Integrated Biological and Behavioral Surveillance (IBBS) Survey among Female Injecting Drug Users (FIDUs) in Pokhara Valley

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Round I -2017



Ministry of Health National Centre for AIDS and STD Control Teku, Kathmandu

Survey Conducted by: National Centre for AIDS and STD Control

Teku, Kathmandu, Nepal Email: info@ncasc.gov.np,/data@ncasc.gov.np Telephone: 4261653

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Field Work Conducted by:

School of Planning, Monitoring, Evaluation and Research

Kalanki, Kathmandu

The IBBS Survey is part of the National HIV Surveillance Plan. The field work of this survey was carried out by School of Planning, Monitoring, Evaluation and Research and the quality assurance by National Public Health Laboratory with technical and financial assistance from the NCASC.

Principal Investigators

Dr. Tarun Poudel - Director, NCASC

Co- Principal Investigators

Mr Bir Bahadur Rawal, SITWG Focal Person, NCASC Mr Rajan Bhattarai, DCoP, Save the Children Mr Purusottam Raj Shedain, SMO, NCASC Dr Keshab Deuba SI Specialist, SI Specialist Mr Upendra Shrestha, M&E Coordinator

Consultant

Dr Samapurna Kakchapati, Save the Children

Key Team Members (SPMER)

Kapil Gyawali - Team Leader Ranju KC - Research Officer Pahara GC – Research Officer/Field Coordinator

Field Survey Team Members (SPMER)

ian
ian

Tablet-based App Design Pathway

Data Management Team Ranju K.C Pahara G.C

Administration Support (SPMER) Kabita Khadka Page | iii

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This was the first round of Integrated Biological and Behavioral Surveillance Survey among FIDUs of Pokhara Valley, as part of the National HIV Surveillance Plan. The survey was conducted with the technical and financial support from National Centre for Page | iv AIDS and STD Control (NCASC). It aimed at generating the baseline evidence about the prevalence of HIV, Syphilis, Hepatitis B and Hepatitis C among the FIDU; their high-risk behaviours; program exposures and exploring strategic information on HIV and STI needed to monitor and guide the National HIV and AIDS program.

We would like to acknowledge Save the Children US/Global Fund technical team for their valuable technical support for conducting this survey. We are also grateful to survey Consultant Sampurna Kakchapati and the entire survey monitoring team and SITWG for their support throughout the survey. We would like to thank School of Planning Monitoring Evaluation and Research (SPMER) and its survey team members for their commitment and enthusiastic work that led to the successful completion of this survey. We would like to thank the National Public Health Laboratory for conducting external quality assessments of the biological specimens.

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We believe that the findings of this survey will be valuable for the policy makers, program designers, planners and implementing agencies to plan the new programs and revise the strategies to address the HIV epidemic of Nepal.

Dr Tarun Paudel Director, NCASC

ACRONYMS

AIDS	Acquired Immuno-Deficiency Syndrome
ART	Anti-Retroviral Therapy
CAC	Community Action Centre
CE	Community Educator
СМ	Community Mobilizer
CHBC	Community Home Based Care
DIC	Drop-in-Centre
EQA	External Quality Assessment
EQAS	External Quality Assurance Scheme
FP	Family Planning
FSW	Female Sex Worker
GOs	Governmental Organizations
HIV	Human Immunodeficiency Virus
HTC	HIV Testing and Counseling
IBBS	Integrated Biological and Behavioral Surveillance
ID	Identification Number
KAP	Key Affected Populations
MSM	Men who have Sex with Men
NCASC	National Centre for AIDS and STD Control
NGO	Non-Governmental Organization
NHRC	Nepal Health Research Council
NPHL	National Public Health Laboratory
OE	Outreach Educator
PE	Peer Educator
РНС	Primary Health Care
PLHIV	People living with HIV
PMTCT	Prevention of Mother to Child Transmission
PWID	People Who Inject Drugs
RPR	Rapid Plasma Reagin
SD	Standard deviation
SITWG	Strategic Information Technical Working Group
SLC	School Leaving Certificate
SPMER	School of Planning Monitoring, Evaluation and Research
SPSS	Statistical Package for the Social Sciences
STI	Sexually Transmitted Infection
TPHA	Treponema Pallidum Hemagglutination Assay
TPPA	Treponema Pallidum Particle Agglutination

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EXECUTIVE SUMMARY

This is the first round of the IBBS survey conducted among Female Injecting Drug Users (FIDUs) in Pokhara Valley. The females of 16 years and above who had been injecting drugs for at least three months preceding the survey were defined as FIDUs and enrolled Page | x in the survey. School of Planning Monitoring Evaluation and Research (SPMER) carried out this survey from December 2016 to May 2017 under the leadership of NCASC. The survey was undertaken primarily to determine the prevalence of HIV, Syphilis, Hepatitis B (HBV) and Hepatitis C (HCV) infection among FIDUs. Moreover, the survey also aimed to find out the comprehensive knowledge of HIV/AIDS, sexual risk behavior and injecting behaviors among FIDUs and their exposures to various HIV/AIDS intervention programs.

Methods

This was a cross sectional survey conducted among 155 FIDUs. Take all approach using network sampling method was applied to recruit FIDUs. A structured questionnaire was used to collect behavioral data related to background information, sexual and injecting behaviors among the FIDUs. Blood samples were collected to test HIV, Syphilis, HBV and HCV. The rapid test kits recommended by National Centre for AIDS and STD Control were used to test HIV, Syphilis, HBV and HCV. The ethical approval for the survey was obtained from Nepal Health Research Council. FIDUs were interviewed after obtaining witnessed oral consent followed by pre-test counseling. FIDUs were provided with test results along with post-test counseling and syndromic treatment for STIs.

Key Findings

Prevalence of HIV, Active Syphilis, HBV and HCV among FIDUs:

The prevalence of HIV among FIDUs was 1.9 percent (95% CI=0.5, 5.9) and prevalence of syphilis was 3.9 percent (95% CI=1.5, 8.6). The prevalence of HBV and HCV was 2.6 percent (95% CI=0.8, 6.9) and 1.3 percent (95% CI= 0.2, 5.1) respectively.

About two out of three FIDUs were identified with HIV during the survey and remaining were previously diagnosed. The newly positive were linked with the National program for treatment, care and support.

Co-infection of HIV/Syphilis, HIV/HBV and HIV/HCV among FIDUs:

The co-infection with HIV and Syphilis was 0.013 percent (n=2 FIDUs), HIV and Hepatitis C was 0.006 percent (n=1 FIDUs), and Hepatitis B and HIV was none. However, co-infections of all three and more STIs were not found among FIDUs.

Comprehensive knowledge of HIV and AIDS among FIDUs:

The proportion of FIDUs who knew all three ABC of HIV prevention indicators {A=Abstinence from sex (54%), B= Being faithful to a single partner (60%), C= Consistent condom use (82%)} was 34 percent.

The percentage of FIDUs who had knowledge of all five components of BCDEF {B= Being faithful to a single partner (60%), C= Consistent condom use (82%), D= Healthy looking person can be infected with HIV (80%), E= Person cannot get HIV from mosquito bite (37%), and F= Person cannot get HIV by sharing meal with infected person (73%)} was 19 percent.

Majority of the FIDUs had knowledge of Hepatitis C:

Nearly half of the FIDUs (44%) had ever heard of HCV infection. Among those who ever heard of HCV, nearly three-fifth (58%) knew HCV could be transmitted through sex. Majority of the FIDUs (77%) knew that sharing needles could transmit HCV and almost three fourths (74%) of the FIDUs knew that even people not infected with HIV could infect from HCV.

Four fifths of the FIDUs were youth aged below 25 years:

The highest proportions of the FIDUs were youths aged below 25 years (80%). Almost a half of the FIDUs each had completed secondary level education (48%) and lower secondary education (46%) respectively. More than three-fifth of the FIDUs were never married (63%) however over a third of them were ever married (36%).

FIDU were practising sex in exchange for money and drugs:

Nearly one quarter (23%) of the FIDUs were found to exchange sex for money and drugs.

Majority of FIDU were engaged in first drug injection at an early age:

More than two-third of the FIDUs (68%) reported that they had been engaged in first drug injection at an early age before 20 years. Majority of the FIDUs (80%) had been injecting for less than two years.

Needle/Syringe sharing practices were prevalent among the noteworthy population of FIDUs:

Almost one-sixth of FIDUs (16%) had shared needle/syringe with one or more people in the last injection. Nearly a tenth of them (7%) had used the syringe given by their friend or relative after their use in their last injection. It was also found that more than two-fifth (43%) FIDUs male regular sex partner also injected drugs. However, only a tenth of the FIDU (10%) reported of sharing needle/syringe with their regular sex partner.

Majority of FIDUs had known how to obtain new/unused needles/syringe:

An overwhelming majority of the FIDUs (94%) knew how to obtain a new, unused needles/syringe. The most common sources to obtain a new needle/syringe was a medical store (79%), friends (58%), hospital (37%) and from health workers (19%). About 3 percent of FIDUs reported that they collect new syringe from DIC (needle exchange program).

Almost all FIDU have knowledge on condom and its accessibility:

Almost all (96%) the FIDUs had knowledge of condom and its accessibility. However, only about 13 percent of them reported of usually carrying condoms with them.

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The condom use at last sex:

More than a half (55%) of the FIDUs used condom at the last anal/vaginal/oral sex with a male partner. It was found that a half of them (50%) had used condom at the last anal/vaginal/oral sex with a male partner in exchange for money or drugs.

FIDUs exposure to some programs was notably low:

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Over one-fourth of the FIDUs (27%) had met PE/OE in the last 12 months before the survey. Nearly 16 percent of FIDUs had visited Drop-in Centers in that period. However, only 12 percent of them had visited STI clinics, and around 16 percent had visited HTC centres in the last 12 months prior to the survey.

Conclusion and recommendations:

This survey provides an insight into the estimated prevalence of HIV, Syphilis, HCV and HCV infection among FIDUs as well as explores their injecting and risky sexual behaviors.

