of PWIDs visited HTC centers in the last year. Among them, 94 percent of them visited the center to give their blood sample for HIV testing. About 56 percent of them had received the HIV test results and received post HIV test counseling (63%) or pre HIV test counseling (57%). The HTC center run by KYC (45%) and Richmond Fellowship (27%) were the most popular among the PWIDs. Among the PWIDs who had visited HTC centers, 56 percent had visited a center more than once.

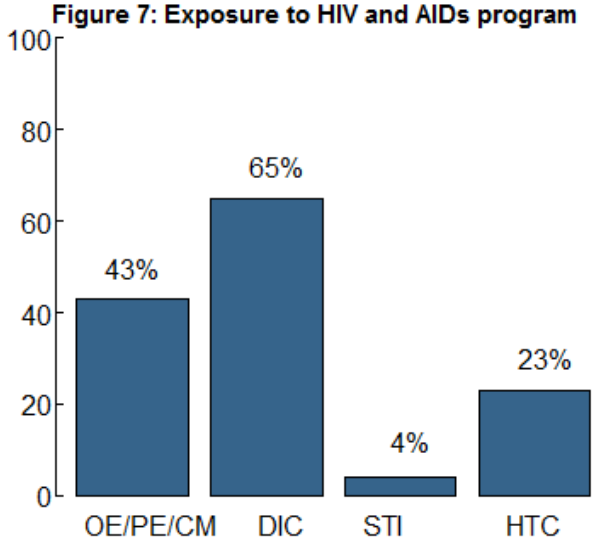
Table 3.28 HTC Visiting Practices in the Past Year

HTC center	Number (N=360)	Percent
Visited HTC centers in the last 12 months		
Yes	82	22.8
No	278	77.2
Number of times visited HTC center in the last 12 months (n=82)		
Once	36	43.9
2-3 times	37	45.2
4-6 times	7	8.5
7-12 times	1	1.2
More than 12 times	1	1.2
Participated activities at HTC (n=82)*		
Received pre-HIV test counseling	47	57.3
Blood sample taken for HIV test	77	93.9
Received post HIV test counseling	52	63.4
Received information on safe injecting behavior	27	32.9
Received HIV test result	46	56.1
Received counseling on using condom correctly in each sexual intercourse	3	3.6
Received information on HIV window period	3	3.6
Name of the organization that run the HTCs visited by them (n=82)		
KYC	37	45.2
Richmond Fellowship	22	26.9
Government hospital	9	11.0
Sahara Nepal	4	4.9
Blue Diamond Society (BDS)	2	2.4
BPKIHS	2	2.4
Others (Happy Nepal, New Hope (Foundation, KCC, PHCC)	4	4.8
Don't know	2	2.4

* Percent adds up to more than 100 due to multiple responses

Figure 7 shows the exposure of PWIDs on ongoing HIV and AIDs Program past year. About 43 percent of the PWIDs had met or interacted with PEs/OEs. Similarly, around 23 percent of PWID had visited a HTC center. Majority of PWIDs (65%) visited DIC past years. However, only four percent of them had visited a STI clinic in the past year.

Figure 7: Exposure to HIV and AIDs program



3.30 Opioid Substitution Therapy Services

More than one fifth (22%) of PWIDs received Opioid Substitution Therapy (OST) and among them 31 percent received these services in past 12 months. Regarding the services received, 64 percent received methadone and remaining received Buprenorphine. Eight percent (2) of them are still in therapy.

Table 3.29 OST services received in past 12 months

OST services	Number (N=360)	Percent
Ever received any OST		
Yes	81	22.5
No	278	77.2
Don't Know	1	0.3
OST therapy received during last 12 months (n =81)		
Yes	25	30.9
No	56	69.1
Service received (n = 25)		
Methadone	16	64.0
Buprenorphine	9	36.0
Still in therapy (n = 25)		
Yes	2	8.0
No	22	88.0
No response	1	4.0

3.31 Knowledge on prevention of mother to child transmission (PMTCT) services

Twenty percent of PWIDs have known about prevention of mother to child transmission (PMTCT) services and among them 64 percent of them knew the place to get PMTCT services. Half of PWIDs (50%) mentioned BPKIHS whereas 37 percent of PWIDs mentioned Government hospital to obtained PMTCT services.

Table 3.30 Knowledge about PMTCT services

PMTCT services	Number (N=360)	Percent
Knowledge on where pregnant women can get PMTCT services		

PMTCT services	Number (N=360)	Percent
Yes	72	20.0
No	257	71.4
Don't know	31	8.6
Knowledge of place to get PMTCT services (n=72)		
Yes	46	63.9
No	24	33.3
Don't know	2	2.8
Name of organizations that run PMTCT visited by them (n=72)		
AMDA Hospital	4	8.6
BPKIHS	23	50.0
Family Planning Association Nepal	1	2.2
Government Hospital	17	37.0
Marie Stopes	1	2.2
PHCC	1	2.2
Happy Nepal	1	2.2
Don't know	1	2.2

3.32 Knowledge on ART and viral load testing services

Half of PWIDs had ever heard about antiretroviral therapy (ART) services for PLHIV. Among them, more than half of PWIDs know the place to obtained ART services. Most of PWIDs mentioned Government hospital (50%) and BPKIHS (38%) are providing ART services. Similarly 18 percent of PWIDs heard about viral load testing services for PLHIV. Among them 61 percent know the place to get viral load testing services. Teku Hospital (31%) and Koshi Hospital (24%) were mentioned by PWIDs for viral load testing.

Table 3.31 Knowledge on ART and viral load testing services

Knowledge on ART and viral load Testing	Number (N=360)	Percent
Ever heard about ART for PLHIV		
Yes	181	50.3
No	179	49.7
Know the place where PLHIV can get ART services (n=181)		
Yes	92	50.8
No	89	49.2
Names of organizations providing ART services (n=92)		
BPKIHS	35	38.0
Government hospital	46	50.0
AMDA hospital	2	2.2
KYC	2	2.2
Others (Sparsha, Happy Nepal, Care Home, New hope foundation, Punarjeev Rehabilation Center (PRC), Sahara Nepal)	6	6.6
Don't know	1	1.1
Heard about viral load testing services for PLHIV		
Yes	65	18.1
No	295	81.9
Know the place where PLHIV get viral load testing services (n=65)		
Yes	40	61.5
No	25	38.5

Knowledge on ART and viral load Testing	Number (N=360)	Percent
Names of organizations providing Viral load testing services (n=40)		
BPKIHS	9	21.4
Teku Hospital	13	30.9
Koshi Hospital	10	23.7
Mechi hospital	2	4.8
KCC	2	4.8
Others (New hope, Richmond Fellowship, Sparsh Chandigarh, Teaching Hospital)	4	9.64
Don't know	2	4.8

3.33 Heard about Community and Home-based Care (CHBC) Services

Some HIV and AIDS programs conduct community home-based care (CHBC) services which include outreach and support services like symptom care and pain management, support for adherence to antiretroviral treatment, and referrals for other care such as screening for tuberculosis, counseling and testing, and services to prevent transmission of HIV from mother to child. The teams complement the clinics' work and visit clients in their community and homes to provide individualized care. When asked if any of the PWIDs had heard about CHBC services, more than one third of PWIDs (34%) heard about CHBC service provided for PLHIV.

Table 3. 32 Heard about CHBC Services

Heard about CHBC services	Number (N=360)	Percent
Heard of CHBC services that are provided for PLHIV		
Yes	123	34.2
No	237	65.8

3.34 Stigma and Discrimination

PWIDs perceptions of PLHIV and the stigma associated with them were examined with the help of a series of questions. Table 3.33 mainly presents findings around stigma and discrimination. It was noted that most of PWIDs were willing to take care of an HIV positive relative, a male relative (98%) or a female relative (97%) at their home if necessary. Nearly one in two PWIDs (47%) said that if a family member had HIV they would talk about it rather than keeping it a secret. Most of PWIDs (94%) would buy food from shopkeeper with HIV positive. Similarly, 80 percent of the PWIDs said that PLHIV need same care as with other chronic disease. Most of PWIDs (94%) agreed that PLHIV should continue to work if he is not sick. Most of PWIDs (98%) stated that children with HIV positive status should attend school with children with HIV negative status.

Table 3.33 Stigma and Discrimination

Stigma and discrimination	Number (N=360)	Percent
Willing to take care of HIV positive male relative in the household		
Yes	352	97.8

Stigma and discrimination	Number (N=360)	Percent
No	7	1.9
Don't Know	1	0.3
Willing to take care of HIV positive female relative in the household		
Yes	348	96.7
No	10	2.7
Don't Know	2	0.6
Willing to maintain confidentiality of a HIV positive family member		
Yes	189	52.5
No	171	47.5
Buying food from shopkeeper with HIV positive		
Yes		
No	337	93.6
No response	21	5.8
	2	0.6
HIV should take same care as other chronic disease		
Same		
More		
Less	287	79.7
Don't Know	60	16.7
No response	4	1.1
	3	0.8
Continuation of work if PLHIV is not sick		
Yes	340	94.4
No	17	4.8
Don't Know	3	0.8
Children with HIV positive should attend school with other children		
Yes	352	97.8
No	7	1.9
Don't Know/No response	1	0.3

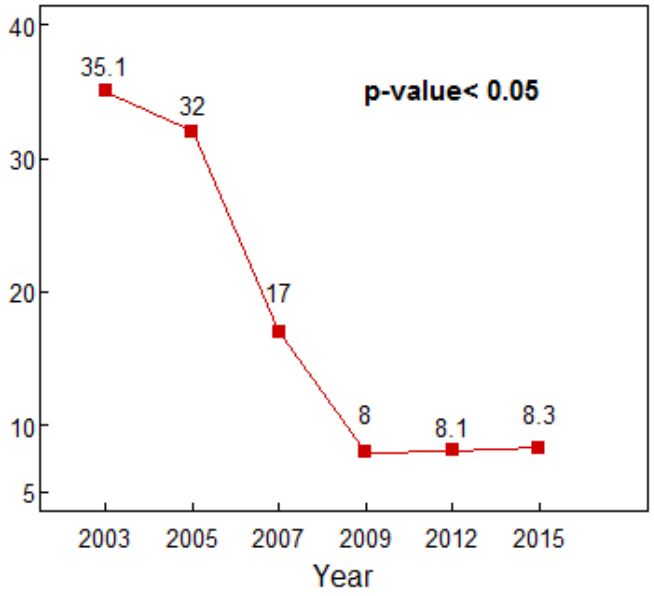
CHAPTER IV: COMPARATIVE ANALYSIS OF KEY INDICATORS

This chapter analyzes the trend in the selected indicators by comparing the data obtained from all six rounds of IBBS among PWIDs conducted in the eastern terai. It focuses on HIV and Syphilis prevalence, drug injecting habits, needle/syringe using practices, comprehensive knowledge on HIV and AIDs, HIV test and condom use among PWIDs.

4.1 HIV Prevalence

Figure 8 analyzes the trend of prevalence of HIV over time. HIV prevalence among PWIDs has significantly decreased since the first round in 2002 to 2009 (p-value <0.05). However HIV prevalence had remained stagnant in previous three rounds of the survey in the study districts (2009, 2012 and 2015).

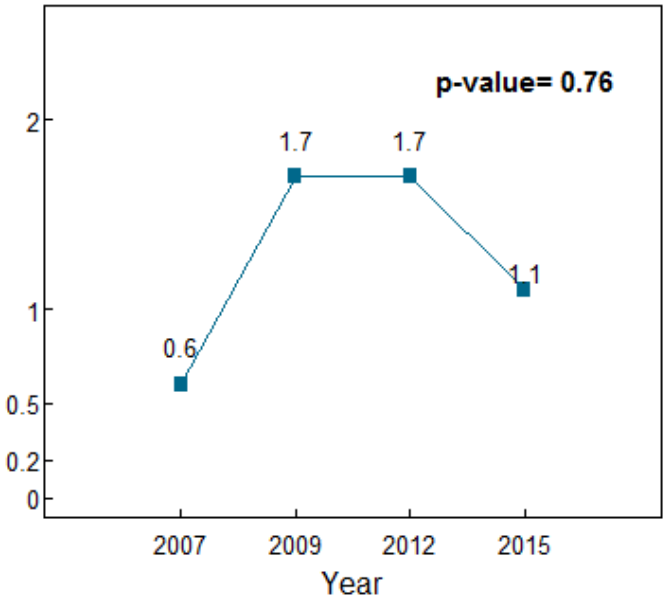
Figure 8: Trends of HIV Prevalance



4.2 Syphilis Prevalence

Figure 9 shows the trends of Syphilis prevalence among PWIDs from 2007 to 2015. The prevalence of active syphilis is lower than two percent in all rounds of IBBS surveys (2007, 2009, 2012 and 2015). Syphilis prevalence was drop from 1.7 percent in 2012 to 1.1 percent in 2015. No significant association was observed in trend analysis of Syphilis prevalence.

