Integrated Biological and Behavioral Surveillance (IBBS) Survey among Injecting Drugs Users in Pokhara Valley, Nepal

Round V - 2011

June 2011

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

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The IBBS Surveys are part of the National HIV Surveillance Plan, led by NCASC. The field work of the surveys was carried out by New ERA and Intrepid Nepal, quality assurance by National Public Health Laboratory and with technical and financial assistance from the United States Agency for International Development (USAID), Cooperative Agreement 367-A-00-06-00067-00, and Strategic Objectives: 9&11

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This survey is the result of the dedicated and collaborative efforts of government as well as local and international institutions. We would like to thank them all for their hard work and significant contribution towards the successful completion of this study.

We firmly believe that the trends identified by these surveys will be internalized and 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.

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ABBREVIATIONS

AIDS - Acquired Immuno-Deficiency Syndrome
SPSS - Statistical Package for the Social Sciences
PE - Peer Educators
DIC - Drop-in-center
EQA - External Quality Assessment
EQAS - External Quality Assessment Scheme
FHI - Family Health International
FSW - Female Sex Workers
HIV - Human Immuno-Deficiency Virus
IBBS - Integrated Biological and Behavioral Surveillance
ID - Identification Number
IDU - Injecting Drug User
IEC - Information, Education and Communication
MARP - Most At-Risk Populations
MLM - Male Labor Migrants
MSM - Men Having Sex with Men
MSW - Male Sex Workers
NCASC - National Centre for AIDS and STD Control
NGO - Non Governmental Organization
NHRC - Nepal Health Research Council
NPHL - National Public Health Laboratory
OE - Outreach Educators
PE - Peer Educator
PHSC - Protection of Human Subject Committee
RDS - Respondent Driven Sampling
RDSAT - Respondent-Driven Sampling Analysis Tool
RPR - Rapid Plasma Reagan
SI - Strategic Information
STI - Sexually Transmitted Infections
TPPA - Treponema Pallidum Particle Agglutination
USAID - United States Agency for International Development
VCT - Voluntary Counseling and Testing of HIV
WLM - Wives of Labor Migrants

EXECUTIVE SUMMARY

The National Centre for AIDS and STD Control (NCASC), Nepal has developed a comprehensive National HIV and STI Surveillance Plan that includes the Integrated Biological and Behavioral Surveillance (IBBS). This surveillance among injecting drug users (IDUs), men having sex with men (MSM), female sex workers (FSWs), male labor migrants (MLM) and wives of labor migrants (WLM) was conducted on a regular basis. These surveys are aimed at assessing health risk behaviors and monitoring the trend in the prevalence of HIV and Sexually Transmitted Infections (STIs) among Most At-Risk Populations (MARPs) to inform the national HIV response in Nepal.

The IBBS surveys are conducted by NCASC with technical and financial support from FHI/Nepal and the United States Agency for International Development (USAID). This round of the IBBS was conducted among male injecting drug users (IDUs) in Pokhara valley. The primary objective of the survey was to collect strategic information to analyze trends in HIV prevalence, injecting drug and sexual behaviors relating to HIV and STIs among IDUs.

This report details the findings of the fifth round of the IBBS conducted among 345 male IDUs in the Pokhara Valley recruited using Respondent Driven Sampling (RDS). A structured questionnaire was administered to the respondents at a centrally located survey center. The questionnaire collected information on sexual behavior and HIV/AIDS awareness as well as socio-demographics. After the interview, clinical examinations were conducted by a Health Assistant and blood samples were collected for HIV and syphilis testing by a lab technician. The test results were provided in coordination with pre- and post-test counseling by a trained counselor in the survey center.

Key Findings:

STI/HIV/AIDS Prevalence

The HIV prevalence among the IDUs in this survey was about 4.6 percent. HIV prevalence among the IDUs has been decreasing gradually, but significantly since the first round in 2003 when the prevalence was 22 percent. A history of syphilis was detected among only 0.9 percent IDUs, while 0.3 percent of the survey participants were currently infected with syphilis. This indicates that sexually transmitted infections are a relatively minor problem among IDUs in the Pokhara Valley.