- Awareness of HIV was universal percent among the FIDUs. However, comprehensive knowledge on HIV (Knowledge of **ABC** and **BCDEF**) was found very low. *Thus, mass-medias and role of GOs/NGOs could play an important role to spread the comprehensive knowledge of HIV among them.*
- Nearly one-third of the FIDUs had their first sex at the very young age of 20 years and below. Similarly, almost three-fifth of them had started injecting drugs at very young age. *Therefore, specific program activities that target adolescents and youths should be designed to impart knowledge on sex education, drug prevention and HIV/AIDS awareness.*
- The prevalence of Hepatitis C, Syphilis and HIV among the FIDUs was found high; so an immediate attention should be given to start various programs targeting FIDUs in the Pokhara Valley.
- The large proportion of FIDUs are at risk of HIV as they have used needles that were already used by their friends, shared syringe with the usual sexual partner and were also found to have shared needle during the last injection. *Harm reduction programs including the risk of needle sharing behaviour and advocacy on practicing safer injecting behaviours should be launched.*
- As a notable percentage (43%) of FIDU's male regular partner also injected drugs, *the programme of harm reduction and safer sexual behaviours targeting both the partners need to be initiated.*
- FIDUs were found sexually active, have multiple sexual partners, involved in premarital sex and are more engaged in risky sexual behaviors. *Messages on delayed sexual debut should be promoted. Safer sex behaviors including being faithful to their sexual partners, partner reduction, consistent and correct use of condom should be disseminated among FIDUs.*
- Nearly a quarter of FIDUs had sexual intercourse with men in exchange for money or drugs. However, among them, condom use was found low. *Hence, FIDUs should be reached by programs to raise awareness of safer sex.*

- Consistent condom use with male sex partners was found low. This may increase vulnerability for HIV and STI transmission. *The program should focus on the consistent condom use with all partners*.
- The practice of seeking STI treatment among FIDUs was lacking. *Treatment seeking behaviors should be promoted among those FIDUs who engaged in risky sexual behaviors.*

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• FIDUs exposure to HIV outreach programs (peer education, DICs, HTC/STI clinics etc.) was found to be low. *Hence, targeted interventions among FIDUs with the provision of peer and outreach education, HTC/STI clinic including care and support would help increase the exposure to HIV and AIDs programs.*

CHAPTER I : INTRODUCTION

1.1 Introduction

In Nepalese context, HIV epidemic has been labelled as "concentrated epidemic" as there is the high prevalence of HIV infection among key populations (KP) (NCASC, 2013). The KPs are at higher risk of HIV in Nepal are people who inject drugs (PWID), female Page | 1 sex workers (FSW), men who have sex with men (MSM) and transgender (TG), and seasonal male labour migrants (MLM), particularly those migrating between Nepal and higher HIV prevalence areas in India. In 2012, the HIV prevalence among these KAP was very high: 6%, 4%, 2% and 1.3%, among PWID, MSM and transgender, FSW and MLM, respectively (NCASC, 2014).

Around 10 percent of HIV infections worldwide are attributable to injecting drug use, and in Nepal, HIV epidemics are confronting serious among PWID (Nelson et al., 2011; Silverman et al., 2008). IBBS surveys are regularly surveying to find out the HIV-related risk behaviors among PWID. Evidence (e.g. different rounds of Integrated Biological and Behavioral Surveillance (IBBS) surveys carried out in Nepal) suggest that HIV prevalence is still high among PWID. IBBS surveys had mainly documented the HIV prevalence among KAP.

IBBS surveys are the one key components of second generation HIV surveillance and had been used in many concentrated epidemic contexts. More recently, IBBS survey had also been recommended in generalized epidemic settings (NCASC, 2003). IBBS surveys collect two distinct types of data (HIV and STI biological data and behavioral data) from a single set of participants and help to understand the existing/emerging dynamics of HIV epidemic so that appropriate interventions can be designed to prevent and control the spread of the virus. By linking biological data with behavioral data, IBBS survey is very effective and helpful to understand the emerging trends of HIV and HIV-related risk behaviors among the KAP.

An article published in International Journal on Drug Policy in 2015 revealed that FIDUs who are among the hidden affected populations are more prone to HIV due to their risky injecting behaviors, unprotected sex and sex selling practices. The article also uncovered that the FIDUs are more stigmatized than the male injecting drug users (Azim T et al. 2015) The survey conducted by United Nations Office on Drugs and Crime found that FIDUs are increasingly vulnerable to HIV due to the position of female in Nepalese society. The survey also indicated that the prevention and care services are male-centric and females have limited access to these services (UNODC, 2016).

This study had attempted to assess the prevalence of HIV, Syphilis, Hepatitis B and Hepatitis C and also identified the sexual behavior and associated risk of HIV/AIDs infection among FIDUs in Pokhara Valley.

1.2 Objectives of the Survey

This survey has been carried out to fulfil the following objectives:

1.2.1 Primary objectives:

- To determine the baseline data of STI and HIV prevalence among FIDUs.
- To measure the prevalence of Hepatitis B and Hepatitis C among FIDUs.
- To estimate the prevalence of sexual behaviors and injection behaviors related to Page | 2 HIV among FIDUs.

1.2.2 Secondary objectives:

- To estimate the knowledge of HIV/STI as well as sexual and injecting behaviors among FIDUs.
- To explore associations between risk behaviors and infections with HIV or STI among FIDUs.
- To estimate the prevalence of STI syndromes among FIDUs.
- To find out the exposure of FIDUs to the various HIV/AIDs and STI prevention and control programs.

1.3 Rationale of the survey

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

IBBS surveys are taken as the effective second generation surveillance tools to generate evidence-based data. These surveys help in exploring both behavioral and biological data of FIDUs that will ultimately help in linking them to understand the emerging trends of HIV, risky sexual and injecting behaviors. The findings from these surveys are commonly used for planning HIV interventions, monitoring HIV programs, estimating and projecting the epidemic of HIV (NCASC, 2015).

In this context, National Centre for AIDS and STD Control with the support from Save the Children US/Global Fund intended to conduct the IBBS survey among FIDU in Pokhara Valley. This survey aimed to provide baseline data that can be used for an enhanced and timely intervention design to combat HIV, STIs, HCV and HBV prevalent among FIDUs.

CHAPTER II: METHODOLOGY

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2.1 Implementation of the Survey

School of Planning, Monitoring, Evaluation and Research (SPMER) implemented this survey with the technical support from NCASC. SPMER was responsible for implementation and overall management of the survey including training of the survey team, management of field team and survey activities, laboratory testing of blood samples, clinical examination of the FIDUs and supervision of the activities of the survey team throughout the survey period. SPMER conducted a formative assessment of FIDUs throughout the Pokhara Valley and followed by data collection using tablet based structured questionnaire.

The survey was conducted in close collaboration with three networks widely working for the Injecting Drug Users; Community Support Group, Naulo Ghumti and Namuna in Pokhara Valley. Data analysis and report writing was done by the technical team of SPMER in close coordination with NCASC and Save the Children US/Global Fund.

2.2 Survey Design

This was a descriptive cross-sectional survey. It was the first round of survey for FIDUs in Pokhara Valley.

2.3 Survey Population

For the present survey, FIDUs are defined as "Female aged 16 years or above who had been injecting drugs for at least three months prior to the date of the survey" along the Pokhara Valley.

2.4 Survey District

The survey was primarily conducted in Pokhara Valley; however, few FIDUs were recruited from Baglung, Syangja and Tanahu district to fulfill the required sample size.

The survey area is as given in map below:



Figure 1: Map of study Area

2.5 Survey Period

The survey was conducted from November 2016 to May 2017. The fieldwork for this survey was carried out from 19/3/2017 to 3/4/2017 from the survey site established at Newroad, Pokhara.

2.6 Sampling Design and Sample Size

Network Sampling method was used in this survey to recruit the 155 FIDU which was the required sample. This sampling method ensures unbiased approximations when the same-targeted population units are eligible to linked to multiple selection units. Two operators were selected from the networks who were involved in recruiting the FIDUs. The networks provided the list of FIDUs. The survey participants were also consulted to invite their friends (eligible) from their circle who were unknown to any operators or networks.

2.7 Data collection tools and techniques

A quantitative research approach was used to collect and analyze the data in this survey. A modified questionnaire was utilized that were used in previous rounds of the survey. However, survey tools finalization workshop was organized with the experts working on various rounds of IBBS surveys. Behavioral data and biological data were collected onto tablet computers and directly loaded into a master database using a wireless internet connection in the field. The software was developed by PATHWAY. Separate tablets were provided to each of the interviewer and lab technicians for collecting the behavioral and biological data.

2.8 Survey team with their responsibility.

Total thirteen team members were mobilized in the survey; they were one team leader, one research officer, one field-coordinator, two network operators, two counselors, one Page | 5 clinician, one lab personal, three interviewers and one runner. The responsibility of the team leader was an allocation of work load and activity to survey staff, ensuring their performance, monitoring and supervision, discussing and resolving problems, carrying out performance review and reporting. The responsibility of research officer was to supervise survey team and support to the team leader to ensure survey quality. The responsibility of the field coordinator was to ensure that the survey was running smoothly, efficiently, discussing and resolving problems, caring out performance review and reporting. The work of network operator was to support to recruit the survey participants/FIDUs during the survey, and the role of the counselor was to counsel the FIDUs before and after the laboratory test. The role of clinician was to examine the FIDUs for any sign and symptoms of STI and other general health problems and provided essential medicines according to the national guidelines on case management of STIs. The role of lab personal was to briefly clarify the FIDUs about the testing process and take verbal consent to draw blood and test the blood sample for HIV, Syphilis, Hepatitis B and Hepatitis C. The role of the interviewer was to interview the FIDUs using the structured questionnaire in the tablet computers. The role of the runner was to bring the client to the survey site and support.