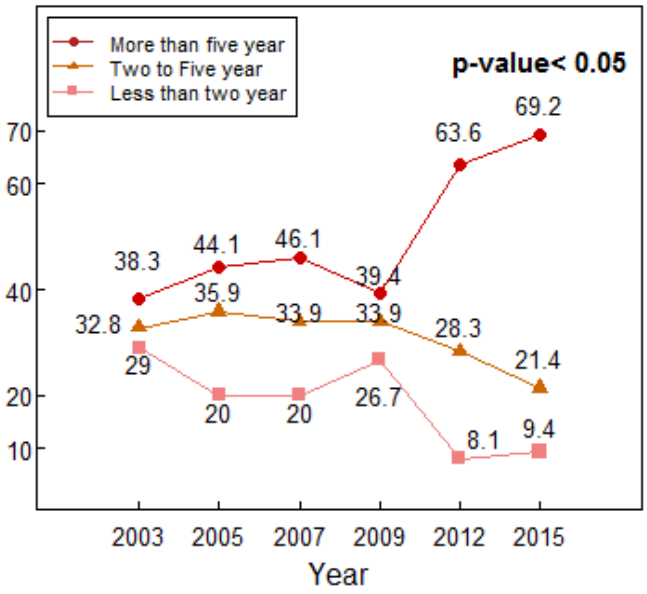
Figure 9: Trend of Syphilis Prevalance



4.3 Drug Injecting Behaviours of PWIDs

Figure 10 shows the drug injecting behaviours of PWIDs. Majority of PWIDs had been injecting drugs more than five years and the trend is increasing significantly from 38 percent in 2003 to 69 percent in 2015 (p-value < 0.05). PWIDs injecting for two years to five years significantly decreased from 33 percent in 2003 to 21 percent in 2015 (p<0.05). Similar patterns was found among PWIDs injecting less than two years as the trend significantly decreased from 29 percent in 2003 to 9 percent in 2015 (p<0.05).

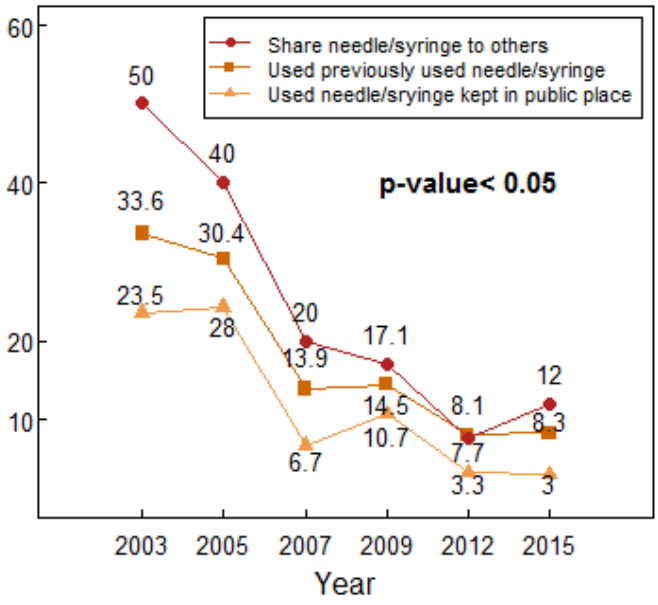
Figure 10: Trends in Drug Injecting Practices



4.4 Unsafe Injecting Behaviours of PWIDs

Figure 11 reveals the unsafe injecting drugs behaviours of PWIDs in past week. It was found that a considerable percent of PWIDs had avoided unsafe injecting behavior in the past week. PWIDs who had unsafe injecting practice in the week preceding the survey has significantly decreased since the first round (p-value <0.05). High risk behavior such as injecting with previously used needles/syringes significantly decreased from 34 percent in 2003 to 8 percent in 2015 (p-value <0.05). Similarly the behavior of using needles/syringes kept in a public place significant decrease to 3 percent in 2015 (p-value <0.05). However, sharing needle with others increased slightly from 8 percent in 2012 to 12 percent in 2015.

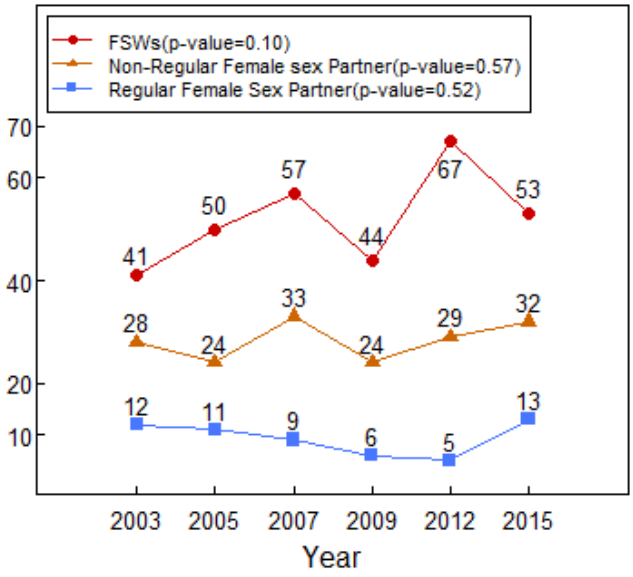
Figure 11: Trends of Unsafe Injecting Behaviours



4.5 Consistent Condom use with Different Partners

Figure 12 shows the trend of consistent condom with different partners. Mainly PWIDs sex partners can be classified as regular female sex partners, non-regular female sex partners and FSWs. The lowest use of consistent condom use was reported with regular female sex partners (wives/live in partners) in all rounds of IBBS. However, consistent condom use with regular female sex partners increase from 12 percent in 2003 to 13 percent in 2015. Similarly consistent condom use with non regular female partners also increased from 28 percent in 2009 to 32 percent in 2015. However, consistent use of condom with FSWs has drop down from 67 percent in 2012 to 53 percent in 2015. No significant association in trend analysis was found.

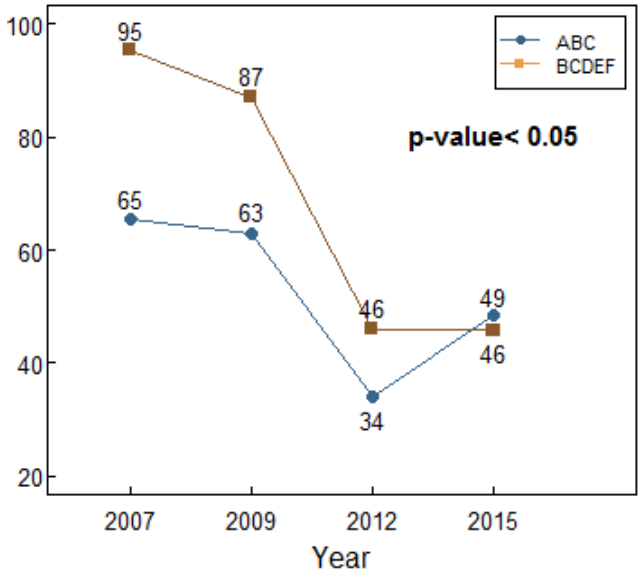
Figure 12:Trends of Consistent Condom Use



4.6 Comprehensive Knowledge on HIV

Comprehensive knowledge is measured by proper knowledge on abstinence (A), being faithful (B) and consistent and correct condom use for infection prevention (C) and on three misconceptions related to food sharing (D), mosquito bite (E) and infection on healthy looking person (F). Figure 13 reveals the trend of Comprehensive Knowledge on HIV and AIDs among PWIDs. The percent of PWIDs who were aware of all three ABC significantly decreased from 95 percent in 2007 to 46 percent in 2015 (p-value < 0.05). Similarly, comprehensive knowledge about HIV and AIDS (BCDEF) was also decreased from 65 percent in 2007 to 49 percent in 2015 (p-value < 0.05). However, the comprehensive knowledge was increased slightly from 34 percent in 2012 to 48 percent in 2015.

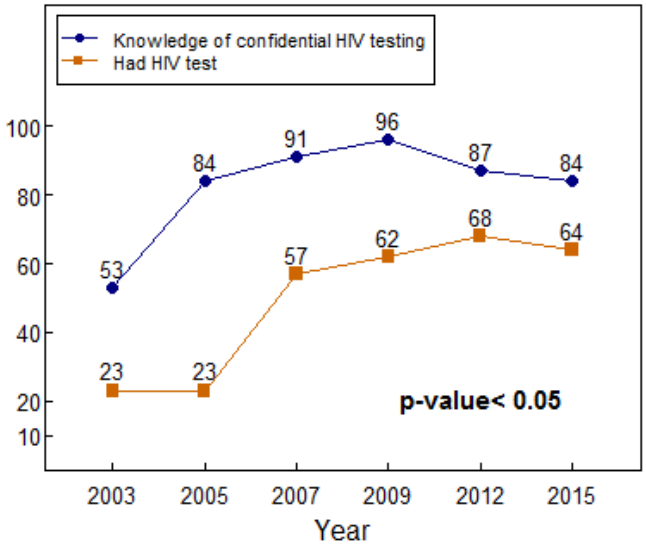
Figure 13: Trends of Comprehensive Knowledge



4.7 Knowledge of confidential HIV testing facilities and ever had HIV test

Figure 14 shows the trend of knowledge of confidential HIV test facility in the community and ever had HIV test among PWIDs. Knowledge of a confidential HIV testing facility in their community significantly increased from 53 percent in 2003 to 96 percent in 2009; however, the knowledge had decreased in recent three rounds of IBBS surveys from 96 percent in 2009 to 84 percent in 2015 (p-value <0.05). Similarly, PWIDs who ever had HIV test significantly increased from 23 percent in 2003 to 64 percent in 2015 (p-value <0.05). However, there was drop in HIV test among PWIDs from 68 percent in 2012 to 64 percent in 2015.

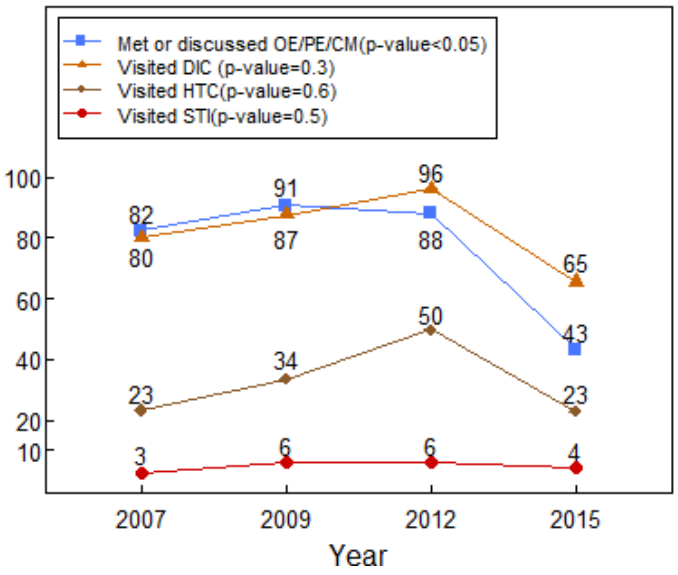
Figure 14: Trends of Knowledge on Confidential HIV testing and had HIV test



4.8 Exposure to HIV Programs

Figure 15 shows the trend of exposure to HIV programs among PWIDs. It was found that PWIDs who interacted with an outreach educator (OE) or peer educator (PE) or community motivators (CM) significantly decreased from 82% in 2007 to 43% in 2015 (p-value <0.05). PWIDs visiting drop-in-centers (DICs) has decreased from 80% in 2007 to 65% in 2015. Moreover, PWIDs visiting HTC centers increased from 23 percent in 2007 to 50 percent in 2012, but drop to 23 percent in 2015. PWIDs visiting STI clinics remained very low (3% in 2007, 6% in 2009, 6% in 2012 and 4% in 2015) in all rounds of IBBS surveys.

Figure 15:Trends of Exposure to HIV Program



Age, education status, drug injection behaviors (age, duration of drug injection), sexual behaviors (number of partners, sex with different partners), comprehensive knowledge on HIV and AIDS, exposure to HIV and AIDs program were selected as key indicators associated with HIV and Hepatitis. Bi-variate analysis of key indicators with HIV and Hepatitis C were preformed using Chi-square test. P-value less than 0.05 were considered as statistically significant. However, this study could not measure the association between key indicators with Syphilis and Hepatitis B because the PWIDs infected with Syphilis and Hepatitis B is relatively small to perform bi-variate analysis.

4.9 Association between selected variables and HIV

Table 4.1 examines the association between selected key indicators and HIV. Only number of sexual contact with FSWs were significantly associated with HIV prevalence (p-value <0.05). Among HIV positive PWIDs, 17 percent had one sexual contact with FSWs whereas three percent had more than once sexual contact with FSWs.