Age, marital status, and literacy were statistically non-significant categories that correlated to risk of HIV. HIV prevalence was 7.8 percent among IDUs aged above 20 years, while no HIV was found among their younger counterparts. HIV prevalence was 3.8 percent among IDUs who had been married before and 7.3 percent among IDUs who had never been married. Likewise, HIV prevalence was 21.6 percent among illiterate/literate no schooling IDUs while 4.5 percent among IDUs who had been to formal school.

A significant correlation was found between HIV prevalence and duration of injecting behavior. HIV prevalence was found in 13.3 percent of IDUs who had been injecting drugs for more than five years, 1.1 percent among those who had been doing so in the last two to five years and no HIV prevalence was among IDUs who had been doing so in the last two years.

Socio Demographic Characteristics

The age of IDUs ranged from 17 to 42 years. Almost eighty-five percent of the respondents were under 30 years of age. A majority of the IDUs (68.5%) were unmarried and among those currently married, 3.7 percent lived without a sexual partner.

IDUs were fairly well educated with 85 percent of them having attended secondary school or higher education. A large portion of the IDUs belonged to the Gurung/Rai/Sherpa community (36.7%), followed by Tamang/Lama/Magar (21.8%) communities, and Chhetri/Thakuri (13.3%) communities.

Sixty-four percent of IDUs had ever been imprisoned or detained for some reason by the police. Out of the ever imprisoned IDUs, about 37.3 percent had been imprisoned or detained for some reason in the past year. About five percent of the respondents had injected while they were in prison.

Alcohol Intake, Oral Drug Use, and Drug Injecting Practice

Alcohol consumption was common among the IDUs in the Pokhara Valley. Around 81 percent of IDUs had consumed alcohol at least once in the past month.

Oral drug use was more common than alcohol intake among IDUs in the Pokhara Valley. All respondents reported using oral drugs. Almost all IDUs had been using oral drugs for more than two years (98.1%), and around 59 percent had been taking them for five years or more. A small proportion (9.2%) had been using oral drugs for less than two years.

More than a third of the respondents (36%) had been injecting drugs for up to two years. One in ten respondents (10.1%) had not injected during the week preceding the survey. About a fifth (19.6%) had injected two to three times in the week preceding the survey, while about the same percentage (19.5%) had injected four to six times during the same period. Overall, 38.8 percent of respondents had injected once a day for a week or more. Furthermore, a large proportion of IDUs (88.3%) injected a combination of different drugs.

The average number of years respondents had been injecting drugs increased to 5.1 years in 2011 from previous four rounds. The median age of the respondents at their first injection has decrease from 20 years (2009) to 19 years (2011). Statistically a higher proportion of IDUs had injected for the first time before turning 20 in all five rounds of the survey High risk behavior such as injecting with previously used needles/syringes decreased significantly from 21 percent in the first round to 1.6 percent in the fifth round. Additionally, the proportion of IDUs who had refrained from sharing their needles/syringes with anyone in the past week increased from 68 percent in 2003 to 97.5 percent in 2011. Nevertheless, a higher number of IDUs (80.4%) reported sharing injecting equipment like bottle, spoon, cooker, vial/container, and 4.2 percent had drawn drug solution from a common container used by others at least once in the week preceding the survey.

Sexual Behavior

Among the respondents, 97.6 percent of IDUs reported having ever had sexual contact. About 84 percent had been sexually active in the past year. Although a third of them (33.8%) had one sex partner, 36.7 percent had two-three sexual partners and about 15 percent had seven or more partners. In the past year, 27 percent of IDUs had sexual contact with their regular

partners. Around 24.2 percent of them had sexual contact with their regular partners in the month preceding the survey. Around 51.6 percent of the IDUs had sex with non-regular female sex partners in the past year, and 47.4 percent of them had sexual contact with non-regular partners in the month preceding the survey. Over one-third of the IDUs in Pokhara (37.5%) had sexual contact with a FSW in the past year, of those 34.2 percent had sexual contact with FSWs in the past month.