2.9 Training of field team and pre-testing

Field survey team was recruited from the pool of researchers of SPMER. The researchers had similar experiences and university degree in the relevant discipline were recruited as supervisors and research assistants. Similarly, experienced lab technicians were hired for the testing of blood samples, and registered doctor were recruited for the symptomatic identification of STIs and their syndromic management.

A six-day intensive training program was organized by School of PMER from 21st-26th February 2017 to the field researchers at Martin Chautari, Thapathali. The training covered various topics such as introduction to the IBBS survey, FIDUs and their population characteristics, questionnaires and ways of administering them, methods of approaching the FIDUs, research ethics, research protocol, counseling, rapport-building techniques and sharing of experiences of similar surveys from the past. The objectives of the survey and the sampling methodologies being adopted for selection of the sample were also explained and discussed in the training.

A significant time was assigned to the lab technicians for being trained on HIV, syphilis, Hepatitis B and Hepatitis C testing and understanding sample selection techniques for external quality assurance system (EQAS). In addition, the training session also included mock interviews, role-plays, and class lectures to help researchers understand the flow of questionnaire. Role-play practices were carried out assuming actual field situations. The

concerned officials from NCASC, Save the Children US/Global Fund and other relevant agencies working for FIDUs and experts were invited to facilitate the training sessions. The researchers from SPMER conducted pretesting of the survey tools among the FIDUs population in service outlet of Network operators. Pretesting was conducted in Sitapaila, Ramkot, Kathmandu. Altogether, four FIDUs were interviewed using tablet-based questionnaires. The questionnaires were checked for flow, skip checks, and language Page | 6 modification and minor grammatical changes were made after the pretesting.

2.10 Fieldwork

The clinic was established in a hotel at Pokhara valley. The clinic comprised of one welcome room, three interview rooms, one counseling room, one STI clinician room, one laboratory room and one waiting room. The flow chart for the survey procedure was developed and displayed in all necessary rooms. The counselor greeted the selected FIDUs in the welcome room where they were briefed about the overall survey process. Consent was taken in the presence of operator/local mobilizers and assigned a unique code for the enrollment in the survey. Then they were interviewed using the structured questionnaire in the tablets in the interview room. After completion of the interview they were guided to pre-test counseling room. After the pre-test counseling, they were directed to the laboratory room. In the laboratory, blood was drawn, centrifuged for separating the serum and undergone all the tests designated for the survey. After the blood was drawn in the lab, the participants were sent to the STI clinician room where necessary syndromic treatment of STIs, which was provided as per National Guidelines on Case Management of STI (2015). They were sent to the waiting room until the test was performed. The test result was provided to them with post-test counseling based on the findings in the counseling room. The refrigerators/cold chain box was used to maintain the cold chain for the collected samples and test kits. The back-up power facility was ensured in survey site in case of power cut. The waste produced from the survey site was properly managed and disposed of systematically with the help of Life Care Diagnostic and Research Center situated nearby the survey site. The hygiene and sanitation of the clinic were appropriately maintained throughout the survey in the survey site.

Pre test and post test counseling were done by the trained counselors of SPMER. The FIDUs were counseled before undergoing the laboratory test. The major part of pre test counseling session was to prepare the FIDUs for the blood test and the probable test result. The post test counseling was done after the confirmation of the test result from the laboratory. The post test counseling session concentrated on the test result, safe injecting behavior, treatment, care and support services available. The FIDUs with positive test result were counseled confidentially were referred to Gandaki hospital and to other services where ART service was available.



Figure 2. 1 Flow chart of IBBS Survey, FIDUs, 2017

2.11 **Sample Recruitment process**

Field researchers including operators from all the networks were trained about the survey area and methods of identification of the participants. Map of the survey site was developed and provided to the researchers to facilitate them for field work. A coordination meeting was organized with the most of the organizations working for Page | 8 FIDUs. Trained field mobilisers of networks were mobilized for the recruitment of samples with the guidance of operators. Survey team established the clinic after discussion with different stakeholder at Pokhara valley. The selected FIDUs identified by the operators in the field through screening questions. The selected FIDUs who came in contact with mobilizers/operators were screened in the survey site once again. Those who satisfactorily answered all the screening questions were briefed about purpose, objectives and methodology of the survey. Once the selected sample is given their consent on the presence of operators/mobilizers to participate in the survey, the counselor assigned the unique code and recruited them in the survey.

2.12 Refusal

One FIDU refused to take part in the survey because she already knew she was HIV positive and refused for blood test.

2.13 Clinical and Laboratory Procedure

The registered clinician examined the FIDUs for any signs and symptoms of STI and other general health problems after completion of the interview, pre test counseling and lab test. The syndromic management of such symptoms and problems were done providing some essential medicines according to the National Guidelines for Case Management of Sexually Transmitted Infections, 2016. The Clinicians made appropriate referrals of the identified cases that required additional treatment to concerned government hospitals or health centers.

After pre-test counseling, the lab technicians briefly clarified the FIDUs about the HIV testing process and took verbal consent to draw blood. Blood samples were drawn in 3milliliter tubes using disposable syringes. The samples were tested for HIV, Syphilis, Hepatitis B and C in the laboratory set up established on the survey site.

2.14 Precautions, Disposal Mechanism and Post-Exposure Management

The universal precautions were followed in the laboratory and STI clinic. Gloves and mask were used by laboratory technician and STI clinician. Waste produced in the lab was collected in different color-coded dustbins and labeled containers. Needles were destroyed using needle destroyer. Waste products formed as a result of laboratory and clinical procedure was managed in accordance with the standard disposal procedures in collaboration with Lifecare Diagnostic and Research center. Also, the post exposure management mechanism was established for the management of possible exposures in collaboration with Gandaki Hospital.

of survey conducted various rounds of participatory internal monitoring and supervision visits to the survey site. The survey team implemented all the feedbacks and suggestions

2.15 Fieldwork Supervision and Monitoring

and followed the protocol of the survey throughout the survey process through direct Page | 9 supervision of Survey Coordinator. Team meetings were held every week to plan for the actions and solve any problems encountered at the field-level. The Survey Coordinator in the field reported the SPMER and the Survey team frequently update the field operations.

The team of NCASC, Save the Children US/Global Fund and SPMER conducted the overall monitoring and supervision of the survey. The Team Leader and Research Officer

2.16 Quality Control and External Quality Assurance Scheme

External Quality Assurance Scheme (EQAS) is the evaluation of the performance of a testing laboratory by an external agency. An EQAS is very essential in such studies to determine the quality of testing. All the HIV positive samples and 10 percent of all the HIV negative samples were sent to retest at NPHL in this survey as an EQA of HIV testing.

		NPHL Results		Total
		Negative	Positive	
SPMER	Negative	15	0	15
	Positive	0	3	3
	Total	15	3	18
Percentage agreement =100%				

HIV Rapid Testing

HIV rapid testing method was conducted at the survey site after completion of pre-test counseling by certified laboratory technicians. Rapid testing was conducted by using a serial testing scheme based on the NCASC national guideline algorithm and approved commercial test kits. Blood serum which was diagnosed reactive on test with the first kit (Determine HIV ¹/₂) was confirmed with a second kit (Uni-Gold HIV) and then by a third Kit (Stat Pak). Samples that were found reactive on all three 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, second test and nonreactive on the third test was then repeated with all three test (with same individual sample) and if the result was still same on the retest was then considered HIV inconclusive. In that condition that individual (sample) was suggested to repeat the test after 14 days.

Interpretation of the Test Results

- All samples negative by the first test were reported as negatives.
- All samples positive by the first test were subjected to the second and the third test.
- All samples that were positive for all three tests were reported positive.
- Any sample that was positive on the 1st and 2nd test and negative on the 3rd test was then repeated with all three tests, and if gives the same result was reported inconclusive. Such sample was suggested to repeat the test after 14 days.

HIV Test Algorithm



Note:

A1 (First test):	Determine HIV ¹ / ₂	
A2 (Second test):	Uni-Gold HIV	
A3(Third test):	Stat Pak	
"+"	Reactive	
"_"	Non-reactive	

Sensitivity and Specificity of H1V 1/2Kits							
Test Kits	Company	Initial	Confirm	Tie Break	Antigen Type	Spec.	Sens.
Determine	Allere	Х			Recom HIV-1 and HIV-2	99.4%	100.0%
Uni-Gold	Trinity Biotech		Х		HIV-1 and HIV-2	100.0%	100.0%
STAT PAK	CHEM BIO			Х	HIV-1 (gp41; p24) -2 (gp36)	99.3%	100.0%

Sensitivity and Specificity of HIV1/2Kits

Syphilis Testing

Rapid Plasma Regain (RPR), a blood-screening test was conducted to detect the presence of antibodies for syphilis among FIDUs. A reactive syphilis result denotes that the FIDUs has been exposed to T. palladium at some point in her life. However, this testing may remain reactive for life in the majority of people who have had syphilis, even if they have Page | 11 been treated properly. Therefore, a positive result does not indicate that the FIDUs currently has untreated syphilis thus it was further confirmed with a non-treponemal test, RPR to assess disease activity. The standard Algorithm followed for Syphilis Testing is shown below:-

Syphilis Test Algorithm



Hepatitis B and Hepatitis C Rapid Testing Hepatitis B

The serum samples were tested for hepatitis B surface antigen (HBsAg) by Rapid test kit HEPACARD Serum/Plasma Kit (J. Mitra and Company, India). The presence of HBsAg in serum was an indication of an active Hepatitis B infection. The presence of the colored line in the test region suggested a positive result, while its absence denoted a negative result. The absence of the control band indicated that the test was invalid.



Hepatitis C

HCV Tri-dot (J.Mitra and Company, India) test kit was used to diagnosis the infection of Hepatitis C. The two red lines in the control and test region suggested the result was positive. The test having red lines in the control region and no lines in test region was considered as negative result. A colored control band in the control region appears at the end of the test procedure regardless of the test result. The absence of the control band Page | 12 indicated that the test was invalid.