Table 4.1 Association between selected indicators and HIV

Characteristics	HIV					P-Value
	Yes (n=30)	%	No (n=330)	%	Total (N=360)	
Districts						
Jhapa	7	8.3	77	91.7	84	1.00
Morang	14	8.3	154	91.7	168	
Sunsari	9	8.3	99	91.7	108	
Age in years						
Less than 19 years	4	10.5	34	89.5	38	0.057
20-29 years	12	5.5	204	94.5	216	
30 years and above	14	13.2	92	86.8	106	
Education						
Illiterate	1	8.3	11	91.7	12	1.00
Literate	29	8.3	319	91.7	348	
Age of first drug injection						
Less than 20 years	18	9.2	178	90.8	196	0.63
20-24 years	7	6.9	94	93.1	101	
25-29 years	2	5.0	38	95.0	40	
30 years and above	3	13.0	20	87.0	23	
Duration of injecting drugs						
Less than 24 months	8	9.4	77	90.6	85	0.50
25-59 months	3	4.7	61	95.3	64	
60 months and above	19	9.0	192	91.0	211	
Number of sexual contact with female partners (n=259)						0.07
One	17	12.9	115	87.1	132	
More than one	8	6.3	119	93.7	127	
Number of sexual contact with FSWs (n=64)						0.04
One	5	17.2	24	82.8	29	
More than one	1	2.9	34	97.1	35	
Number of sexual contact with non regular female sex partners (n=106)						0.68
One	4	7.1	52	92.9	56	
More than one	2	4.0	48	96.0	50	
Sex with FSWs						
Yes	6	9.4	58	90.6	64	0.79
No	24	8.4	263	91.6	287	
Sex with non regular female sex partners						0.20
Yes	6	5.7	100	94.3	106	
No	24	9.8	221	90.2	245	
Comprehensive Knowledge on HIV ABC						

Characteristics	HIV					P-Value
	Yes (n=30)	%	No (n=330)	%	Total (N=360)	
Yes	16	9.7	149	90.3	165	0.38
No	14	7.2	181	92.8	195	
BCDEF						
Yes	15	8.5	160	91.5	175	0.87
No	15	9.1	170	91.9	165	
Ever had HIV test						
Yes	21	9.1	210	90.9	231	
No	9	7.0	119	93.0	128	0.49
Meet OE/PE/CM in past year						
Yes	13	8.3	143	91.7	156	1.00
No	17	8.3	187	91.7	204	
Visited DIC in past year						
Yes	23	9.8	212	90.2	235	0.17
No	7	5.6	118	94.4	125	

4.10 Association between selected variables and Hepatitis C

Table 4.2 examines the association between selected key indicators and HIV. There was no significant association between key indicators and Hepatitis C.

Table 4.2 Association between selected indicators and Hepatitis C

Characteristics	Hepatitis C					P-Value
	Yes (n=171)	%	No (n=189)	%	Total (N=360)	
Districts						
Jhapa	43	51.2	41	48.8	84	0.72
Morang	77	45.8	91	54.2	168	
Sunsari	51	47.2	57	52.8	108	
Age in years						
Less than 19 years	14	36.8	24	63.2	38	0.27
20-29 years	102	47.2	114	52.8	216	
30 years and above	55	51.9	51	48.1	106	
Education						
Illiterate	6	50.0	6	50.0	12	0.86
Literate	165	47.4	183	52.6	348	
Age of first drug injection						
Less than 20 years	98	50.0	98	50.0	196	
20-24 years	41	40.6	60	59.4	101	0.24
25-29 years	18	45.0	22	55.0	40	
30 years and above	14	60.9	9	39.1	23	
Used previously used needle/syringe in past week (n=284)						
Yes	13	41.9	18	58.1	31	0.45
No	124	49.0	129	51.0	253	
Used needle/syringe kept in public places in past week (n=284)						

Characteristics	Hepatitis C					P-Value
	Yes (n=171)	%	No (n=189)	%	Total (N=360)	
Yes	4	50.0	4	50.0	8	0.59
No	133	48.2	143	51.8	276	
Share needle/syringe to others in past week (n=284)						
Yes	17	51.5	16	48.5	33	0.68
No	120	47.8	131	52.2	251	
Duration of injecting drugs						
Less than 24 months	35	41.2	50	58.8	85	0.23
25-59 months	28	43.8	36	56.3	64	
60 months and above	108	51.2	103	48.8	211	
Meet OE/PE/CM in past year						
Yes	74	47.4	82	52.6	156	0.98
No	97	47.5	107	52.5	204	

4.11 Association between HIV and Hepatitis C

Table 4.3 shows the association between HIV and Hepatitis C among PWIDs. There was significant association between HIV and Hepatitis C (p-value <0.05). Among HIV positive PWIDs, 73 percent of PWIDs tested Hepatitis C. PWIDs who have HIV are 3.3 more likely to have Hepatitis C compared to control groups.

Table 4.3 Association between HIV and Hepatitis C

HIV	Hepatitis C				Total	P-Value	Odd ratio	95% CI
	Yes (n=171)	%	No (n=189)	%				
Yes	22	73	8	27	30	<0.05	3.3	1.4 to 7.5
No	149	45	181	55	330			

CHAPTER V: SUMMARY OF MAJOR FINDINGS AND RECOMMENDATIONS

This section presents brief discussion on major findings of the IBBS surveys among PWIDs in the study districts. This is sixth rounds of IBBS surveys among PWIDs in the study districts. The survey aimed to collect and analyze biological and behavioral behaviours of HIV and STI among PWIDs. In this IBBS survey, prevalence of Hepatitis B and Hepatitis C among PWIDs were measured for the first time. The survey has revealed some degree of knowledge gaps and vulnerability among the PWIDs. This section briefly summarizes the key findings on the biological and behavioral gaps and other indicators based on the scope of the study and derive programmatic implications of the findings.

Prevalence of HIV, STI, Hepatitis B and Hepatitis C

HIV prevalence rate among PWIDs is still high, with 8.3 percent, ranging from 5.7 to 11.8 at a 95 percent confidence interval. The trend of HIV prevalence had remained stagnant from the previous three consecutive round of the survey in the study districts (2009, 2012 and 2015). Syphilis history was found among eight (2.2%) of the PWIDs, while four (1.1%) were currently infected with active syphilis. Less than one percent (0.8%) tested Hepatitis B positive. Hepatitis C prevalence rate was high, 47.5 percent (42 to 52 at 95% CI).

Most of the PWIDs are young, unmarried, literate and imprisoned at least once

Majority of PWIDs (60%) were 20-29 years old. Most of PWIDs were literate (97%).
Just over half of PWIDs (55%) were unmarried. Among married, the median age at first marriage was 22 years (range 14 to 34 years) and majority (72%) were married at the age below 25 years. Forty-seven percent of PWIDs were from Morang, 30 percent from Sunsari and 23 percent were from Jhapa. The representation of disadvantaged janajati ethnic groups and upper caste groups was high (73%). Majority of the PWIDs (68%) had been imprisoned or detained at least once. Nearly half of PWIDs (49%) been imprisoned or detained in the past year, among them, 43 percent of PWIDs imprisoned of drugs related reasons.

Drug use at a young age is prevalent and some PWID still possess high risk behaviours

Alcohol consumption was common among PWIDs as 67 percent of PWIDs had consumed alcohol. Most of the PWIDs had used drugs for a longer duration, with an average of 9 years. More than half of PWIDs (54%) injected drugs before 20 years. Similarly, the mean duration of injecting drugs was six years and 49 percent of them injected drugs more than five years. Most of PWIDs (90%) injected drugs in the last month and most of them used sterile syringe/needle (87%) and sterile injecting equipment (89%). Marijuana (64%) and Nitrosun (26%) were most used drugs and Diazepam (73%) and Phenergan were most injected drugs. Moreover, most of PWIDs (96%) used a combination of drugs. In the survey there are still some PWIDs having high-risk behaviors like the use of pre-used needles and syringe, use of needle/syringe given by friend/relative and used a needle/syringe picked it up from a public place in their last three injections. Among PWIDs injected drugs last week, some PWIDs followed some risky drug sharing practices in the past week. For example, using needle/syringe used by someone (9%), using needles/syringes left in public places (3%) and injecting with pre-filled needle/syringe

(8%), injecting with syringe after drugs were transferred into it from another's syringe (9%), sharing bottle, spoon, cooker, vial/container, cotton/filter and rinse water (11%) and drewing drug solution from a common container used by others (14%). Two percent of PWIDs never cleaned previously used needle/syringe in the past week. Among the PWIDs who clean previously used needle/syringe, only two percent had cleaned the needle/syringe with bleach, 40 percent had cleaned them with saliva, water, and urine. The trend analysis of unsafe injecting drugs behaviours of PWIDs in past week revealed that unsafe injecting practice in the week preceding the survey has significantly decreased since the first round of IBBS surveys (2003) to latest rounds (2015) (p-value <0.05).

PWIDs are sexually active, had multiple sexual partners, had sex with FSWs

Most of the PWIDs (98%) reported to have had at least one sexual contact with a female partner. The median age of first sexual intercourse for PWIDs was 17 years. Most of PWIDs had sexual debut before 20 years (84%). Nearly half of PWIDs (49%) had multiple sexual partners. About 60 percent of the PWIDs had regular female sex partners, 17 percent of PWIDs had regular FSWs and 30 percent of PWIDs had non regular female sex partners.

PWIDs are more cautious regarding the use of condom with FSWs, however, not cautious regarding use of condom with wives

PWIDs who used condoms in their most recent sexual contact with their regular female sexual partner was 31 percent; 58 percent with their non-regular female sex partner; and 73 percent with FSWs. Consistent condom use among PWIDs during sexual intercourse in past year was relatively high with FSWs (53%). Consistent condom used in past year with non regular sexual partner was 32 percent and consistent condom use with regular female sex partner was least reported (13%) by PWIDs. A similar pattern was also observed in trend analysis of consistent condom with different partners in the past year. In all rounds of IBBS surveys, the lowest use of consistent condom use was reported with regular female sex partners (wives/live in partners) followed by non regular female partners and FSWs.

Comprehensive knowledge on HIV is considerably moderate; Most of the PWIDs are aware of HIV testing centers and undergone HIV test

All the PWIDs had heard of HIV. Overall, 46 percent of the PWIDs correctly identified all three major knowledge indicators ABC as HIV-preventive measures whereas 48 percent of PWIDs were aware of all the five major indicators i.e. BCDEF. The trend analysis revealed that comprehensive knowledge on HIV had significantly decreased from previous IBBS Surveys. The main source of knowledge on HIV was posters (97%), television (95%), newspapers (94%), Radio (94%), friends/Relatives (92%) and billboards/signboards (90%). A high proportion of PWIDs (64%) had undergone HIV test and among them, 48 percent had taken test in past 12 months. Majority of PWIDs (95%) had also obtained the test result.

All of the PWID do not have Access to free Condoms

Less than half of PWIDs (47%) do not access to free condoms. More than half of PWIDs (52%) obtained condoms free of cost from any organization. Most of PWIDs were aware that condoms are available at the pharmacy (95%), hospital (38%) and clinic (27%). PWIDs were also asked about time needed to obtain Condoms. Most of PWIDs (92%) said that the nearest place they could get condoms was up to 30 minutes away. About 32 percent of

PWIDs carried condoms. The most common sources of information were newspapers/posters (96%), television (95%), pharmacies (95%), and Radio (91%), billboards/signboards (91%) and Health post (91%).

The practice of seeking STI treatment is Low

Most of PWIDs (92%) heard of STIs. The most commonly cited genital symptoms of STIs were genital ulcer/sore blister (37% in female and 53% in male) and genital discharge (35% in female and 44% in male). The reported experience of genital discharge was seven percent in the past year and among them, 35 percent reported having such symptom at the time of survey. Similarly, nine percent of PWIDs reported experienced of genital ulcers/sore in the past year and among them, 50 percent reported having the symptom at the time of survey. Among PWIDs who had experienced STI, 57 percent had never sought any treatment. However, 38 percent seek treatment from private doctor and hospital/health post.

Exposure to HIV Awareness Programs is Low

Majority of PWIDs were exposed to different HIV program components in the past year. For example, 43 percent of PWIDs had interacted with peer/outreach educators/community mobilizers (PE/OE/CM) and 65 percent of them visited DIC. However, only four percent of PWIDs visited STI clinics and 23 percent of PWIDs had visited HTC center. In the trend analysis, it was found that exposure to HIV and AIDs program declined from previous IBBS surveys.

Exposure to OST services is low

More than one-fifth of PWIDs (22%) received OST services and among them 31 percent received these services in past 12 months. Majority of PWIDs (64%) received methadone and the rest received Buprenorphine. Eight percent (2) of them are still in therapy.

Knowledge on PMTCT, ART and CHBC needs to be Increased

One fifth (20%) of PWIDs knew about PMTCT services and among them 64 percent of them knew the place to get PMTCT services. Half of PWIDs had heard about ART services for PLHIV. Among them, more than half of PWIDs know the place to obtained ART services. Most of PWIDs mentioned Government hospital (37%) and BPKIHS (50%) are providing ART services. Similarly 18 percent of PWIDs heard about viral load testing services for PLHIV and more than one third of PWIDs (34%) heard about CHBC service provided for PLHIV.