Condom use during respondents' most recent sexual contact with sex workers was reported by 88.4 percent of IDUs. This figure was higher compared to the use of a condom during the IDUs' most recent sexual contact with regular partners (56.9%) and non-regular partners (48.6%). A similar pattern was observed in IDUs regarding consistent condom use in the past year. In the past year, 70.2 percent of IDUs had used condoms consistently with female sex workers compared to 15.1 percent who used condoms consistently with regular female sex partners and 33.9 percent with non-regular female sex partners.

STI and HIV/AIDS Awareness and Treatment Practices

Among the respondents 16.3 percent had not heard about STIs before. Those who had heard about STIs, most commonly cited genital discharge (69.2% in female and 76.4% in male) and genital ulcers/sore blisters (65% in female and 74.3% in male) as symptoms. Around 4.8 percent of the IDUs in Pokhara have had genital discharge and 4.9 percent had suffered from genital ulcers/sores in the past year. Forty-two percent of them reported having experienced genital discharge, while 75.4 percent had genital ulcers/sores at the time of survey. More than half of those IDUs who had experienced STI symptoms in the past year had not sought any form of treatment. Of those who sought treatment, 70 percent had been to a private doctor, and 20 percent had been to hospital/health post to seek treatment.

While 68.4 percent of IDUs knew about all three major HIV prevention measures, A - abstinence from sexual contact, - being faithful to one partner, and C - condom use during each sexual contact, there were 71.2 percent IDUs who were also aware of the truth about common misconceptions, thus indicating a comprehensive knowledge of HIV: D - a healthy-looking person can be infected with HIV, E - a person cannot get the HIV virus from a mosquito bite, and F - sharing meal with an HIV infected person does not transmit the HIV virus. The majority of the IDUs in the Pokhara Valley (95.1%) knew that a confidential HIV testing facility was available in their community. About 66 percent of IDUs had ever tested for HIV before and 94 percent had received their test results.

Exposure to HIV/AIDS Related Programs

Among the respondents, 82.2 percent of IDUs had met with a peer/outreach educator at least once in the past year. Seventy one percent had visited a drop-in center (DIC), and 31.3 percent had visited a VCT center in the last 12 months. Only about three percent had visited an STI clinic. The survey revealed that nearly one-third (31.2%) of IDUs in the Pokhara Valley had participated in HIV/AIDS awareness-raising programs or similar community events before. Sixty percent of them had participated in the AIDS day celebrations, 45.7 percent in condom day celebrations, and 38.4 percent in group discussions.

Nearly one-quarter (21.9%) had participated in one program only. A little over one-third (33.8%) had taken part in two or three programs, while about 44.2 percent had not participated in any HIV and AIDS awareness programs in the past year.

1. INTRODUCTION

1.1 Background

The number of people living with HIV worldwide is estimated to be 33.4 million, and among them, approximately 4.7 million are in Asia (AIDS epidemic update report, UNAIDS, 2008). The National Centre for AIDS and STD Control (NCASC) has been compiling and publishing data on reported HIV cases in different population subgroups since 1991. In 2009, NCASC estimated about 63,528 adult and children (including children and adults above the age of 49 years) were infected with HIV in Nepal. However, there is a significant gap between the estimated number of HIV infections and the number of people who have actually been tested and know their status.

The IBBS surveys are conducted at regular intervals in Nepal. This is the fifth round of the survey conducted among IDUs in Pokhara valley. IDUs function as a core HIV-risk group because of their high-risk behavior of sharing needles/syringes between different injecting partners and also re-using needles kept in public places. Moreover high-risk sexual behavior associated with drug use has also been found to be a major contributing factor in the spread of HIV among the non-injecting population (AIDS epidemic update report, UNAIDS, 2008).

The IBBS survey conducted in the Pokhara Valley revealed an HIV-positive prevalence rate of 22 percent in 2003 (New ERA/SACTS/FHI 2003); 21.7 percent in 2005 (New ERA/SACTS/FHI 2005); 6.8 percent in 2007 (New ERA/SACTS/FHI 2007); and 3.4 percent in 2009 (New ERA/SACTS/FHI 2009).The first, second, third, and fourth rounds of the IBBS among IDUs conducted in 2002, 2005, 2007, and 2009 in the Kathmandu Valley indicated a staggeringly large proportion of HIV-positive respondents at 68 percent in 2002 (New ERA/SACTS/FHI 2002); 51.7 percent in 2005 (New ERA/SACTS/FHI 2005); 34.8 percent in 2007 (New ERA/SACTS/FHI 2007); and 20.7 percent (New ERA/SACTS/FHI 2009), respectively.