2.17 External Quality Assurance Scheme (EQAS)

Serum samples were created for the external quality assurance of the tests. The samples were collected in crayon vials and cold chain was maintained during storage and transportation throughout the survey period. All Positive and randomly selected 10% of the negative samples of HIV, RPR, Hepatitis B and Hepatitis C were handed over to National Public Health Laboratory (NPHL), Kathmandu for external quality control.

2.18 Data Management and Data Analysis

The behavioral and biological data collected through the tablets were uploaded to a server after completion of each questionnaire every day. The uploaded data were downloaded by an authorized person of SPMER (Research Officer for the survey) and were saved in password-protected computers every day. The inconsistencies identified in the data collection procedures were noted on a daily basis and finally were rechecked and verified in consultation with survey consultant, application and data management team and other experts. These data were further transferred to the Excel sheets and coded. Then, the data were exported to the SPSS-20 version for the final data analysis. Descriptive statistics such as percentage, mean, median, standard deviation and inferential statistics like chisquare test were used to establish an association to infer findings. The associations are having a p-value less than 0.05 were taken as a significant association.

2.19 Ethical Considerations

The survey protocol was approved by Nepal Health Research Council (NHRC). The FIDUs involved in the surveys were properly informed about the nature of the survey. They were informed that their participation was voluntary and was free to refuse to answer any question or to withdraw from the interview at any stage. They were also informed that such withdrawal would not affect the services they receive. The consent describing the objectives of the survey, the nature of survey population, benefits, risks and confidentiality issues were clearly delivered to them in presence of network operators and mobilisers. A specific number ID card was provided to each of the FIDUs. HIV test results along with post-test counseling were provided to each of them in a confidential manner. A travel allowance of NRs 350, a pack of fruit juice was offered to each of the FIDUs as incentive. Only the core team of the research had access to the submitted data. The research ethics were strictly followed throughout the survey process.

2.20 Limitation of the survey

- IBBS survey among FIDUs is conducted in Pokhara Valley only. Hence this Page | 13 survey could not generalized FIDUs of Nepal.
- Due to the cross sectional survey, this survey could not examine the casual relationship between variables of interest.

CHAPTER III: RESULTS

3.1 Prevalence

The prevalence of HIV among FIDUs was 1.9 percent (95% CI=0.5, 5.9) and prevalence of syphilis was 3.9 percent (95% CI=1.5, 8.6). The prevalence of HBV and HCV was 2.6 percent (95% CI=0.8, 6.9) and 1.3 percent (95% CI= 0.2, 5.1) respectively (Figure 1). Among the 3 FIDUs having HIV; one FIDUs was identified before the survey, and 2 of them were newly recognized HIV prevalence.



Figure 3. 1 Prevalence of HIV, Syphilis, Hepatitis B and Hepatitis C

The co-infection between HIV and syphilis was 0.013 percent (2 FIDU), HIV and Hepatitis C was 0.006 percent (1 FIDU), and Hepatitis B and HIV was none. However, co-infections of all three and more STIs were not found among FIDUs (Figure 2).



Figure 3. 2 Co-infection of HIV/Syphilis, HIV/HCV

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3.2 **Demographic Characteristics of the survey participants**

Table 3.1 represents the demographic characteristics of FIDUs. The majority (84%) of the FIDUs were from Kaski district. Four-fifth of the FIDUs (80%) were youths aged below 25 years. Almost 19 percent of them were 25 to 34 years of age and remaining less than 2 percent were of 35 to 39 years age group. Nearly half of the FIDUs each had Page | 15 completed secondary level education (48%) lower secondary education (46%) respectively. Four percent of the FIDUs were found to be illiterate.

More than half (57%) of FIDUs belonged to Janjati followed by a quarter (25%) of Dalit and 17 percent belonging to Brahmin. Over three-fifth, (62%) of FIDU were never married while more than a third of them (35%) were married. More than half (53%) of FIDUs were currently living in a rented room, and over two fifths (44%) were living in their own home.

Description	Ν	%
District		
Baglung	7	4.5
Kaski	131	84.5
Syangja	6	3.9
Tanahun	11	7.1
Total	155	100.0
Age group		
Below 20 yrs	86	55.5
20 to 24 yrs	38	24.5
25 to 29 yrs	16	10.3
30 to 34 yrs	13	8.4
35 and more yrs	2	1.3
Total	155	100.0
Level of education		
Illiterate	7	4.5
Lower secondary	72	46.5
Secondary	74	47.7
Informal education	2	1.3
Total	155	100.0
Cast/Ethnicity		
Brahman/	26	16.8
Dalit	39	25.2
Janjati	89	57.4

Demographic Characteristics of the FIDU Table 3.1

Description	Ν	%	
Muslim	1	0.6	_
Total	155	100.0	
Current marital status			
Never married	97	62.6	Page 16
Married	55	35.5	
Divorced/Permanently separated	2	1.3	
Widow	1	0.6	
Total	155	100.0	
Current living situation			
Own home	69	44.5	
Hotel	3	1.9	
Rented	83	53.5	
Total	155	100.0	

3.3 Injecting behavior and syringe sharing

3.3.1 Injecting behavior

Table 3.2 represents the injecting behavior of FIDUs. It was found that two-third (66%) of the FIDUs had started injecting drugs below 19 years followed by one-fifth (20%) by the age of 20-24 years. More than half (56%) of the FIDUs had been injecting drugs from 3 to 12 months. Almost a quarter (24%) of the FIDUs had been injecting drugs for 1 to 2 years. Among the 155 FIDUs, three out of four (75%) reported that they had injected drugs in the last month. Among them who had injected drug in the last month, over two-third (69%) mentioned of not using previously used non-sterile syringe/needles in the last month. Majority of the FIDUs (83%) used drugs in combination. More than half (52%) of the FIDUs reported that in the past one week they had injected 2-3 times followed by more than a quarter (28%) of them injecting once a week. However, 8% of FIDUs reported that they had not injected in the last week.

Description	Ν	%	
Age of drug initiation			
Before 15 years	3	1.9	
15 to 19 years	102	65.8	
20 to 24 years	31	20.0	
After 25 years	19	12.3	
$Mean \pm SD$	19±3.5		
Median	18		
Total	155	100.0	
Duration of injecting drugs			

Table	3. 2	2 Ini	iecting	Beh	avior
1 ant	U . 4	- III	Juing	DUIG	101

Description	Ν	%
3 to 12 months	87	56.1
1 to 2 years	37	23.9
2 to 3 years	17	11.0
3 to 4 years	4	2.6
More than 4 years	10	6.5
Mean ±SD	22	2±22
Median		12
Total	155	100.0
Drugs injected in the last month		
Yes	116	74.8
No	39	25.2
Total	155	100.0
Used previously used syringe /non-sterile syringe/needle in the last month		
Yes	36	31.0
No	80	69.0
Total	116	100.0
Drugs used in combination form		
Yes	128	82.6
No	26	16.8
No response	1	0.6
Total	155	100.0
Frequency of drug injected during the past one- week		
Once a week	43	27.7
2-3 times a week	80	51.6
4-6 times a week	17	11.0
2-3 times a day	2	1.3
4 or more times a day	1	0.6
Not injected in the last week	12	7.7
Total	155	100.0

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3.3.2 Syringe sharing behavior

Nearly three-fourth (72%) of the FIDUs injected drugs once a day whereas over a quarter of them (28%) injected twice or more in a day. The majority (76%) of them had used a new needles/syringe given to them by a friend, and 12 percent of FIDUs reused the same needles/syringe used by themselves previously. Majority (84%) of them did not share the syringe/needles with other people whereas one in ten (10%) of them shared needles/syringe with two partners. Majority of FIDUs (81%) reported that they never

used a needles/syringe that had been used by other in the past one week. Less than one percent of FIDUs used the needles/syringe used by someone else every time they injected drugs. Over one-sixth, (17%) of the FIDUs used the previously used needle or syringe some time. It is encouraging to note that large majority of FIDUs (92%) had never used a syringe/needles that had been kept in public place. Very few (7%) of the FIDUs had used a needles/syringe that had been kept in public place sometime. Less than one percent of FIDUs (0.7%) used the needle /syringe kept in public place every-time. Three-fifth of FIDUs (60%) reported they have not share needles/syringe with anyone in the past one week. One in ten (10%) reported that they had shared needles/syringe twice in the last one week. Almost two-third of FIDUs (65%) had not injected with a prefilled syringe in past week whereas over one third (34%) of them had used the prefilled syringe in past week.

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	IN	%0
Frequency of injected drugs yesterday		
Single	111	71.6
Two and more	44	28.4
Total	155	100.0
Way of getting syringe/needle in the last injection		
My friend/relatives gave it to me after his use	11	7.1
I picked it up from a public place which was left there by myself	1	0.6
I used a new needles/syringe given by NGO staff/Volunteer	1	0.6
I used a needle/syringe which I purchased	6	3.9
I reused my own needles/syringe	18	11.6
My friend gave new needle/syringe	118	76.1
Total	155	100.0
Number of different people in the group you used the same syringe/needle in the last time you injected		
One	6	3.9
Two	16	10.3
Three	3	1.9
Injected alone	130	83.9
Total	155	100.0
Frequency of drug injected with a needle or syringe that had previously been used by someone else during the past one-week		
Every time	1	0.6

Table 3.3 Syringe using behavior

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	Ν	%	
Sometime	27	17.4	-
Never used	125	80.6	
Not injected in the last week	2	1.3	
Total	155	100.0	Page 19
Times you have used syringe/needle that had			
been left in public place when you injected			
drugs in the past week			
Every time	1	0.7	
Sometime	10	6.5	
Never used	141	92.2	
Don't know	1	.7	
Total	153	100.0	
Number of different injecting partners you			
shared needles or syringes in the past one week			
None	91	59.5	_
Once	10	6.5	
Twice	16	10.5	
Three	3	2.0	
Don't know	27	17.6	
No response	6	3.9	
Total	153	100.0	
Ever inject with a pre- filled syringe In the past- week			
Yes	52	34.0	-
No	99	64.7	
Don't know	2	1.3	
Total	153	100.0	

3.3.3 Syringe sharing behavior

Table 3.4 represents the needle sharing behavior of FIDUs. It was found that more than a tenth (11%) shared needle/syringe with their regular sex partner and very few of them (3%) shared needle/syringe with a sex partner they did not know. Similarly nearly a sixth of the FIDUs (14%) shared syringe/needle with their friend. None of the FIDUs shared needle/syringe with drug seller or unknown person.