Stigma and Discrimination among PLHIV is considerably low

Most of PWIDs were willing to take care of an HIV positive relative, a male relative and female relative at their home. Most of PWIDs would buy food from shopkeeper with HIV positive and agreed that PLHIV should continue to work if he is not sick. Most of PWIDs also mentioned that children with HIV positive should attend school with children with HIV negative. However, 47 percent of PWIDs would disclose HIV status of their family member.

Program Implications and Recommendations

Based on the findings from this study, the following program implications and recommendation are discussed below.

- HIV prevalence had remained stable over years, suggesting a public health concern. *Intensified and focussed program is needed incorporating GOs and I/NGOs to reduce the HIV prevalence in the study districts. Further research is also needed to explore the factors for steady trend of HIV prevalence.*
- Nearly half of PWIDs were suffering from Hepatitis C. *Special attention is needed to reduce the transmission of Hepatitis C through education, improved awareness of risks and access programs.*
- PWIDs had started injecting drugs in their youth and adolescence. A large proportion of PWIDs in all the sites were less than 25 years of age when they first injected drugs. *This indicates that young groups should be reached with HIV and STI programs and education. Specific program activities that target school children, college students, youths, and adolescents should be designed to impart HIV/AIDS awareness, injecting behaviours and sex education.*
- Although high risk behaviors of PWIDs had decrease in recent years, there are some PWIDs having high-risk behaviors. *Behavioral change and safe injecting and sexual practices through wider mobilization of PEs/OEs should be promoted.*
- Pre-marital sexual relationship was common among PWIDs. The median age at first sexual intercourse among youth PWIDs was 17 years and majority of PWIDs had sexual intercourse before 20 years. *Messages on delayed sexual debut should be incorporated and promoted among PWIDs.*
- PWIDs are sexually active, have multiple sexual partners are more engaged in risky sexual behaviors. *Safer sex behaviors including being faithful to their sexual partners, partner reduction, consistent and correct use of condom should be promoted and disseminated among PWIDs. Strategic behavioral communication materials on safer sex behaviors should be available where PWIDs most frequently assembled.*
- Practice of visiting FSWs exists among PWIDs and among them there are some PWIDs who never used condom with FSWs. *Hence, awareness on risk and preventive measures of HIV along with promotion of consistent condom use especially with FSWs needs to be strengthened among PWIDs.*
- Consistent condom use with regular female sex partners is low. Consistent condom use is also found lower among PWIDs while having sex with non regular female sex partners. *This may increase vulnerability for HIV and STI transmission. Program should focus on the consistent condom use with wives, girlfriends and female partners.*
- Radio and TV were the frequently reported and preferred sources for HIV and AIDs and condom. *This suggests that message should be continuously promoted through these channels.*

- Comprehensive knowledge had significantly decreased from previous rounds of IBBS Surveys from 2003 to 2015. However the comprehensive knowledge had increase slightly from 2012 to 2015. *Therefore, comprehensive knowledge should be promoted through multiple channels.*
- The practice of seeking STI treatment among PWIDs is not common. *Treatment seeking behaviors should be promoted among those PWIDs who engaged in risky sexual behaviors. Similarly, STI treatment and HIV testing and counselling behavior should be promoted through interpersonal and mass communication. Information of government and NGO health facilities providing STI treatment services should be promoted.*
- Exposure to structured HIV program (peer education, DICs, HTC/STI clinics etc.) found to be declined from previous round of IBBS surveys. *Targeted intervention among PWIDs with the provision of peer and outreach education, HTC/STI clinic including care and support will help increase the exposure to HIV and AIDs programs.*
- Health post and other public health services centers were frequently reported most convenient places to obtaining free condoms. *Free condom distribution through these sites should be continued and promoted.*
- Knowledge on ART services, PMTCT services, CHBC services is considerably low among PWIDs. *This calls for scaling up HIV and AIDS education and awareness programs incorporating these services.*
- Exposure to OST services is low. *Availability and awareness on OST services should be provided among community. OST services should be linked with harm reduction programs.*

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ANNEXURE

Annex 1- Formula for Sample Size Calculation for the IBBS Surveys

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

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

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

P1 = the estimated number of an indicator measured as a proportion at the time of the first survey or for the control area

P2 = the expected level of the indicator either at some future date or for the project area such that the quantity (P2-P1) is the size of the magnitude of change it is desired to be able to detect

Zα= the Z-score corresponding to the degree of confidence with which it is desired to be able to conclude that an observed change of size (P2-P1) would not have occurred by chance (α– the level of statistical significance), and

Zβ= the Z-score corresponding to the degree of confidence with which it is desired to be certain of detecting a change of size (P1-P2) if one actually occurred (β– statistical power).

Annex-2 UNGASS Indicators

Indicators	Male	Less than 25 years	More than 25 years
	Number (%)	Number (%)	Number (%)
Percentage of people who inject drugs reporting the use of a condom the last time they had sexual intercourse (n=360)	111(38%)	63(45%)	48(31.6%)
Percentage of people who inject drugs reporting the use of sterile injecting equipment the last time they injected (n=325)	289(88.9%)	144(89.5%)	145(88.3%)
Percentage of people who inject drugs who received an HIV test in the past 12 months and know their results (n=360)	108(30%)	57(31.7%)	51(28.3%)
Percentage of people who inject drugs who are living with HIV (n=360)	30(8.3%)	13(7.2%)	17(9.4%)

Annex-3 National Monitoring and Evaluation Guidelines Indicators

Indicators	Total	Less than 25 years	More than 25 years
	Number (%)	Number (%)	Number (%)
Percentage of people who inject drugs who are living with HIV (n=360)	30(8.3%)	13(7.2%)	17(9.4%)
Percentage of people who inject drugs reporting the use of sterile injecting equipment the last time they injected (n=325)	289(88.9%)	144(89.5%)	145(88.3%)
Percentage of people who inject drugs reporting the use of a condom the last time they had sexual intercourse (n=360)	111(38%)	63(45%)	48(31.6%)
Percentage of people who inject drugs who received an HIV test in the past 12 months and know their results (n=360)	108(30%)	57(31.7%)	51(28.3%)
Percentage of people who inject drugs who both correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV transmission (n=360)	175(48.6%)	76(43.4%)	99(56.6%)

Annex 4- Monitoring Checklist

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

Name of Research Organization		**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 - Respondent Driven Sampling • Recruitment process o How many seeds selected? o How are the PWID recruited? o Local NGO/CBO involvement in PWID identification? o Coupon system used to recruit PWID o Recruitment map of each seed (recruitment wave)	SI	

S.No.	Activity	Method	Observation and comments
	• Describe the flow of the study process once an PWID arrives at the study site o 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
	  o NHRC approval letter
	  o IEC materials on HIV and STI and Hepatitis B & C
	  o Informational posters on the wall
	  o Map of the study site
	  o Chart to monitor study progress
	  o Flow chart of study process
	
	• Laboratory room cleanliness and organization
	  o Is the laboratory room clean?
	  o The lighting in the room?
	  o Is there any food item in the lab?
	• Is cold chain maintained?
	  o Is the ice box filled with enough ice packs to maintain the required 2-8 degree Celsius temperature
	  o During transportation of collected serum, are samples removed from cold box and sent to main lab for storage at the end of the day?
	  o For Pokhara site – how often are the serum samples sent to the research laboratory in Kathmandu?
	  o Who checks the temperature of the refrigerator used for storage at the main laboratory and how often?
	  o Has there been any reported failure of the
		O	

S.No.	Activity	Method	Observation and comments
	cold chain system? If so, for what reason(s)? o Are the samples appropriately labeled during storage? o 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 o Is there a red waste bin with lid, labeled infectious waste? o Does the lab technician dispose of all infectious waste as per protocol every day? o 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 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 studies 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]**	O	
8	[By direct observation of interview or if not able to observe the interview, then check randomly selected completed questionnaire(s) to ensure the following:] • Is the consent form read to the respondent in Nepali?	O or R	

S.No.	Activity	Method	Observation and comments
	○ 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? • Are all the questions asked? • If questions are skipped are they as per the skipping rules indicated in the questionnaire? • Are the completed questions peer reviewed? If yes when and how?		
9	Interview room set-up: ○ Comfortable and clean setting? ○ Flow chart in every room? ○ Interview guidelines in the rooms?	O	
	Counseling process		
10	Ask the counselor to explain the counseling process and show the counseling guidelines	SI	
11	Ask who gives her the test results (both HIV and Syphilis)	SI	
12	Counseling room set-up: ○ Comfortable and clean setting? ○ Flow chart in the room? ○ HIV flip chart used during counseling? ○ Dildos, condoms and IEC materials used for counseling?	O and SI	
	Meeting with all field staff		

S.No.	Activity	Method	Observation and comments
13	[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:**	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		
	Poviclone Iodine solution 450ml		
	Poviclone 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		
	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 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 f. Post exposure prophylaxis	O	
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	O	

	p. Tourniquet q. Supportive cushion r. Sodium Hypochlorite Solution		
8	All the three types of rapid HIV 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 and Syphilis testing algorithm as recommended by study protocol.	O/SI	
11	Laboratory staff wears lab coats and gloves during specimen collection, processing and testing.	O	
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 venipuncture, 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	O/R	

	daily test results with remarks, if necessary, is available.		
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. (make sure the test result is not mentioned in EQAS form)	O/R	
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*		

Last monitoring visit by: NCASC _____ Save the children _____

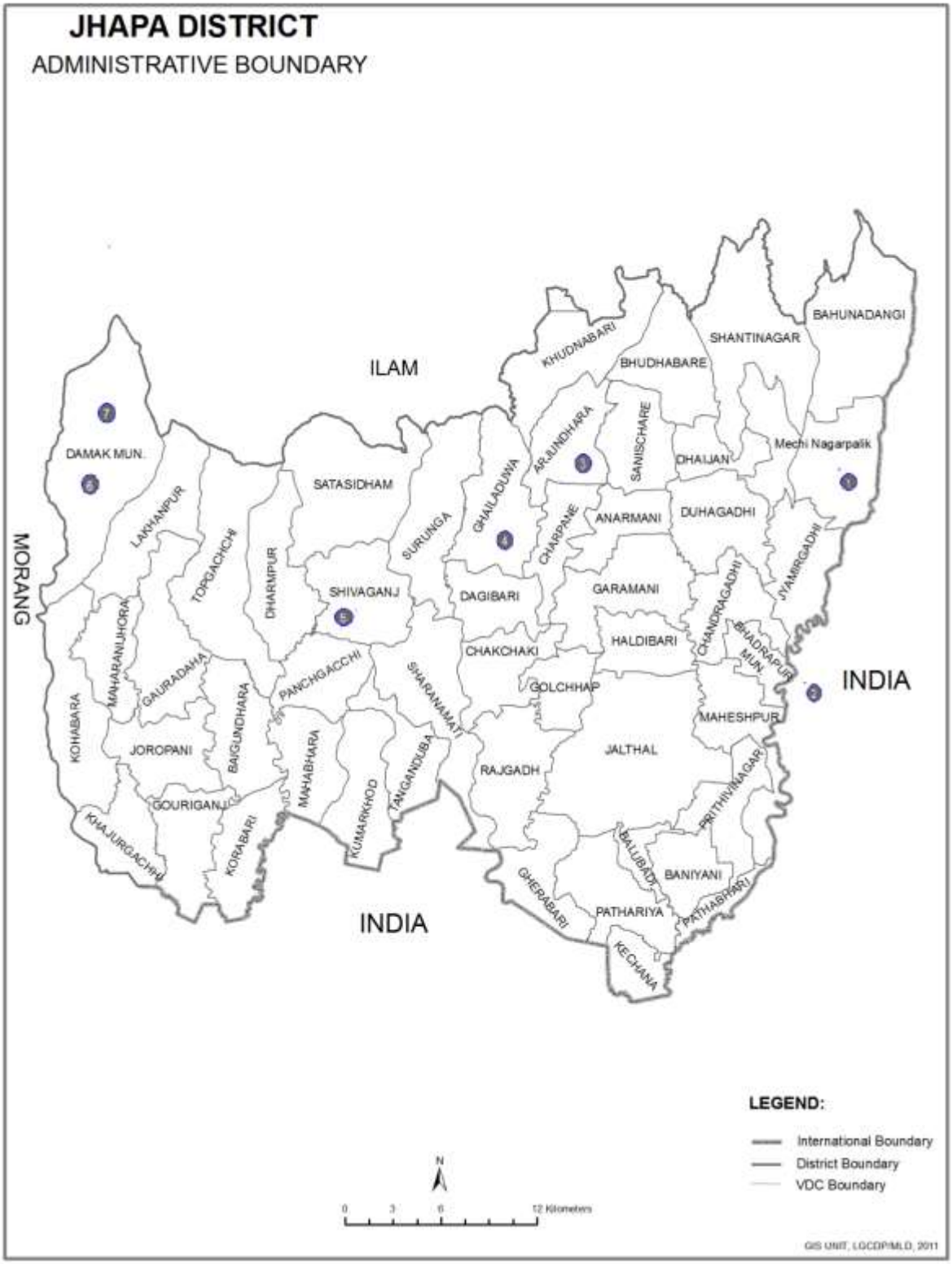
Annex 5- List of Final clusters selected for the study