The latest round of IBBS conducted in 2009 showed a decline in HIV prevalence among IDUs in Kathmandu and Pokhara. The last round of surveys also indicated that, over time, IDUs developed greater levels of knowledge about how to protect themselves from HIV infection through safer sex and less harmful injecting practices. Although HIV prevalence among IDUs in 2009 was lower than the previous rounds of the survey in Pokhara and Kathmandu, it is still high.

These surveillance surveys are designed to monitor the trend in the key indicators of HIV over time. This survey is included in the National Surveillance Plan of HIV developed by NCASC. This fifth round of IBBS survey among male IDUs was conducted in the Pokhara and Kathmandu Valley. The reports discuss the key findings of the survey conducted in the Pokhara Valley.

2. DESIGN AND METHODOLOGY

2.1 Objectives of the Survey

In line with the objectives of the previous rounds of IBBS, this fifth 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 IDUs in Pokhara Valley.

The specific objective of the survey was to collect information related to socio-demographic characteristics; drug using and needle sharing behaviors; sexual behavior including knowledge and use of condoms; knowledge of HIV/AIDS; knowledge and treatment of STIs; and exposure of IDUs to available HIV and STI services in Pokhara.

2.2 Survey Population

The cross-sectional survey was conducted among IDUs who are considered to be one of the *'core groups'* for transmission of HIV/STIs. For the purposes of this survey the definition for IDUs was "*those current male injectors aged 16 years or above who had been injecting drugs for at least three months prior to the date of survey.*"

2.2.1 Sample Size and Sampling Design

The sample size was calculated to detect 15 percent differences in key indicators, such as needle/syringe sharing and consistent condom use in four successive IBBS among IDUs. The sample size was determined by using basic statistical formula (Annex 2). Based on this formula, a total of 345 IDUs participated in this survey.

The respondent-driven sampling (RDS), a form of chain-referral, was used to recruit participants. The RDS, unlike the "snowball" method, attempts to overcome the biases such as masking, volunteerism, and over sampling of groups with large networks and, thus, gives unbiased estimates of population parameters (Heckathorn, 1997) and provides more representative samples.

Since it relies on social networks, RDS has the potential to reach individuals who are not easily accessible such as MSM, IDUs, and male sex workers (MSWs). In RDS, the sampling frame is created based on information collected from the participants during the sampling process itself. This information includes (1) who recruited whom (2) the relationship of the participant to the recruiter (RDS population estimates are based on an assumption that the recruiter and the participant know each other) (3) the participants' personal network sizes (network size is used to estimate the average network size by different sample characteristics such as gender, race/ethnicity, and age).

Since RDS population estimates are based on the recruiter and recruit knowing one another, RDS design includes means for encouraging participants to recruit those they already know. This involves offering rewards for recruiters and making recruitment rights scarce through quotas, so that recruitment is not wasted on strangers (Ramirez-Valles et. al., 2005).

The preliminary mapping exercise carried out with the help of some local NGO partners before the initiation of the actual field survey acquainted the survey team with several IDUs, their gathering locations, and their networks.

This information helped the survey team recruit a total of six known IDUs as "seeds" who met survey eligibility criteria from different sites and different injecting groups. In some cases, the local key informants helped in the seed recruitment process.

The sampling process begins with the selection of a set of people in the target population who serve as 'seeds.' Seeds were informed of the survey protocol and procedures and were encouraged to recruit other eligible individuals from their social networks to participate in the survey. After participating in the survey, each seed is provided with maximum of three recruitment coupons, which they use to recruit other people from their networks. After participating in the survey, each participant of the survey are also provided with maximum of three recruitment coupons, which they then use to recruit others. The referral coupon had a unique serial number that was used to link the recruiter to his recruit. The recruitment continued this way, with the subjects recruiting more subjects, until the desired sample size was reached.