Table 3. 4 Needle sharing

	Ν	%
Syringe sharing with		
Regular sex partner		

	Ν	%	
Yes	16	10.5	
No	136	88.9	
Don't know	1	0.7	
Total	153	100.0	Page
Unknown sex partner			
Yes	4	2.6	
No	148	96.7	
Don't know	1	0.7	
Total	153	100.0	
Friend			
Yes	22	14.4	
No	130	85.0	
Don't know	1	0.7	
Total	153	100.0	
Drugs seller			
No	152	99.3	
Don't know	1	0.7	
Total	153	100.0	
Unknown person			
No	152	99.3	
Don't know	1	0.7	
Total	153	100.0	

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3.3.4 Use of new needle and treatment

An overwhelming majority of the FIDUs (94%) knew how to obtain a new unused needle/syringe. Among them the common sources of obtaining a new needle/syringe was Medical store (79%), Friend (58%), Hospital (37%), Health worker (19%). Almost two-fifth (36%) of FIDUs reported that they were completely satisfied with the newer available syringe and one-fifth (21%) reported that they were satisfied. Nearly half of the FIDUs (40%) reported that they were not at all satisfied with the newer available syringe/needles. Almost a half (46%) of the FIDUs reported of throwing needles/syringes anywhere after use while two-fifth (40%) of them disposed it safely. Majority of the FIDUs (83%) had never received treatment to overcome drug use. Among the FIDUs who were currently under treatment for drug use (1%) and who were on treatment in past (16%), half of them (50%) had received treatment 6 months before. Over one-third (35%) had received treatment before 6 to 23 months. However, almost one-sixth (15%) had received treatment before 2 years.

	Ν	%	
Access to new unused needles and syringes whenever needed			Page 2
Yes	146	94.2	
No	8	5.2	
Don't know	1	0.6	
Total	155	100.0	
Needle available places*			
Medical store	123	79.4	
Other shop	20	12.9	
Health worker	29	18.7	
Hospital	57	36.8	
Drugs/wholeseller/drugs agency	3	1.9	
Family/relatives	5	3.2	
Sex partner	5	3.2	
Friends	90	58.1	
Others drugs users	4	2.6	
Drugs seller	7	4.5	
Needle exchange program	5	3.2	
Total	155	*	
Satisfaction with the newer available syringes			
Completely satisfied	55	35.5	
Satisfied	32	20.6	
Somewhat satisfied	62	40.0	
Dissatisfied	2	1.3	
Completely dissatisfied	4	2.6	
Total	155	100.0	
Practice of needle disposal*			
Disposed	61	39.4	
Gave to friend	19	12.3	
Kept/carry safely for another use	2	1.3	
Hide in public places	1	0.6	7
Threw anywhere	71	45.8	
Don't know	1	.6	7
Total	155	*	
Currently under treatment because of drug use			
Currently under treatment	2	1.3	

 Table 3. 5
 Using new needle and treatment

	Ν	%
Was in treatment but not now	24	15.5
Have never received treatment	129	83.2
Total	155	100.0
Duration of receiving service		
Before 6 months	13	50.0
6 to 23 months	9	34.6
Before 2 years	4	15.4
Total	26	100.0

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* Percents total may exceed 100 due to multiple responses

3.5 Sexual behaviors and condom use with different partners

Over two-third (67%) of the FIDUs had had sexual intercourse in the last 12 months. Among the FIDUs who had sexual intercourse in last 12 months, over two-third (68%) had single sex partner and almost one-fourth (26%) of them had 2 to 4 sex partners. Almost four-fifth (79%) of them had single regular sex partner. Nearly three-fourth (70%) of the FIDUs had sex with single non-regular sex partner. Majority (77%) of the FIDU did not have sexual intercourse with men in exchange for money or drug in last 12 months. On the contrary, almost one-fourth of them (24%) had had sexual intercourse with men in exchange for money or drugs in last month. (table 3.6)

	N	%
Ever had sexual intercourse in the last 12 months		
Yes	102	65.8
No	53	34.2
Total	155	100.0
Number of sex partners		
Single	68	66.7
Two to Four	26	25.5
Five and more	8	7.8
Total	102	100.0
Number of regular sex partners		
Single	80	78.4
Two and more	22	21.6
Total	102	100.0
Number of non-regular sex partners		
None	14	13.7
Single	60	58.8
Two and more	28	27.5
Total	102	100.0

Table 3. 6 Sexual behavior

Had sexual intercourse with men in exchange for money or drugs in last 12 months		
Yes	24	23.5
No	78	76.5
Total	102	100.0
Number of male partners you had sex in last month by paying them money or drugs		
None in the last month	5	20.8
Single	8	33.3
Two and more	11	45.8
Total	24	100.0

3.6 Condom availability and use

FIDUs who had ever had sexual experience were examined for their knowledge about condom availability and its use. It is notable that almost all of them (96%) knew about the place or person from whom to obtain a condom. Nearly two-third of FIDUs (63%) reported that they did not get condom from any organization in the las months. Majority of the FIDUs (87%) were not found to be usually carrying condoms along with them. More than half (57%) of the FIDUs had ever used a condom. More than half (55%) of them had used condom during the last anal/vaginal/oral sex with a male sex partner. It was found that half (50%) of FIDUs had used condom during the last anal/vaginal/oral sex with the male partner in exchange for money or drugs.

	Ν	%
Knowledge about place or person for obtain condoms		
Yes	148	95.5
No	7	4.5
Total	155	100.0
Organization give you condom in the last 12 months		
Yes, free of cost	47	31.8
Yes, by paying money	8	5.4
No	93	62.8
Total	148	100.0
Usual condom carrying practice		
Yes	19	12.8
No	129	87.2
Total	148	100.0
Ever used a condom		

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Yes	88	56.8	
No	67	43.2	-
Total	155	100.0	
Use of condom at the last anal/vaginal/oral sex with			
a male sex partner			
Yes	56	54.9	rage 24
No	46	45.1	
Total	102	100.0	-
Use of condom at the last anal/vaginal/oral sex with a male partner in exchange for money or drugs			
Yes	12	50.0	-
No	12	50.0	
Total	24	100.0	

3.7 **Comprehensive Knowledge of HIV**

FIDUs were assessed to know their perception about HIV transmission. Majority (82%) of them knew "condom used during each sexual contact does not transmit HIV virus (C)". Four-fifth of them (80%) knew "A healthy looking person can be infected with HIV (D)". Almost three-fourth (73%) of them knew "Sharing a meal with HIV infected person does not transmit HIV (F)". Three-fifth (60%) of them knew "People can protect transmission of HIV by being faithful to a single partner (B)". More than a half (54%) of them knew "Abstinence from sexual contact as a means to avoid themselves from HIV (A)". Over one-third of them (37%) knew "A person cannot get the HIV virus from mosquito bite (E)". Overall only over one-third (36%) of FIDUs correctly identified all three A, B and C as HIV preventive measures. Overall less than one-fifth (19%) were aware of all the five major indicators i e B, C, D, E and F.



Figure 3.1 Comprehensive Knowledge of HIV and Modes of HIV Transmission

3.8 Awareness and Availability of HIV Testing Facility and HIV Testing

The knowledge of FIDUs regarding the availability of HIV testing facility and their practice of HIV testing was assessed in the survey. Majority of the FIDUs (81%) knew about the place where HIV testing could be done. Over a quarter of them (29%) had been ever tested for HIV. Out of the ones who were ever tested for HIV, majority (76%) had undergone the test voluntarily. Among the FIDUs who had ever had an HIV test, majority (82%) had undergone the test within last 12 months and out of them nearly two-third (64%) had tested once. However, over a quarter of them (27%) had undergone the test for twice. All FIDUs who underwent HIV testing knew their HIV status and almost all of them (98%) had test result as HIV negative. On the other hand, two percent of them were uncertain about their results. (table 3.8)

	N	%
Knowledge of place where HIV test can be done		
Yes	126	81.3
No	29	18.7
Total	155	100.0
Ever had an HIV test		
Yes	45	29.0
No	110	71.0
Total	155	100.0
Done HIV test Voluntarily		
Voluntary	34	75.6

Table 3.8 Awareness and Availability of HIV Testing Facility and HIV Testing

	Ν	%	
As required	11	24.4	
Total	45	100.0	
Time of most recent HIV test			
within the past 12 months	37	82.2	Page 26
Between 13-24 months	5	11.1	
Between 25-48months	1	2.2	
More than 48 months	2	4.4	
Total	45	100.0	
Frequency of undergoing for HIV test within the last 12 months			
One	29	64.4	
Two	12	26.7	
Three	4	8.9	
Total	45	100.0	
HIV test result received			
Yes	45	100.0	
Total	45	100.0	
Result of last HIV test			
Negative	44	97.8	
Uncertain	1	2.2	
Total	45	100.0	

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

An over whelming majority (84%) of the FIDUs had heard of STIs. The FIDUs who had heard of STIs were further assessed about their knowledge of STI symptoms. The common symptoms they knew about were, burning micturition (84%), foul smelling (81%), itching (78%), lower abdomen pain (71%), genital discharge (53%), genital ulcer/sore (49%) and swelling in groin area (42%). More than a quarter of the FIDUs (29%) had experienced genital discharge/burning micturition during the last 12 months. Over two-fifth of them (42%) had experienced genital ulcer/sore/blister in the last 12 months. Among those who had experienced genital discharge/burning micturition (n=22) during the last 12 months more than a quarter (27%) were currently experiencing the symptoms a quarter of them (25%) did not seek treatment.(table 3.9)