Id	Cluster Name	PWID total No.	Location
1	Kakarvitta	39	Kalikhola, Sukedanda, Mechi danda, garamthan Mandir, Tokla Bagan, Sungava tol, Salghari, Dovan(Charghare), Mechipul
2	Bhadrapur A	47	Bhanu Chowk, Devi Basti, Mechi Kinar, Jhapa Chowk, Narasing Bagan
3	Birtamod A	46	Krishna Hall Road,Hickola, Dharma Kanta, New Bus Park, Charali Chowk
4	Dudhe	32	Dudhe, Jhiljhile, Maidhar
5	Padajungi	41	Mangalbare, Padajungi Nursery, Sabitra Chowk
6	Damak A	48	Ratuwa Bridge, Kirat Chowk, Aankha Sibir
7	Damak C	45	Hawaldar Chowk, Mero mobile tower, Baghkhor, Beldangi
8	Urlabari A	44	Bargachhi, Munal tol, Chiura mill, Durga tol, Pipal Bot
9	Urlabari B	44	Urlabari Chowk, East Bus station, Mawa khola, Jaipath Tol,Pani Tanki, Larun Cowk,
10	Pattari A	33	Rabi Chowk, Sukumbasi tole, yalambar chowk, Amardaha,
11	Belbari	34	Bazzar line, lalbatti chowk, higure, Belbarri Chowk, laxmi marga, Kerabari Chowk, Haat khola
12	Koshiharacha B	34	Salakpur, Gachiya
13	Khanchanbari	47	Pokhariya Chowk, Kanchanbari Chowk, santi chowk, Nobel Hospital, Rajbansi Chowk
14	Sarauciya	45	Keshaliya Road, masjid, Lama tol, Ram Mandir, budhabare Haat, Sai Mandir, Santi chowk
15	Hospital chowk/ Tintoliya	45	Devkota chowk, Nyuro Hospital Road, Gograha pul, hospital Chowk,
16	Hatkhola	45	Rangeli road, Hatkhola,
17	Pichayra	45	Bakri Chowk, Diurga mandir, Panchali, Dharanidhar chowk,
18	Road Sess Cowk	38	Road Shes Chowk, Campus area,
19	Bhatti mode	33	Bhatti Mod, Talim Kendra line, Jhameli Chowk, hanuman mandir
20	Taxi stand/ Boarder	48	Taxi stand, Boarder area
21	Dachhin gate	38	Dakshin Gate, boarder line
22	Itahari B	40	Gorkha Plotting, Halgadha, Janata Basti Chowk, Janata basti Dhara Tole,
23	Itahari C	43	Kali Mandir, Resam Kheti, Sano Chaur(Janata School), Reliance Mill area
24	Dharan A	40	Pindeswar Chowk, bagarkot, everest Line,Nirajan Basti
25	Dharan C	34	Hariyali, Kirati Chowk, sunam tole,
26	Dharan E	42	Sabji mandi, sole Pul, Sainik Chowk, Bhanu Chowk
27	Dharan F	45	Bijayapur Chowk, Budhasubba, Dantakali,pindeswar

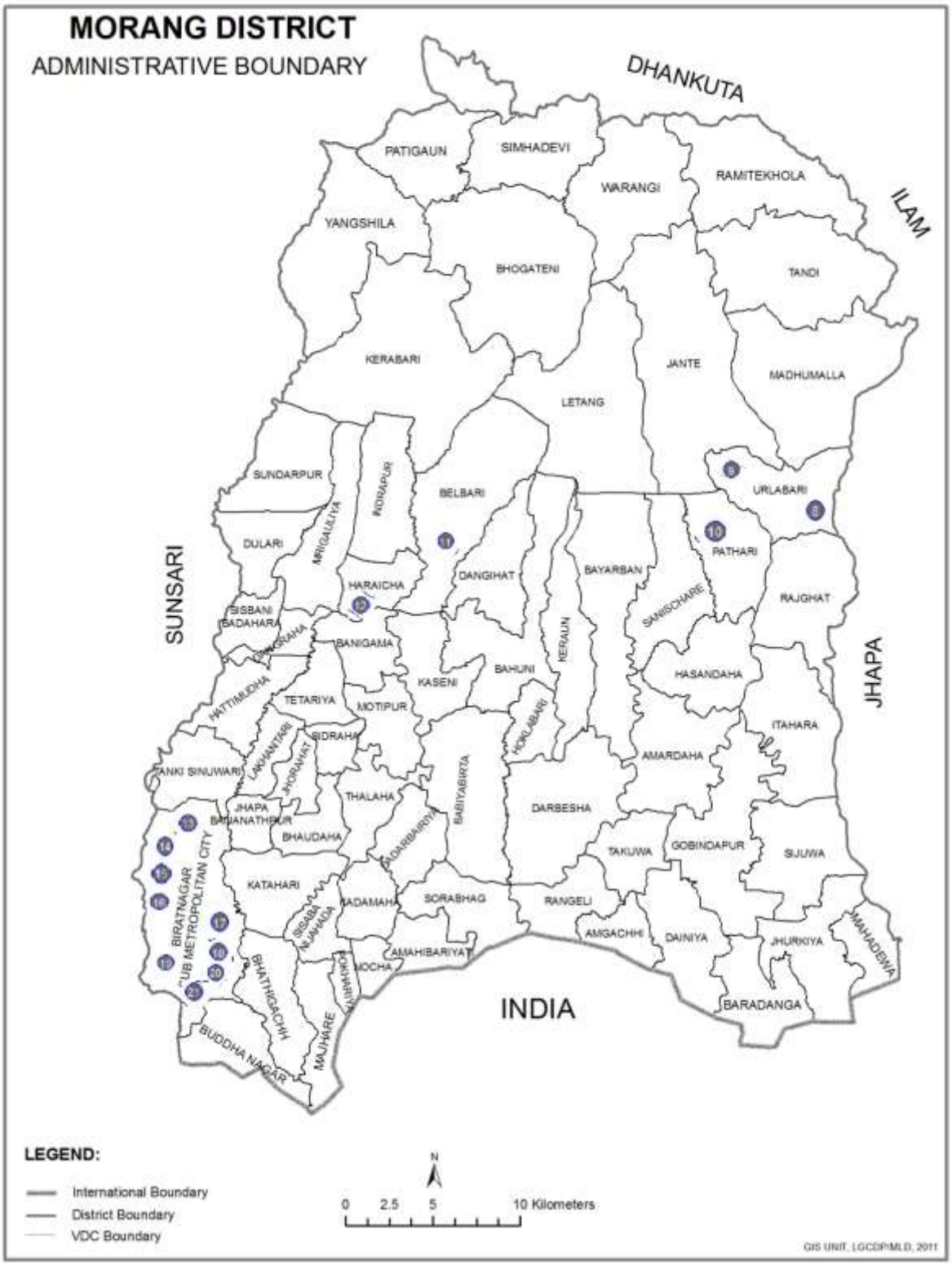
Id	Cluster Name	PWID total No.	Location
			mandir
28	Dharan H	33	Bagaincha Line, Savagriha Line,Purano traffic office
29	Dharan J	45	Chhata chowk, Singa devi Chowk, Nagarpalika Line, Pani tank Line, Madhesi Galli, Recross line
30	Dharan K	42	Mangalbare chowk, santi Chowk, Durga Chowk,

Annex 6- Maps

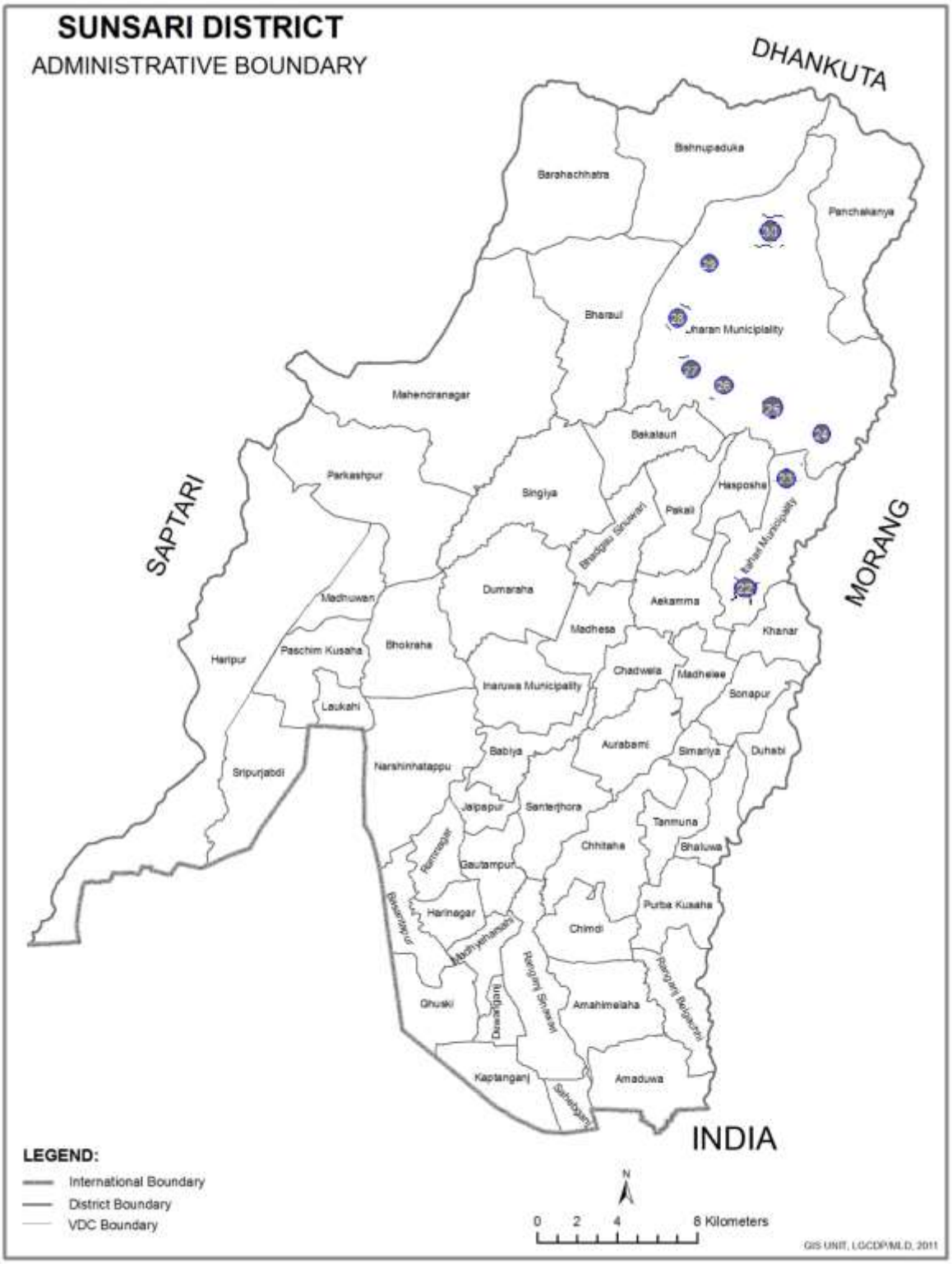
Map of Jhapa District showing selected clusters



Map of Morang district showing selected clusters



Map of Sunsari district showing selected clusters



Annex 7-Further Analysis

Gather to injecting drugs	Number (N=360)	Percent
Jungle	80	22.2
Silent space	85	23.6
Riverside	25	6.9
Bus park	3	0.8
School/Campus	4	1.1
Boarder	41	11.4
Own toilet	39	10.8
Chowk	28	7.8
Open house	22	6.1
Own room	9	2.5
Pasal	6	1.7
Garage	5	1.4
Open toilet	5	1.4
Others (Restaurant, *Nahar*, Pool house Temple, Near Airport)	8	2.4

Annex 8 – Study Questionnaire

Integrated Biological and Behavioral Surveillance Survey
among People Who Inject Drugs in Eastern Region

Namaste! My name is ....., I am here from ……to collect data for a research survey. This survey is being conducted by National Centre for AIDS and STD Control (NCASC), Ministry of Health and Population. During this interview, I will ask you some personal questions that will be about sexual behavior, use and promotion of condoms, STI/HIV/AIDS and use of drugs and needle/syringes. You may feel uncomfortable to answer some questions relating to your personal behavior, but it is important that you provide correct information. We will also take about 5-7 ml blood sample for testing HIV and syphilis infection. If it is determined that you have any STI symptoms, we will provide treatment free of charge. We also will treat for syphilis on the basis of RPR test on the same day of interview. The information given by you will be strictly treated as confidential. Nobody will know whatever we talk about because your name will not be mentioned on this form and collected samples. All the mentioned information will be used only for the survey purpose. This survey will take about an hour.