	Ν	%	
Ever heard of diseases that can be transmitted through sexual intercourse			Page 27
Yes	130	83.9	
No	25	16.1	
Total	155	100.0	
Sign and symptoms of STIs*			
Lower abdomen pain	92	70.8	
Genital discharge	69	53.1	
Foul smelling	105	80.8	
Burning micturition	109	83.8	
Genital ulcers/sore	64	49.2	
Swelling in groin area	54	41.5	
Itching	101	77.7	
Don't know	5	3.8	
Total	130	*	
Genital discharge/burning urination during the last 12 months			
Yes	45	29.0	
No	110	71.0	
Total	155	100.0	
Currently have genital discharge/burning urination problem			
Yes	19	42.2	
No	26	57.8	
Total	45	100.0	
Have genital ulcer/sore blister during the last 12 months			
Yes	22	14.2	
No	132	85.2	
Don't know	1	0.6	
Total	155	100.0	
Currently have genital ulcer/sore blister			
Yes	6	27.3	
No	16	72.7	
Total	22	100.0	

 Table 3. 9
 Knowledge of STIs, Experienced Symptoms, and Treatment in the Past

 Year

	N	%	
Place for treatment while having genital discharge/ burning urination or a genital ulcer/sore blister in the last time			
Did not seek treatment	38	24.5	F
Private hospital	12	7.7	
Public hospital	5	3.2	
Never had such symptoms	100	64.5	
Total	155	100.0	

* Percents total may exceed 100 due to multiple responses

3.10 Exposure to HIV Programs (PE, DIC, HTC)

More than a quarter (27%) of the FIDUs had met PE/OE/CM/CE in the last 12 months. Almost one-sixth (16%) had visited outreach center (DIC, IC, CC) in the last 12 months. More than a tenth of them (12%) had visited STI clinic in the last 12 months. Likewise, 16 percent of the FIDUs had visited HTC (HIV testing and counseling center). Overall six percent of FIDUs were enrolled into opioid substitution therapy (OST): methadone and buprenorphine.

	Ν	%
Ever met or discussed or interacted with PE/ OE/ CM/CE in the last 12 months		
Yes	41	26.5
No	114	73.5
Total	155	100.0
Ever visited DIC/IC/CC in the last 12 months		
Yes	25	16.1
No	130	83.9
Total	155	100.0
Ever visited any STI clinic in the last 12 Months		
Yes	19	12.3
No	136	87.7
Total	155	100.0
Ever visited any HTC in last 12 months		
Yes	25	16.1
No	130	83.9
Total	155	100.0

Table 3. 10 Exposure to HIV Programs (PE, DIC, HTC)

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	Ν	%
Ever enrolled into any Opioid substitution Therapy (OST): Methadone and Buprenorphine		
Yes	9	5.8
No	145	93.5
Don't know	1	0.6
Total	155	100.0

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3.11 Stigma and Discrimination

This IBBS survey assessed stigma and discrimination among the HIV infected people. In this regards, more than two-third (68%) of the FIDUs shared that they were willing to buy stuff from HIV infected shopkeeper. Majority of the FIDUs (72%) replied that children living with HIV should be able to attend school with those children who have HIV negative status (Table 3.11).

Table 3. 11 Stigma and discrimination

	Ν	%
Willing to buy stuff from HIV infected shopkeeper		
Yes	106	68.4
No	45	29
Don't Know	4	2.6
Total	155	100
HIV infected children allowed to study with other children		
Yes	112	72.3
No	43	27.7
Total	155	100.0

CHAPTER IV: CONSLUSION AND RECOMMENDATIONS

IBBS survey conducted among FIDUs is the first round survey in Pokhara Valley. Page | 30 Females, who had been injecting drugs for at least three months preceding the survey age of 16 years and above were defined as FIDUs and enrolled in the survey. The survey was conducted from December 2016 to May 2017. The survey was undertaken primarily to determine the prevalence of HIV, syphilis, Hepatitis B (HBV) and Hepatitis C (HCV) infection among FIDUs. Moreover, the survey also finds out the baseline data of comprehensive knowledge of HIV/AIDS, sexual risk behavior and injecting behaviors among FIDUs, their exposures to various HIV/AIDS prevention, treatment, care and support programs. Based on the findings of this study, the following are the recommendations.

Prevalence of Syphilis (3.9%), Hepatitis C (2.6%) and HIV (1.9%) was found among the FIDUs. Hence BCC and IEC programs should be implemented targeting the FIDUs in Pokhara Valley.

Although awareness of HIV was almost cent percent among the FIDUs, comprehensive knowledge on HIV was found very low. Only a third of the FIDUs (33.5%) correctly identified all three **A**, **B** and **C** as HIV preventive measures whereas less than one-fifth of the FIDU (18.5%) were aware of all the five major indicators, i.e., **BCDEF.** *Therefore, misconceptions of the target population on the mode of transmission of HIV need to be addressed. Mass-medias and role of GOs/NGOs could play an important role to spread the correct knowledge of HIV among them.*

More than two-thirds of the FIDUs (73%) had injected drugs in a very young age of below 20 years. Therefore, specific program activities that target *adolescents and youths should be designed to impart knowledge on sex education, drug prevention and HIV/AIDs awareness through Behaviour Change Communication (BCC) interventions.*

Considerable proportions of FIDUs are at risk of HIV as they have used needles that were already used by their friends (14.4%). Likewise, the practice of syringe sharing with the usual sex partner in the past week was also prevalent among the FIDUs (10.5%). Similarly, the practice of sharing needle during the last injection was prevalent among 16 percent of the FIDU. *Hence, harm reduction programs including the risk of needle sharing behaviour and advocacy on using new syringes should be launched*.

As notable percent (43%) of FIDUs male regular partner also injected drugs, *the programme of harm reduction and safer sexual behaviour targeting both the partners need to be initiated.*

FIDUs were found sexually active, have multiple sexual partners are more engaged in risky sexual behaviors. The pre-marital sexual relationship was common among them. *Messages on delayed sexual debut should be promoted. Safer sex behaviors including being faithful to their sexual partners, partner reduction, consistent and correct use of condom should be disseminated among FIDUs.*

Nearly a quarter of FIDUs had sexual intercourse with men in exchange for money or drugs. However, among them, condom use was found low. These groups of FIDUs had overlapping risks. *Hence, FIDUs should be reached by programs to raise awareness of* Page | 31 *safer sex.*

Consistent condom use with male sex partners was found low. This may increase vulnerability for HIV and STI transmission. *The program should focus on the consistent condom use with all partners*.

The practice of seeking STI treatment among FIDUs was lacking. *Treatment seeking behaviors should be promoted among those FIDUs who engaged in risky sexual behaviors*.

Ongoing structured HIV program (peer education, DICs, HTC/STI clinics etc.) was found to be low among FIDUs. *Hence, targeted interventions among FIDUs with the provision of peer and outreach education, HTC/STI clinic including care and support would help increase the exposure to HIV and AIDs programs.*

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ANNEX 1: Integrated Biological and Behavioral Surveillance Survey among FIDUFIDU (FIDU) in Pokhara Valley

Questionnaire

Namaste! My name is, I am here from SPMER 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, HIV/STI/HCV; 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, syphilis infection, Hepatitis B and Hepatitis C. If it is determined that you have any STI symptoms, we will provide treatment free of charge. We 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:

_____Date:___/ _____/2073 Operational definition of FIDU:

"Current female 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"

Interviewer Name:	Code	Intervi	ewer:	
Date Interview:// 2073				
Checked by the supervisor: Signature:	Date:	/	/ 2073	
001. Has someone interviewed you from	with a questionnain	re in las	t few	Page 34
1. Yes 2. No (continue interview) ↓				
When?Days ago (make sure that it was intervie	wed by SPMER and close	se the ir	nterview)	
002. FIDU's ID #:				
002.1 How long have you been injecting drugs	?			
Years Months				
(NOTE: AFORMENTIONED QUESTIONS AF IF THE RESPONSE IS LESS THAN T BECAUSE THIS PERSON IS NOT ELIC SAMPLE)	RE THE SCREENING (THREE MONTHS, STO GIBLE FOR INCLUSIC	QUEST)P INTH)N IN 1	IONS. ERVIEW THE	
003. Interview Location (to be filled by interviewer) 003.1 District: 003.2 VDC/Municipality:				

1.0 FIDU Information

O.N.	Question	Coding Categories	Skip
101	Where are you living now?		
		003.1 District:	
	(Write current place of residence)	003.2 VDC/Municipality :	
101.1	How long have you been living		
	continuously at	Month	
	the same address?	Always (since birth)	
		0	
102	How old are you?	Age	
		(write the completed years)	

103	What is your educational status?	Illiterate0		
		Literate without formal education 19		
	(Circle '0' if illiterate, '19' for the			
	literate without attending the school,	Literate Grade		
104	and write exact number of the passed			
104	What is your caste?	Caste		Page 35
	(Specify Caste)			U .
105			100	
105	What is your current marital status?	Never married	106	
		Married		
		Divorced/Permanently separated. 3		
		W1dow4		
		Living together		
		Others		
105.1	How old were you when you first got			
105.1	married?	(write the completed years)		
105.2	Have you ever given birth to any live	Yes 1		
100.2	child?	No		
			105.4	
105.2	If you have many live shildren have you	Son		
105.5	ni yes, now many nye children nave you given birth to?			
	given bitui to:	Daughter		
105.4	Have you ever terminated any of your	Terminated		
	pregnancy or have you ever gone through	pregnancyl		
106	Which of the following best describes your	Homeless on the street1		
	current	Living in own home2		
	living situation?	Living in a residential hotel3		
	$(\mathbf{C} \cdot 1 \cdot \mathbf{t} \cdot \mathbf{r} \cdot 1 \cdot \mathbf{r} \cdot \mathbf{r} \cdot \mathbf{r} \cdot \mathbf{r})$	Rented apartment4		
	(Select only one option)	Rented room		
		Other(specify)96		
107	With whom you are living now?	Living with husband 1		
		Living with male sexual partner 2		
		Living without sexual partner 3		
		Others (Specify)96		
		No response		
108	During the past one-month how often have	Every day 1		
	you	More than once a week		
	had drinks containing alcohol?	Less than once a week		
	Ĭ	Never drink 4		
	(Such as beer, local beer etc.)	Others (Specify)96		
		No response		
109	Have you ever heard about the methods of	Yes1		
	family planning?	No2 →	111	
110	If yes, which methods do you know?			
110	If yes, which methods do you know?			
			1	1

111	Are you currently using any family planning methods?	$\begin{array}{ccc} Yes1\\ No2 & \longrightarrow \end{array}$	201
112	If yes, which method are you using currently?		

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2.0	DRUG USE								
Q.N.	Questions		Cod	ling Ca	ntegori	ies			Skip
201	How long have you been using drugs?		Yea	r					
	(Drug means medicine not used for		Mor	nths					
	treatment purpose rather used for								
202	How old were you when you first								
_ • _	injected drugs?								
	(Include self-injection or injection		Vea	rs					
	hy another)		(wr	ito tho	aamnl	otod ve	ore)	_	
	by another)		(WI	tte the	compi	leteu ye	ais)		
202	How long have you been injecting dry	.	Va						
205	How long have you been injecting drug	28:	102		•••••	•••••			
ł	(Include self-injection or injection by	7	NIO	ntns	•••••	•••••			
1	others)								
			NO 1	respons	se	~	0		
203.1	Have you injected drugs in the last more	nth?	Vec			Q	y	1	
203.1	i ave you injected drugs in the last mor		No	•••••	•••••		•••••	」 ?_	5
			110.	•••••	•••••	•••••	•••••	∠_	201
									∠04
203.2	If Yes, have you used previously used s	syringe	Yes				1		
	/non-sterile syringe/needle in the last m	nonth?	No.					2	
204	Which of the following types of drugs	harrarr		ad and/	-	atadim	tha ma	at an	
204	which of the following types of drugs	nave y	ou use	and/	or inje	cted in	the pa	ist on	le-
	week?	-						-	
		Used	<u>in La</u>	st-Wee	ek	Injec	ted in		t-
	Description 1	YES	NU		INK	1	$\frac{NU}{2}$	08	
	$T: \frac{1}{1} = \frac$					1	2	90	<u>,</u> ,
	2. Brown Sugar/White Sugar	1	2	98	99	1	2	98	99
	3. Nitrosun/ Nitrovate	1	2	98	99	1	2	98	99
	4. Ganja/Chares	1	2	98	99				
	5. Phensydyl+Corex	1	2	98	99				
	6. Calmpose/Diazepam/Velium 10	1	2	98	99	1	2	98	99
	/. Codeine		2	98	99	1	2	98	99
	8. Phenergan/Stagon		2	98	99	1	2	98	99
	9. Cocaine/Cracks	1	$\frac{2}{2}$	98	99	1	2	00	00
	11 Effidin	1	$\frac{2}{2}$	90	00	1	$\frac{2}{2}$	90	99
	12 Lysergic Acid/Dithylamide(LSD)	1	$\frac{2}{2}$	98	99	1		90	
	13. Avil/Algic	1	2	98	99	1	2	98	99
	14. Amphetamine /Yava/Ice	1	2	98	99	1	2	98	99
	96. Others (Specify)	1	2	98	99	1	2	98	99
		<u> </u>	<u> </u>	10	,,	1	-	,0	,,
204.0.1	Have you used these drugs in	Yes				1			
	combination form?	No					2	-2	94.1
		No rea	spons	e		99	9		
			-						
204.0.2	If yes, how many drugs has been used?)		ר (חווש	bers)				
201.0.2	in yes, now many drugs hus been used.				Se 15 <i>j</i>				

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?	Yes1 No	205 ➡

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Q.N.	Question	Coding Categories	Skip to
204.1.1	If yes, which drug?	Fromdrug	
		Todrug	
204.1.2	What is the reason for switching?	To decrease Tidigesic1 Costly2 Difficult to find drugs3 Others96	
205	How many times did you inject drugs yesterday?	Times – Not injected0	207
206	Would you like to tell me why you did not Inject yesterday?	Due to lack of Money1Want to quit slowly2Had taken Ganja3Had taken Brown Sugar4Had injected previous day5Had taken alcohol6Did not find Drugs7Was under police custody8Had taken Nitrosun9Was Sick10Had taken other drugs11Was busy in household activity12Others(Specify)96	
207	How many days ago did you inject?	Days ago	
208	During the past one-week how often would you say you injected drugs?	Once a week12-3 times a week24-6 times a week3Once a day42-3 times a day54 or more times a day6Not injected in the last week7Don't know98No response99	
209	(Ask whether the FIDU was ever arrested or not then ask the following questions) Have you ever been imprisoned or detained for any reason?	Yes1 No2– No response99	▶ 210

200.1	In the past year, how many times have you			
207.1	have you	Timos		
	Uccil Lunning and fam draw related manager?			
2 00 2	Imprisoned for drug-related reason?	No response		
209.2	Have you ever-injected drugs while in	Yes1		
	prison?	No2		
		No response99		Page 39
210	How often you cross the border (Indo-			I uge 55
	Nepal) to buy and use the illicit drugs in			
	the past 12 months?			
3.0	NEEDLE SHARING BEHAVIORS	•		
O.N.	Ouestion	Coding Categories	Skip to	,
301	Think about the times, you have injected			
	drugs			
	Yesterday/last day. How many times	Times		
	did you inject drugs on that day?			
	(Fill the number from answer to O 205			
	and verify by asking the FIDID			
	and verify by asking the TIDO)			
302	The last time you injected, how did you	My friend/relative gave it to me		
	get that syringe/needle?	after his use1		
		Unknown person gave it to me		
		after he use		
		I picked it up from a public place		
		which was left there by others 3		
		I nicked it up from a public place		
		which was left there by myself		
		which was left there by mysen		
		Lugad a new needle/swings siven		
		her NCO staff/reshurts or		
		by NGO stall/volunteer		
		I used a needle/syringe which I		
		purchased		
		I reused my own needle/syringe /		
		My friend gave new		
		needle/syringe8		
		Others (Specify)96		
		Don't know98		
303	If you were in a group the last time that			
	you injected, how many different people	No of person:		
	in the group			
	do you think used the same	Injected alone		
	svringe/needle?			
		1	1	_

Question	Coding Categories	Skip to
Think about the times, you have	Every times1	
injected drugs	Almost every-times2	
during the past one-week. How often	Sometimes3	
was it with a needle or syringe that	Never used4	
had previously been used by someone	Not injected in the last week5	→311
else?	Don't know98	
	No response99	
	Ouestion 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?	QuestionCoding CategoriesThink about the times, you have injected drugsEvery times

305	When you injected drug during the past	Every tin	195		1	
505	weals				1 ົ	
	week,	Annost e	very-um		······2	
	now often did you use a syringe/needle	Sometim	es	••••••		
	that had been left in public place?	Never	•••••	•••••	4	
	(Public place means places other than	Don't kno	ow	•••••		
	the	No respo	nse			Page 40
306	With how many different injecting					
	partners did you share needles or syringes	No. of pa	rtners			
	in the past one week?					
	*	Don't				
	(Count everyone who injected from the	know				
307	In the past one-week, did you ever share					
	needles and syringes with any of the				1	
	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)	l	2			
308	In the past one-week, how often did you	Every tin	nes		1	
	give a needle or syringe to someone else,	Almost e	very-tim	es	2	
	after you had already used it?	Sometim	es			
		Never			4	
		Don't kno	ow			
		No respo	nse			
309	In the past-week, did you ever inject with	Yes				
2.07	a pre- filled syringe?	No				
	(By that I mean a syringe that was	Don't' kn	IOW		98	
	filled without you witnessing it)	No respo	nse		99	
		1.0 10000				

Q.N.	Question	Coding Categories	Skip to
310	In the past one-week, how often did you	Every times1	
	inject	Almost every-times 2	
	drugs using a syringe after someone else	Sometimes	
	had squirted drugs into it from his/her	Never 4	
	used syringe?	Don't know 98	
		No response	
311	Can you obtain new, unused needles and	Yes 1	
	syringes when you need them?	No	ר
		Don't' know 98	≻ 316
		No response	J

312	Where can you obtain new unused needles	Drugstore1	
	and	Other shop2	
	syringes?	Health worker3	
		Hospital4	
		Drug wholesaler/drug agency 5	
		Family/relatives6	Dago 11
	(Do not read out list. Multiple answers	Sexual partner7	Page 41
	possible. Probe only with "Anywhere	Friends	
	Else?")	Other drugs users9	
		Drugs seller10	
		Needle exchange program of11	
		(write the name of	
		Organization) Steal from	
		legitimate source	
		(hospital./pharmacy)12	
		Buy on streets13	
		Other (Specify)96	
313	What do you usually do with your used	Disposed1	
	needle/ svringe?	Gave to friend2	
		Kept/carry safely for another use3	
		Hide in public places	
		Threw anywhere	
		Others (specify)	
		Don't know	

O.N.	Ouestion	Coding Categories	Skip to
314	In the past one-year, did you ever inject drug in another city/district (or another country)?	Yes1 No2 Don't' remember98 No response99	
315	Are you currently under treatment (or receiving help) or have you ever received treatment (or help) because of your drug use?	Currently under treatment1 Was in treatment but not now2 Have never received treatment.3 No response	► ₄₀₁
316	How many months ago did you last receive treatment or help for your drug use?	Months	