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

Would you be willing to participate?

1. Yes 2. No

Signature of the interviewer: [redacted] Date: [redacted] /2072

Operational definition of PWIDs:

"Current drug injectors aged 16 years or above who had been injecting drugs for non-medical purposes for at least three months prior to the date of the survey"

Seed:

Yes……1 No……..2

Coupon brought by the respondents ☐☐☐☐☐ *(Write '0' for seed)*

Coupon number given:

☐☐☐☐☐ 1.

☐☐☐☐☐ 2.

☐☐☐☐☐ 3.

Did the interviewee abandon the interview?

Yes ……..1 No……2

(Precise the number of the last question completed: Q _____)

Interviewer Name: _____ Code Interviewer: _____

Date Interview: _____/ _____/ 2072

Checked by the supervisor: Signature: _____ Date: _____/ ____/ 2015

Data Entry # 2: Clerk's name: Date / /2015

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

1. Yes 2. No (continue interview)

↓

When?

_____Days ago (make sure that it was interviewed by …… and close the interview)

002. Respondent's ☐☐☐☐☐☐ ID #:

002.1 Respondent referred by coupon no. ☐☐☐☐☐☐

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

Arm……	1	Wrist……..	2
Femoral/Groin area……	3	Calf muscles…….	3
Thigh……	5	Hand……	6
Behind Knee……...	7	Armpit……..	8
Finger…….	9	Forearm…….	10

002.3 Did you share needle/syringe with the friend who brought you here? (Don't ask with seed)

1. Yes 2. No

002.4 How long you have been injecting drugs?

☐☐ ☐☐

Years Months

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

003. Interview Location (to be filled by interviewer)

003.1 Name of location----------

003.2 Ward No.----------

003.3 VDC/Municipality: _____

003.4 District: _

1.0 BACKGROUND OF RESPONDENT

9	Questions	Coding Categories		Skip to
101	Where are you living now? **(Write current place of residence: Ward No. Tole, Lane etc.)**	Ward ..... VDC/Municipality_____ District_____		
102	How long have you been living continuously at this location? **(Write 995 if less than one month)**	Month Always (since birth) Others (Specify)_____	0 96	
103	In the last 12 months have you been away from your home for more than one-month altogether? **(Left home, village/district)**	Yes No Don't know No response	1 2 98 99	
104	How old are you?	Age ..... **(write the completed years)**		
105	What is your educational status? **(Circle '0' if illiterate, '19' for the literate without attending the school, and write exact number of the passed grade)**	Illiterate Literate Grade **(write the completed grade)**	0 19	
106	What is your caste? **(Specify Ethnic Group/Caste)**	Ethnicity/Caste _____ Code No.....		
107	What is your current marital status?	Never married Married Divorced/Permanently separated Widow Other (Specify)_____	1 2 3 4 96	→107
108	How old were you when you first got married?	Age ..... **(write the completed years)**		
109	Which of the following best describes your current living situation? (Select only one option)	Homeless on the street Living in own home Living in a residential hotel Rented apartment Other(specify)_____	1 2 3 4 96	
110	With whom you are living now?	Living with wife Living with female sexual partner Living without sexual partner Others (Specify)_____ No response	1 2 3 96 99	
111	How many dependents are there in your family?	Number: ……..		

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

2.0 DRUG USE

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

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

Description	Used in Last-Week				Injected in Last-Week			
	YES	NO	DK	NR	YES	NO	DK	NR
1. Tidigesic					1	2	98	99
2. Brown Sugar	1	2	98	99	1	2	98	99
3. Nitrosun	1	2	98	99	1	2	98	99
4. Ganja	1	2	98	99				
5. Chares	1	2	98	99				
6. White Sugar	1	2	98	99				
7. Phensydyl	1	2	98	99				
8. Calmpose	1	2	98	99	1	2	98	99
9. Diazepam	1	2	98	99	1	2	98	99

	10. Codeine	1	2	98	99	1	2	98	99
	11. Phenergan	1	2	98	99	1	2	98	99
	12. Cocaine	1	2	98	99				
	13. Proxygin	1	2	98	99	1	2	98	99
	14. Effidin	1	2	98	99	1	2	98	99
	15. Velium 10	1	2	98	99	1	2	98	99
	16. LSD	1	2	98	99				
	17. Nitrovate	1	2	98	99	1	2	98	99
	18. Combination (Specify)	1	2	98	99	1	2	98	99
	96. Others (Specify)_	1	2	98	99	1	2	98	99

204.0.1	Have you used these drugs in combination form?	Yes.....1 No .....2 No respons……..99	→ 204.1
204.0.2	If yes, how many drugs has been used?	……..(numbers)	
204.0.3	What are the most frequently combination that is used ?	……..(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?	From _____drug To _____drug	
204.1.2	What is the reason for switching?	Reduce the use of Tidigesic……1 Costly……..2 Easily unavailable……3 Others(specify)_____96	
205	How many times would you say you injected drugs yesterday?	Times ..... Not injected 0	→ 209

206	Would you like to tell me why you did not injected yesterday?	Lack of money……..1 Inhaled Ganja……3 Taken brown sugar……4 Injected last day……5 Drink Alcohol……6 Unavailability of drugs……..7 Was in police custody……8 Taken Nitrosun……9 Was ill……..10 Used another medicine……..11 Busy in household work…….12 Others(specify)_____96	
207	How many days ago you injected drugs ?		
208	How many times would you say you injected drugs on the last day?	Times	
209	During the past one-week how often would you say you injected drugs?	Once a week .....1 2-3 times a week.....2 4-6 times a week.....3 Once a day.....4 2-3 times a day .....5 4 or more times a day.....6 Not injected in the last week.....7 Don't know .....98 No response 99	
210	(Ask whether the respondent was ever arrested or not then ask the following questions) Have you ever been imprisoned or detained for any reason?	Yes.....1 No .....2 No response 99	211
210.1	In the past year, have you ever been imprisoned or detained for any reason?	Yes.....1 No .....2 No response 99	211
210.2	In the past year, have you ever been imprisoned for drug-related reason?	Yes.....1 No .....2 No response 99	211
210.3	In the past year, how many times have you been imprisoned for drug-related reason?	Times ..... No response 99	
210.4	Have you ever injected drugs while in prison?	Yes.....1 No .....2 No response 99	

211	How often 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 No response……99	

3.0 NEEDLE SHARING BEHAVIORS

Q.N.	Questions	Coding Categories	Skip to
301	Think about the times, you have injected drugs yesterday/last day. How many times d i d you inject drugs on that day? **(Fill the number from answer to Q. 205 or 208 and verify by asking the respondent)**	Times	
302	The last time you injected, how did you get that syringe/needle? **(Public place means places other than the IDU's home that are used to hide syringe/needle)**	My friend/relative gave it to me after his use 1 Unknown person gave it to me after he use I picked it up from a public place which was 2 left there by others I picked it up from a public place 3 which was left there by myself I used a new needle/syringe given by NGO 4 staff/volunteer **(write the name of organization)** 5 I used a needle/syringe which I purchased I reused my own needle/syringe 6 My friend gave new needle/ 7 syringe Others (Specify) 8 Don't know 96 No response 98 99	
302.1	If you were in a group the last time that you injected, how many different people in the group do you think used the same needle?	Nos. …… Injected alone ……95	
303	Think about the time before the last time you injected, how did you get that syringe/needle? **(Public place means places other than the IDU's home that are used to hide syringe/needle)**	My friend/relative gave it to me after his use 1 Unknown person gave it to me after he use 2 I picked it up from a public place which was left there by others 3 I picked it up from a public place which was left there by myself 4 I used a new needle/syringe given by NGO staff/ volunteer 5 **(write the name of organization)** I used a needle/syringe which I purchased I reused my own needle/syringe 6 My friend gave new needle/Syringe 7 Others (Specify) Don't know 8 No response 96 98 99	

303.1	That time, If you were in a group, how many different people in the group do you Think had used the same needle?	Nos. ..... Injected alone	
304	Now think about the time before (before Q.303), how did you get that syringe/ needle? **(Public place means places other than the PWID's home that are used to hide syringe/needle)**	My friend/relative gave it to me after his use ..... 1 Unknown person gave it to me after he use ..... 2 I picked it up from a public place which was left there by others ..... 3 I picked it up from a public place which was left there by myself ..... 4 I used a new needle/syringe given by NGO staff/ volunteer ..... 5 **(Write the name of Organization)** I used a needle/syringe which I purchased ..... 6 I reused my own needle/syringe ..... 7 My friend gave new needle/syringe ..... 8 Others (Specify) ..... 96 Don't know ..... 98 No response 99	
304.1	That time If you were in a group, how many different people in the group do you think had used the same needle?	Nos…… Injected alone ……..95	
305	Think about the times, you have injected drugs during the past one-week. How often was it with a needle or syringe that had previously been used by someone else?	Every times ..... 1 Almost every-times ..... 2 Sometimes ..... 3 Never used ..... 4 Not injected in the last week ..... 5 → 314 Don't know ..... 98 No response 99	
305.1	When you injected drug during the past week, how often did you use a syringe/needle that had been left in public place? **(Public place means places other than the IDU's home that are used to hide syringe/needle)**	Every times ..... 1 Almost every-times ..... 2 Sometimes ..... 3 Never ..... 4 Don't know ..... 98 No response 99	

306 In the past one-week, did you ever share needles and syringes with any of the following?

Read out list. Multiple answers possible	**Yes**	**No**	**DK**	**NR**
1.Your usual sexual partner	1	2	98	99
2.A sexual partner who you did not know	1	2	98	99
3.A friend	1	2	98	99
4.A drugs seller	1	2	98	99
5.Unknown Person	1	2	98	99
96. Other (Specify) _____	1	2		

307	With how many different injecting partners did you share needles or syringes in the past one-week? **(Count everyone who injected from the same syringe)**	Number of partners ..... Don't know ..... No response 98 99	
308	In the past one-week, how often did you give a needle or syringe to someone else, after you had already used it?	Every times ..... 1 Almost every-times ..... 2 Sometimes ..... 3 Never ..... 4 Don't know ..... 98 No response 99	
309	In the past-week, did you ever inject with a pre-filled syringe? **(By that I mean a syringe that was filled without you witnessing it)**	Yes ..... 1 No ..... 2 Don't know ..... 98 No response 99	
310	In the past one-week, how often did you inject drugs using a syringe after someone else had squirted drugs into it from his/her used syringe? **(Front-loading/back-loading/ splitting)**	Every times ..... 1 Almost every-times ..... 2 Sometimes ..... 3 Never ..... 4 Don't know ..... 98 No response 99	
311	In the past one-week, when you injected drugs, how often did you share a cooker/ vial/container, cotton/filter, or rise water?	Every times ..... 1 Almost every-times ..... 2 Sometimes ..... 3 Never ..... 4 Don't know ..... 98 No response 99	
312	In the past one-week, how often you draw up your drug solution from a common container used by others?	Every times ..... 1 Almost every-times ..... 2 Sometimes ..... 3 Never ..... 4 Don't know ..... 98 No response 99	
312.1	In the past one year have you switched from sharing to non-sharing practice?	Yes ..... 1 No 2	
	Check Q no. 305 and those who have not injected in the last one week go to Q314		

313	In the past one-week, when you injected with needles or syringes that had previously been used, how often did you clean them first?	Every time 1 Almost every-times 2 Sometimes 3 Never 4 Never reused 5 Others (Specify)_____ 96 Don't know 98 No response 99	314
313.1	If cleaned, how did you usually clean them?	With water 1 With urine 2 With saliva 3 Boil the syringe in water 4 With bleach 5 Burning the needle with matchstick Others (Specify)_____ 6 Don't know 96 No response 98 99	
314	Can you obtain new, unused needles and syringes when you need them?	Yes 1 No 2 Don't know 98 No response 99	316
315	Where can you obtain new unused needles and syringes? **(Do not read out list. Multiple answers possible. Probe only with "Anywhere Else?")**	Drugstore 1 Other shop 2 Health work 3 Hospital 4 Drug wholesaler/drug agency 5 Family/relatives 6 Sexual partner 7 Friends 8 Other drugs users 9 Drugs seller 10 Needle exchange program of___ **(write the name of Organization)** Steal from legitimate source (hospital./pharmacy) 11 Buy on streets 12 Other (Specify)_____ 13 96	
316	In the past one-year, did you ever inject drug in another city/district (or another country)?	Yes 1 No 2 Don't remember 98 No response 99	316.4