4.0 SEXUAL HISTORY

Q.N.	Question	Coding Categories	Skip to	
401	How old were you at your first sexual	Years old		
	Intercourse?		(01	
		(Write completed	601	
		<i>years)</i>		Page 42
		never had sexual intercourse	-	0
402	Have you had sexual intercourse in the last	Yes1		
102	12	No2		
	months?	No response99		
403	In total, how many different male sexual			
	partners have you had sex in the last 12	Number		
	months?			
403.1	How many were male "regular partners"?	Number		
		Don't know98		
	(Your husband or live-in sexual	No response99		
	partners)			
403.2	Did your male regular partner also	Yes 1		
	inject drugs?	No 2		
		Don't know 98		
		No response		
404	How many were male "non-regular			
	partners"?	Number		
	(Sexual partners, you are not married	Don't know98		
	to and have never lived with and did	No response99		
404.1	not have sex in exchange for money)	Vas 1		
404.1	inject drugs?	No 2		
	inject drugs:	Don't know 98		
		No response		
405	The last time you had anal/vaginal/oral sex	Yes1		
	with a male sex partner did you and your	No2		
	partner use a condom?	Don't Know98		
		No response99		
406	Did you have a sexual intercourse with	Yes 1		
	men in exchange for money or drugs in	No2 ר		
	last 12 months?	Don't know98	501	
		No Response99		
406.1	With how many male partners you had			
	sex in last month by paying them money	Number		
	or drugs	Don't know98		
		No response99		

406.2	The last time you had anal/vaginal/oral	Yes1
	sex with a male partner in exchange for	No2
	money or drugs; did you or your partner	Don't know98
	use a condom?	No response99

5.0 USES AND AVAILABILITY OF CONDOM

501	Have were even used a second surge	V _e 1	
501	Have you ever used a condom?	Y es 1 No	
502	Do you know of any place or person from which you can obtain condom?	Yes1 No2 No response99	601
503	From which place or people, can you obtain condoms? (Multiple answer possible. Don't read the list but probe)	Shop1Pharmacy2Clinic3Hospital4Family planning center5Bar/Guest house/Hotel6Health worker7Peer Educator/Outreach doctor8Friend9Pan Pasal10Others (Specify)96No response99	
503.1	Did any organization give you condom in the last 12 months?	Yes, free of cost	
504	Do you usually carry condom with you?	Yes1 No2	
505	At this moment how many condoms do you have at-hand with you? (Observe and write)	Numbers	

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Q. N.	Que	Coding Categories	Skip to	
601	Have you ever heard of diseases that can be transmitted through sexual intercourse?	Yes 1 No 2 No response	603	
				Page 44
602	Can you describe any symptoms of STIs in women?	Lower abdominal pain1Genital discharge2Foul smelling3Burning pain on urination4Genital ulcers/sore5		
	(Do not read possible	Swelling in groin area6		
	answers, multiple answers possible.)	Itching		
603	Have you had genital discharge/burning urination during the last 12 months?	Yes	604	
603.1	Currently, do you have genital discharge/burning urination problem?	Yes		
604	Have you had a genital ulcer/sore blister during the last 12 months?	Yes	605	
604.1	Currently, do you have genital ulcer/sore blister?	Yes		
605	Last time you had a genital discharge/ burning urination or a genital ulcer/sore blister, where did you go for treatment?	Did not seek treatment1With private doctor2In hospital3Never had such symptoms4Others (Specify)		

6.0 KNOWLEDGE AND TREATMENT OF STIS

7.0 KNOWLEDGE, OPINIONS AND ATTITUDES ON HIV

O. N.	Que	Coding Categories	Skip to
701	Have you ever heard of HIV or	Yes1	
	the disease called AIDS?	No2	
	(Probe if the response if No)	No response99	
702	Do you know anyone who is infected	Yes1	
	with HIV	No2	
	or who has died of AIDS?	No response99	704

703	Do you have close relative or close	Yes, a close relative1	
	friend who is infected with HIV or	Yes, a close friend2	
	has died of AIDS?	No3	
		No response99	

O. N.	Ou	Coding Categories	Skip to	Page 45
704	Can a person protect himself/herself	Yes1		1 486 1 10
	from HIV,	No2		
	the virus that causes AIDS, by	Don't know98		
	using a condom correctly during	No response99		
705	Can a person get HIV, from	Yes1		
	mosquito bites?	No2		
		Don't know98		
		No response99		
706	Can a person protect himself/herself	Yes1		
	from HIV,	No2		
	by having only one	Don't know98		
	uninfected faithful sex	No response99		
	partner?	-		
707	Can a person protect himself/herself	Yes1		
	from HIV,	No2		
	by abstaining from sexual	Don't know98		
	intercourse?	No response99		
		-		
708	Can a person get HIV, by sharing a	Yes1		
	meal with	No2		
	someone who is infected?	Don't know		
		No response		
709	Can a person get HIV, by getting	Yes1		
	injections with	No2		
	a needle that was already used by	Don't know98		
	someone else?	No response99		
710	Can a person who inject drug	Yes1		
	protect	No2		
	himself/herself from HIV, the virus	Don't know		
711	that causes	No response		
/11	Can a pregnant woman infected	Y es1		
	With HIV	Don't Imany	712	
	transmit the virus to her unborn	Don't know	/13	
712		Take madiantian (Antienterrine) 1		
/12	what can a pregnant woman do to	Take medication (Antiretroviral) I		
	reduce the risk of transmission of	Durlet Image (Specify)96		
	ΠV to ner unborn child?	Don't know		
	(Do not read the possible	No response		
	answers, multiple answer			

713	Can women with HIV transmit	Yes1	
	the virus to her newborn child	No2	
	through breast-feeding?	Don't know98	
		No response99	
713.1	Do you think a healthy-looking	Yes1	
	person can be	No2	Page 1/6
	infected with HIV?	Don't know 08	rage 40
713.2	Can a person get HIV by shaking	Yes1	
	hand with an infected person?	No2	
	_	Don't know 08	
713.3	Can blood transfusion from an	Yes1	
	infected person	No2	
	to the other transmit HIV?	Don't know 08	
714	Is it possible in your community for	Yes1	
	someone to have a confidential HIV	No2	
	test?	Don't know98	
	(By confidential, I mean that no	No response99	
	and will know the negalt if you		
714.1	Do you know where to go for HIV	Yes1	
	test?	No2	

O . N.	0	Coding Categories	Skip to
715	Have you ever had an HIV test?	Yes1	
		No2	
		99. لـ99	
716	Did you voluntarily take up	Voluntary1	
	the HIV test, or were you	Required2	
	required to have the test?	No response99	
717	When did you have your most	Within the past 12 months1	
	recent HIV test?	Between 13-24 months2	
		Between 25-48 months3	
		More than 48 months4	
		Don't know98	
717.1	How many times have you		
	undergone for HIV test within		
	the last 12 months?	Times	
718	Did you find out the result of	Yes1	
	your HIV test?	No2→	801
		No response99→	801
		-	
718.1	What was the result of your last	Positive1	
	test?	Negative2	801
		Uncertain3	719
		Result not received4	801
		Don't know98	}
		No response99	

718.2	Did you go to HTC for HIV care once you knew you were HIV positive?	Went1 Did not go2 Don't know98 No response99	801
718.3	Why didn't you go to HTC for HIV care even after knowing you were HIV positive?	Felt I was healthy1Others might know2Had to pay3Bad attitude of healthcare provider4Long waiting time/Could not managewith Clinic opening time	801
719	Why did you not receive the test result?	Sure of not being infected1 Afraid of result2 Felt unnecessary3 Forgot it4 Others (Specify)	

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8.0 KNOWLEDGE OF HEPATITIS C

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

O. N.	Questions	Response categories	Skip to
801	Can Hepatitis C be transmitted	Yes1	
	through sex?		
		No2	
802	Can Condoms protect you	Yes1	
	against hepatitis C?		
	- ·	No2	
803	Can Hepatitis C only occur if	Yes1	
	vou have HIV?		
	5	No2	
	Can sharing needles transmit	Yes1	
	Hepatitis C?		
804	1	No2	
	Can Hepatitis C be transmitted	Yes1	
	through tattooing?		
805	8.	No2	
	Is there a medical treatment for	Yes1	
	hepatitis C?		
806		No2	
	Can herbal remedies cure	Yes1	
	hepatitis C?		
807	1	No2	

9. KNOWLEDGE AND PARTICIPATION IN STI AND HIV PROGRAMS

O. N.	0	Coding Categories	Skip to	D 40
901	Have you met or discussed or interacted with Peer Educators (PE) or Outreach Educators (OE) or Community Mobilizes (CM)	Yes1 No	904	Page 48
902	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		
903	How many times have these PE, OE, CM and/or CE met you in the last 12 months?	Once		
904	Have you visited or been to any outreach center (DIC, IC or CC) in the last 12 months?	Yes1 No	907	
905	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 condoms1Went to learn the correct way of using condom2Went to learn about the safe injecting behavior3Went to watch film on HIV/AIDS4Participated in discussion on HIV transmission5Went to have new syringe6Other (Specify)96		
906	How many times have you visited out reach centers (DIC, IC or CC) in the last 12 months?	Once		

907	Have you visited any STI	Yes1	010	
	clinic in the last 12	INO	910	
	montus?			
908	What did you do when you visited such STI clinic? (Multiple answers. DO NOT READ the possible answers given below)	Blood tested for STI		
909	How many times have you visited STI clinic in the last 12 months?	Once		
910	Have you visited any HTC (HIV testing and counseling center)?	Yes1 No	913	
911	What did you do when you visited such HTCs ? (Multiple answers. DO NOT READ the possible answers)	Received pre-HIV/AIDS test counseling		

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O. N.	0	Coding Categories	Skip to
912	For how many times have you	Once1	
	visited HTC	2-3 times2	
	center in the last 12 months?	4-6 times3	
		7-12 times4	
		More than 12 times5	

913	Have you ever enrolled into any Opioid substitution Therapy (OST): Methadone and Buprenorphine?	Yes	End the Intervie	
913.1	Have you received any Opioid substitution Therapy (OST) in the past 12 months?	Yes1 No2 Don't Know	w End the Intervie	Page 50
913.2	Which service have you received?	Methadone1 Buprenorphine2 Others (Specify)96		
913.3	Are you still in therapy?	Yes	End the Intervie w	
913.4	What amount have you been receiving per day?	Methadoneml Buprenorphine mg.		
913.5	How long have you been in this therapy?	Years Months		

Thank You!!