316.1	If yes, in which other cities/districts did you inject, including cities in other countries?	Cities_____ _____ _____ Districts_____ _____ _____ Country _____ _____ _____	
316.2	Think about the times you injected drugs in another city/district (including abroad) how often was it with a syringe/needle that had previously been used by someone else?	Every times ..... 1 Almost every-times ..... 2 Sometimes ..... 3 Never ..... 4 Don't know ..... 98 No response 99	
316.3	When you injected drugs in another city, how often did you give a syringe/needle to someone else?	Every times ..... 1 Almost every-times ..... 2 Sometimes ..... 3 Never ..... 4 Don't know ..... 98 No response. 99	
316.4	In the last 12 months, have any of an outreach worker, a peer educator or a staff from a needle exchange program given you a new needle/syringe?	Yes ..... 1 No ..... 2 Don't' remember ..... 98 No response 99	
317	Are you currently under treatment (or receiving help) or have you ever received treatment (or help) because of your drug use?	Currently under treatment ..... 1 Was in treatment but not now ..... 2 Have never received treatment. ..... 3 No response 99	401
318	How many months ago did you last receive treatment or help for your drug use?	Months Don't know ..... 98 No response 99	
319	What kind of treatment or help you received? (Do not read out the responses, probe asking, "Are there any other kinds of treatment that you've received?" (**Multiple Answers Possible)**		

Types of Treatments	**Name of Institutions**
1. Outpatient counseling	
2. Self-help groups	
3. Detoxification w/methadone	
4. Maintenance w/methadone	
5. Detoxification w/other drugs	
6. Detoxification with no drug	
7. Residential rehabilitation	
8. Helped for cold turkey without medicine	

9. Forced for cold turkey by others without treatment		
96. Other (Specify)		
99. No response		

4.0 SEXUAL HISTORY

Q.N.	Questions	Coding Categories	Skip to
401	How old were you at your first sexual intercourse?	Years old ..... ***(Write completed years)*** Never had sexual intercourse ..... 0 → Don't know ..... 98 No response 99	601
402	Have you had sexual intercourse in the last 12 months?	Yes ..... 1 No ..... 2 No response ..... 99 }	404
403	In total, how many different female sexual partners have you had sex in the last 12 months?	Total Number	
403.1	How many were female "regular partners"? **(Your wife or live-in sexual partners)**	Number ..... Don't know ..... 98 No response 99	
403.2	How many were female "sex worker"? **(Partners to whom you bought or sold sex in exchange for money or drug)**	Number ..... Don't know ..... 98 No response 99	
403.3	How many were female "non-regular partners"? **(Sexual partners, you are not married to and have never lived with and did not have sex in exchange for money)**	Number ..... Don't know ..... 98 No response 99	
404	We have just talked about your female sexual partners? Have you ever had any male sexual partners also?	Yes ..... 1 No ..... 2 No response ..... 99 }	501
404.1	If yes, have you had anal sex with any of your male partners in the last 12 months?	Yes ..... 1 No ..... 2 No response ..... 99 }	501

404.2	With how many different male partners have you had anal sex in the last 12 months?	Number ..... Don't know ..... 98 No response 99	
404.3	The last time you had anal sex with a male sex partner did you and your partner use a condom?	Yes ..... 1 No ..... 2 Don't Know ..... 98 No response 99	
404.4	How often have you used a condom in an anal sex with male sex partner in the past 12 months?	Every Times ..... 1 Almost Every Times ..... 2 Some Times ..... 3 Never Used ..... 4 Don't Know ..... 98 No response 99	

5.0 NUMBERS AND TYPES OF PARTNERS

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

Q. N.	Questions	Coding Categories	Skip to
501.	Did you have sex with female regular partner (wife or live-in partner) during last 12 months?	Yes ..... 1 No 2	→ 502
501.1	Think about your most recent female regular sexual partner. How many times did you have sex with her during last one-month?	Times ..... 98 Don't know ..... 99 No response	
501.2	The last time you had sex with a female regular partner did you and your partner use a condom?	Yes ..... 1 No ..... 2 Don't know ..... 98 No response 99	→ 501.4 → 501.4
501.3	Why did not you or your partner use a condom that time? **(Do not read the possible answers, multiple answer possible)**	Not available ..... 1 Too expensive ..... 2 Partner objected ..... 3 Don't like them ..... 4 Used other contraceptive ..... 5 Didn't think it was necessary ..... 6 Didn't think of it ..... 7 Other (Specify) 96 Don't know ..... 98 No response 99	

501.4	How often have you used a condom with female regular partners in the past year?	Every times ..... 1 Almost every-times ..... 2 Sometimes ..... 3 Never used ..... 4 Don't know ..... 98 No response 99	
501.5	Did your female regular partner also inject drugs?	Yes ..... 1 No ..... 2 Don't know ..... 98 No response 99	
501.6	Have you ever had anal sex with your female regular partners?	Yes ..... 1 No ..... 2 Don't know ..... 98 No response 99	502
501.7	The last time you had anal-sex with a female regular partner did you and your partner use a condom?	Yes ..... 1 No ..... 2 Don't know ..... 98 No response 99	
501.8	How often have you used a condom in an anal-sex with female regular partners in the past 12 months?	Every time ..... 1 Almost every-times ..... 2 Sometimes ..... 3 Never used ..... 4 Don't know ..... 98 No response 99	
502	Did you have a sexual intercourse with a female sex worker in last 12 months? **(Check 403.2 and circle the response of Q. 502 *if necessary you may need to ask 403.2 once again and correct the response)***	Yes ..... 1 No 2	503
502.1	Think about the female sex workers that you have had sex in the past one-month. In total how many female sex workers you sold sex in exchange for money or drugs?	Number ..... Don't know ..... 98 No response 99	
502.1.1	With how many sex workers you had sex in last month by paying them money or drugs?	Number ..... Don't know ..... 98 No response 99	

502.1.2	Where did you have sex with a last sex worker?	Hotel/lodge ..... 1 Own house ..... 2 Sex worker's house ..... 3 Injecting site ..... 4 Tea shop ..... 5 Park/garden ..... 6 Dance restaurant ..... 7 Massage parlor ..... 8 Bhatti pasal ..... 9 Dohori restaurant ..... 10 Don't Know ..... 9899 No response	
502.2	Think about your most recent female sex worker. How many times did you have sexual intercourse with her in the past one-month?	Times ..... Don't know ..... No response 98 99	
502.3	The last time you had sex with a female sex worker did you and your partner use a condom?	Yes ..... 1 No ..... 2 Don't know ..... 98 No response 99	→ 502.5 → 502.5
502.4	Why did not you and your partner use a condom that time? **(Do not read the possible answers, multiple answer possible)**	Not available ..... 1 Too expensive ..... 2 Partner objected ..... 3 Don't like them ..... 4 Used other contraceptive ..... 5 Didn't think it was necessary ..... 6 Didn't think of it ..... 7 Other (Specify)_____ 96 Don't know ..... 98 No response 99	
502.5	How often have you used a condom with female sex workers in the past year?	Every times ..... 1 Almost every-times ..... 2 Sometimes ..... 3 Never used ..... 4 Don't know ..... 98 No response 99	
502.6	Do you know whether female sex worker with whom you had sex also injected drugs?	Yes ..... 1 No ..... 2 Don't know ..... 98 No response 99	

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

503.4	How often have you used a condom with a female non-regular partner in the past year?	Every times ..... 1 Almost every-time ..... 2 Sometimes ..... 3 Never used ..... 4 Don't know ..... 98 No response 99	
503.5	Did you know whether your female non-regular partners also injected drugs?	Yes ..... 1 No ..... 2 Don't know ..... 98 No response 99	
503.6	Have you ever had anal sex with your female non-regular partners?	Yes ..... 1 No ..... 2 Don't know ..... 98 No response 99	504
503.7	The last time you had anal sex with a female non-regular partner, did you and your partner use a condom?	Yes ..... 1 No ..... 2 Don't know ..... 98 No response 99	
503.8	How often have you used a condom in an anal-sex with female non-regular partners in the past year?	Every times ..... 1 Almost every-times ..... 2 Sometimes ..... 3 Never used ..... 4 Don't know ..... 98 No response 99	
504	Have you had anal sex with a male partner in the past one year? **(See the response in Q. 404.1 and circle Q.504 response *if necessary you may need to ask 404.1 once again and correct the response)***	Yes ..... 1 No 2	~~505~~ ▶
504.1	Think of your last male sex partner with whom you had anal sex: in the last one month, how many times you had anal sex with him?	Times ..... Don't know ..... 98 No response 99	
504.2	The last time you had anal sex with him; did you use condom? **(Check answer in Q no 404.3)**	Yes ..... 1 No ..... 2 Don't know ..... 98 No response 99	~~504.4~~ ▶ ~~504.4~~

504.3	Why didn't you use condom at that time? **(Don't read possible answer, multiple answer possible)**	Not available ..... 1 Too expensive ..... 2 Partner objected ..... 3 Don't like ..... 4 Used other contraceptive ..... 6 Didn't think it was necessary ..... 7 Didn't think of it ..... 8 Other (Specify)_____ 96 Don't know ..... 98 No response 99	
504.4	How often have you used a condom during anal sex with a male partner is the past year? **(Check Q no. 404.4)**	Every times ..... 1 Almost every-times ..... 2 Sometimes ..... 3 Never used ..... 4 Don't know ..... 98 No response 99	
504.5	Do you know if your male partner with whom you had anal sex also injected drugs?	Yes ..... 1 No ..... 2 Don't know ..... 98 No response 99	
504.6	Have you ever had sex in exchange for money or some commodities?	Yes ..... 1 No 2	505
504.7	Before starting injecting drugs did you have sex in exchange for money or some commodities?	Yes ..... 1 No 2	
504.8	After starting injecting drugs did you have sex in exchange for money or some commodities?	Yes ..... 1 No 2	
504.9	Did you have sex in exchange for money or some commodities in the last 12 months?	Yes ..... 1 No 2	505
504.10	In the last 12 month how many such sexual contacts did you have?	Number	
504.11	In the last 12 month how many such partners did you sell sex to?	Number	
505	Have you had sexual intercourse in the last month?	Yes ..... 1 No ..... 2 Don't know ..... 98 No response 99	507

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

6.0 USE AND AVAILABILITY OF CONDOM

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

Q. N.	Questions	Coding Categories	Skip to
601	Have you ever heard of a condom? **(Show picture or sample of condom) Probe if the response is No**	Yes ..... 1 No ..... 2 Don't know ..... 98 No response 99	701
602	Have you ever used a condom?	Yes ..... 1 No 2	
603	Do you know of any place or person from which you can obtain condom?	Yes ..... 1 No ..... 2 No response 99	701

604	From which place or people, you can obtain condoms? **(Multiple answer possible. Don't read the list but probe)**	Shop ..... 1 Pharmacy ..... 2 Clinic ..... 3 Hospital ..... 4 Family planning center ..... 5 Bar/Guest house/Hotel ..... 6 Health worker ..... 7 Peer Educator/Outreach doctor ..... 8 Friend ..... 9 *Pan Pasal* ..... 10 Others (Specify)_____ 96 No response 99	
604.1	Did any organization give you condom in the last 12 months?	Yes, free of cost ..... Yes, by taking money ..... No	
605	How long would it take **(from your house or the place where you work)** to obtain a condom?	Less than 30 minutes ..... More than 30 minutes ..... Don't know ..... No response	
606	Do you usually carry condom with you?	Yes ..... No	
607	At this moment how many condoms do you have at-hand with you? **(Observe and write)**	Numbers .	

7.0 KNOWLEDGE AND TREATMENT OF STIs

Q. N.	Questions	Coding Categories	Skip to
701	Have you ever heard of diseases that can be transmitted through sexual intercourse?	Yes ..... 1 No ..... 2 No response 99	704
702	Can you describe any symptoms of STIs in women? **(Do not read possible answers, multiple answers possible.)**	Lower abdominal pain ..... 1 Genital discharge ..... 2 Foul smelling ..... 3 Burning pain on urination ..... 4 Genital ulcers/sore ..... 5 Swelling in groin area ..... 6 Itching ..... 7 Other (Specify)_____ 96 Don't know ..... 98 No response 99	
703	Can you describe any symptoms of STIs in men? **(Do not read possible answers, multiple answer possible)**	Genital discharge ..... 1 Burning pain on urination ..... 2 Genital ulcers/sore blister ..... 3 Swellings in groin area ..... 4 Others (Specify)_____ 96 Don't know ..... 98 No response 99	

704	Have you had genital discharge/burning urination during the last 12 months?	Yes 1 No 2 Don't know 98 No response 99	705
704.1	Currently, do you have genital discharge / burning urination problem?	Yes 1 No 2 Don't know 3 No response 4	
705	Have you had a genital ulcer/sore blister during the last 12 months?	Yes 1 No 2 Don't know 98 No response 99	706
705.1	Currently, do you have genital ulcer/sore blister?	Yes 1 No 2 Don't know 3 No response 4	
706	Last time you had a genital discharge/ burning urination or a genital ulcer/sore blister, where did you go for treatment?	Did not seek treatment 1 With private doctor 2 In hospital 3 Never had such symptoms 4 Others (Specify) 96	

8.0 KNOWLEDGE, OPINIONS AND ATTITUDES ON HIV/AIDS

Q. N.	Questions	Coding Categories	Skip to
801	Have you ever heard of HIV or the disease called AIDS? **(Probe if the response if No)**	Yes 1 No 2 No response 99	
802	Do you know anyone who is infected with HIV or who has died of AIDS?	Yes 1 No 2 No response 99	804
803	Do you have close relative or close friend who is infected with HIV or has died of AIDS?	Yes, a close relative 1 Yes, a close friend 2 No 3 No response 99	
804	Can a person protect himself/herself from HIV,the virus that causes AIDS, by using a condom correctly during each sexual act?	Yes 1 No 2 Don't know 98 No response 99	

805	Can a person get HIV, from mosquito bites?	Yes ..... 1 No ..... 2 Don't know ..... 98 No response 99	
806	Can a person protect himself/herself from HIV, by having only one uninfected faithful sex partner?	Yes ..... 1 No ..... 2 Don't know ..... 98 No response 99	
807	Can a person protect himself/herself from HIV, by abstaining from sexual intercourse?	Yes ..... 1 No ..... 2 Don't know ..... 99 No response	
808	Can a person get HIV, by sharing a meal with someone who is infected?	Yes ..... 1 No ..... 2 Don't know ..... 98 No response 99	
809	Can a person get HIV, by getting injections with a needle that was already used by someone else?	Yes ..... 1 No ..... 2 Don't know ..... 98 No response 99	
810	Can a person who inject drug protect himself/herself from HIV, the virus that causes AIDS, by switching to non-injecting drugs? **(Oral or inhaling drugs)**	Yes ..... 1 No ..... 2 Don't know ..... 98 No response 99	
811	Can a pregnant woman infected with HIV transmit the virus to her unborn child?	Yes ..... 1 No ..... 2 Don't know ..... 98 No response 99	~~813~~
812	What can a pregnant woman do to reduce the risk of transmission of HIV to her unborn child? **(Do not read the possible answers, multiple answer possible)**	Take medication (Antiretroviral) 1 Others (Specify)_____ 96 Don't know ..... 98 No response 99	
813	Can women with HIV transmit the virus to her newborn child through breast-feeding?	Yes ..... 1 No ..... 2 Don't know ..... 98 No response 99	
813.1	Do you think a healthy-looking person can be infected with HIV?	Yes ..... 1 No ..... 2 Don't know 99	

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

9.0 AWARENESS OF HIV/AIDS

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

Q. N.	Questions	Coding Categories		Skip to
901	Of the following sources of information, from which sources have you learned about HIV/AIDS? ***(Read the following list, multiple answers possible)***			
	Source of Information	**Yes**	**No**	

	1. Radio	1	2	
	2. Television	1	2	
	3. Newspapers/Magazines	1	2	
	4. Pamphlets/Posters	1	2	
	5. School/Teachers	1	2	
	6. Health Worker/Volunteer	1	2	
	7. Friends/Relatives	1	2	
	8. Work Place	1	2	
	9. People from NGO	1	2	
	10. Video Van	1	2	
	11. Street Drama	1	2	
	12. Cinema Hall	1	2	
	13. Community Event/Training	1	2	
	14. Bill Board/Sign Board	1	2	
	15. Comic Book	1	2	
	16. Community Workers	1	2	
	96. Others (Specify) _____			
902	Has anyone give you following information or items in the past year? ***(Multiple answer possible, read the list)***			
	Items	**Yes**	**No**	
	1. Condom	1	2	
	2. Brochure/Booklets/Pamphlets about HIV/AIDS	1	2	
	3. Information about HIV/AIDS	1	2	
	96. Others (Specify) _____			

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

Q. N.	Questions	Coding Categories		Skip to
1001	In the past one-year have you seen, read or heard any advertisements about condoms from the following sources? ***(Read the following list, multiple answer possible)***			
	Sources	**Yes**	**No**	
	1. Radio	1	2	
	2. Television	1	2	
	3. Pharmacy	1	2	
	4. Health Post	1	2	
	5. Health Center	1	2	
	6. Hospital	1	2	
	7. Health Workers/Volunteers	1	2	
	8. Friends/Neighbors	1	2	
	9. NGOs	1	2	
	10. Newspapers/Posters	1	2	
	11. Video Van	1	2	
	12. Street Drama	1	2	
	13. Cinema Hall	1	2	
	14. Community Event/Training	1	2	
	15. Bill Board/Sign Board	1	2	

	16. Comic Book	1	2	
	17. Community Workers	1	2	
	96. Others (Specify)			
1002	What message did you get from the advertisement? **(Below are the multiple possible answers that the respondent may answer. DO NOT READ the possible answers. Please circle to 1 if they mention and circle to 2 if they do not mention)**	Condoms should be used to prevent HIV/AIDS …….....1 Condoms should be used to Prevent STI…… .....2 Condoms should be used for family planning, …….....3 Condom should be used together with other FP methods…….....4 Others (Specify) _____96		
	Network size			
1003	Generally, where do you gather to inject drug? **(Type of injecting site and location too)**	|Forest/bushes……1 Open area/Planning area…2 Pond/river bank/slum area….3 Bus park…….4 School/campus/ground…...5 Camp/company……..6 Tunnel……7 Pool house/swimming pool...8 Garage/junkyard…….…..9 Public toilet……..10 Hotel/lodge/restaurant……11 Temple area……12 Vacant house……..…..13 Shop……..14 Near Airport ……15 Tole/Lane……16 Lonely place…….....17 Others(specify)_____96		
1004	How many IDUs do you know who also know you well? **(Knowing someone is defined as being able to contact them, and having had contact with them in the past 12 months)**	Total _____ Don't know.....98 No response 99		1008
1005.1	Among them, how many are male and female?	Male _____ Female _____ Don't know.....98 No response……99		

1006	Among those persons, please try to estimate the number of people by range of age:	Less than 15 years old . 15-19 years old ..... 20-24 years old..... 25-29 years old..... 30-40 years old..... > 40 years old.....	
1007	Again, among those, please try to estimate the number of people by religion:	Hindu ..... Buddhist..... Muslim..... Christian..... Others (Specify) _____	
1008	How is the person who gave you the coupon related to you? **(Do not ask to the Seed)**	A close friend .....1 A friend .....2 Your sexual partner ..... 3 A relative .....4 A stranger .....5 Others (Specify)_____96 Don't know.....98 No response 99	
1009	In the past one year how many IDUs that you knew have died?	Numbers ..... ☐☐ Don't know.....98	

11.0 KNOWLEDGE AND PARTICIPATION IN STI AND HIV/AIDS PROGRAMS

Q. N.	Questions	Coding Categories	Skip to
1101	Have you met or discussed or interacted with Peer Educators (PE) or Outreach Educators (OE) or Community Mobilizes (CM) or Community Educators (CE) in the last 12 months?	Yes.....1 No.....2 No response.....99 →	1105
1102	What activities did these PE or OEs involve you in when you met them? **(Multiple answers. DO NOT READ the possible answers)**	Discussion on how HIV/AIDS is/isn't transmitted.....1 Discussion on how STI is/isn't transmitted..... Discussion on safe injecting behavior.....2 Regular/non-regular use of condom.....3 Demonstration on using condom correctly.....4 Others (Specify)_____5 96	

1103	Do you know which organization were they from? **(Multiple answers. DO NOT READ the possible answers)**	NGOs (Specify)_____ Other (specify)_____ Don't know_____	
1104	How many times have these PE, OE, CM and/or CE met you in the last 12 months?	Once ..... 1 2-3 times ..... 2 4-6 times ..... 3 7-12 times ..... 4 More than 12 times 5 96	
1105	Have you visited or been to any out reach center(DIC, IC or CC) in the last 12 months? Drop-In Center (DIC), Information Center (IC), Counseling Center (CC)	Yes ..... 1 No ..... 2 → 1109	
1106	What did you do when you went to the out reach center (DIC, IC or CC) in the 12 last months? **(Multiple answers. DO NOT READ the possible answers)**	Went to collect condoms ..... 1 Went to learn the correct way of using condom Went to learn about the safe 2 injecting behavior ..... Went to watch film on HIV/AIDS ..... 3 Participated in discussion on HIV 4 transmission ..... Went to have new syringe ..... 5 Other (Specify_____ 6 96	
1107	Do you know which organizations run those out reach center (DIC, IC or CC)? **(Multiple answers. DO NOT READ the possible answers)**	NGOs (Specify)_____ Other (specify)_____ 96 Don't know_____ 98	
1108	How many times have you visited out reach centers (DIC, IC or CC) in the last 12 months?	Once ..... 1 2-3 times ..... 2 4-6 times ..... 3 7-12 times ..... 4 More than 12 times 5	
1109	Have you visited any STI clinic in the last 12 months?	Yes ..... 1 No ..... 2 → 1113	

1110	What did you do when you visited such STI clinic? **(Multiple answers. DO NOT READ the possible answers given below)**	Blood tested for STI ..... 1 Physical examination conducted for STI identification ..... 2 Discussion on how STI is/isn't transmitted ..... Discussion on safe injecting behavior ..... 3 Regular/non-regular use of Condom ..... 4 Took a friend with me ..... 5 Other (Specify)_____ 6 96	
1111	Do you know which organizations run those STI clinics? **(Multiple answers. DO NOT READ the possible answers)**	Government sector (specify)_____ NGOs (Specify)_____ Other (specify_____	
1112	How many times have you visited STI clinic in the last 12 months?	Once ..... 1 2-3 times ..... 2 4-6 times ..... 3 7-12 times ..... 4 More than 12 times 5	
1113	Have you visited any Health Counseling and Testing (HTC) centers in the last 12 months?	Yes ..... 1 No ..... 2 →	1116.1
1114	What did you do when you visited such HCT center/s? **(Multiple answers. DO NOT READ the possible answers)**	Received pre-HIV/AIDS test counseling ..... 1 Blood sample taken for HIV/AIDS test ..... 2 Received post HIV/AIDS test counseling ..... 3 Received information on safe injecting behavior ..... 4 Received HIV/AIDS test result ..... 5 Received counseling on using condom correctly in each sexual intercourse ..... 6 Received information on HIV/AIDS window period ..... 7 Took a friend with me 8 96	
1115	Do you know which organizations run those HTC centers? **(Multiple answers. DO NOT READ the possible answers)**	Government sector (specify)_____ NGOs (Specify)_____ Other (specify)_____	
1116	For how many times have you visited HTC center in the last 12 months?	Once ..... 1 2-3 times ..... 2 4-6 times ..... 3 7-12 times ..... 4 More than 12 times 96	

1116.1	Have you ever received any Opioid substitution Therapy (OST)?	Yes ..... 1 No ..... 2 Don't Know ..... 98 No response 99 5	1117
1116.2	Have you received any Opioid substitution Therapy (OST) in the past 12 months?	Yes ..... 1 No ..... 2 Don't Know ..... 98 No response 99	1117
1116.3	Which service have you received?	Methadone ..... 1 Bupenorphine 2	
1116.4	Are you still in therapy?	Yes ..... 1 No ..... 2 Don't know ..... 98 No response 99	1117
1116.5	What amount have you been receiving per day?	Methadone ……..ml Or Buprenorphine … ….. mg.	
1116.6	How long have you been in this therapy?	…….Years …… Months	
1117	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	1118
1117.1	Do you know from where pregnant women can get PMTCT services?	Yes ..... 1 No ..... 2 Don't know ..... 98 No response 99	1118
1117.2	If Yes, please specify	Government sector (specify)_____ NGOs (Specify)_____ Other (specify)_____	
1118	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	1119
1118.1	Do you know from where HIV positive individuals can get ART services?	Yes ..... 1 No ..... 2 Don't know ..... 98 No response 99	1119

1118.2	If Yes, please specify	Government sector (specify)_____ NGOs (Specify)_____ Other (specify)_____	
1119	Have you heard of viral load testing services for HIV positive individuals?	Yes ..... 1 No ..... 2 Don't know ..... 98 No response 99	1120
1119.1	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	1120
1119.2	If Yes, please specify	Government sector (specify)_____ NGOs (Specify)_____ Other (specify)_____	
1120	Have you heard of any Community Home Based Care (CHBC) services that are provided for HIV positive people?	Yes ..... 1 No 2	

12.0 STIGMA AND DISCRIMINATION

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

1206	If one of your colleagues has HIV but he/she is not very sick, Do you think he/she should be allowed to continue working?	Yes ..... 1 No ..... 2 Don't know ..... 98 No response 99	
1207	Do you agreed children with HIV positive should attend school with children with HIV negative	Yes.....1 No.....2 Don'tknow.....98 Noresponse.....99	