2.2.2 Seeds and Recruitment

Following RDS theory, research staff recruited the seeds (e.g., initial participants), who then began the chain referral by recruiting their peers into the survey. It was decided that "seeds" selected to initiate the recruitment process needed to be as diverse as possible (heterogeneous in geographical area, age, gender, ethnicity, and length of time participants had been injecting drugs). To ensure this all seeds and then generated survey participants were educated on the random recruitment of three peers from their network.

The first wave of participants recruited for the survey was brought in by the seeds. Thereafter, each person recruited for and enrolled in the survey received three recruitment coupons to recruit their peers into the survey. Each coupon was uniquely coded in order to link recruiters with recruits. The coupon ID numbers were carefully recorded in each questionnaire.

The recruitment process in this survey started with four 'seeds' and one more 'seeds' were added in between the survey periods. Initially four 'seeds' were selected from different sites/locations of the Pokhara Valley in consultation with the concerned NGOs working with the IDUs communities. During the recruitment process, survey team felt that the 'seeds' may not recruit the participants to meet the number of sample size required for the survey. One 'seeds' was thus added. All together five "seeds" generated required sample size for the survey. Each "seed' was given three coupons to pass on three peers they recruited for the survey. These peers who successfully participated in the survey were given another three coupons. In this way the recruitment process continued until 345 IDUs were recruited in this survey. Of the total five "seeds," two seeds generated 9 waves, one seed generated 7 waves each, and another two each completed 6 waves (Annex 3). By RDS theory, if at least six waves of recruitment are generated in the survey an equilibrium will be reached. This means that the recruited IDUs will sufficiently represent the population being sampled. The seeds were able to penetrate many networks during the recruitment of participants in the survey. One seed each was able to penetrate 43, 35, 33, 32 and 30 sites/locations of the Pokhara Valley respectively (Annex 4).

Since RDS is a dual incentive system to induce recruitment, each participant received Rs. 100 (equivalent to $1.30) for their participation in the survey and another Rs 50 (equivalent to $0.70) for each individual they recruited to the survey. A participant could have received up to Rs. 250 for successfully participating and recruiting three peers in the survey.

Refusals

There were no refusal from the survey after survey participants were introduced the survey ID number. However, many IDUs were screened when people came with coupon in the survey sites.

Those who did not meet the survey criteria and those who were not willing to participate in the survey because of personal reasons were not recruited into the survey. In total, there were 3 refusals at the survey center. They all had started injecting drugs less than three months prior to the survey.

2.3 Survey Process

A quantitative research approach was adopted in this survey. Structured questionnaires were used to collect behavioral data relating to drug injection, syringe/needle sharing, and sexual behavior among the IDUs. Additionally, specific socio-demographic details were collected. In order to draw up a comparative analysis of the behavioral trends over the time, questions asked during the first, second, third, and fourth rounds were repeated. A few questions were added in the final round as per the recommendation of the NCASC. The questionnaires were developed based on the "Guidelines for Repeated Behavioral Surveys in Populations at Risk of HIV" (FHI, 2000) (Annex 5).

Survey site was set up in Prithivi chowk in Pokhara. This centrally-located site was selected specifically for the convenience of meeting and bringing the survey population into the office. The field office had separate rooms for each activity, such as administration of the questionnaire, general physical and STI examinations, blood drawing and laboratory testing of the blood, and post-test counseling.

Before initiating the actual interview, all those coming with the referral cards were informally asked certain questions in order to ensure that they met the criterion set for the survey. Injection marks were also checked in order to confirm the participant's injecting behavior.

Apart from the structured questionnaire, questions related to STI symptoms were asked by a health assistant to verify the occurrence of such symptoms in the past or during the survey (Annex 6). The survey participants were provided with syndromic treatment for STI problems, and a lab technician collected blood samples to test for HIV and syphilis. Moreover, on the spot syphilis treatment was provided to all RPR reactive survey participants. On the spot RPR test was performed from the blood.

Strict confidentiality was maintained throughout the survey process. The names of the survey participants and/or their full addresses were not recorded anywhere. Instead, they were provided with a unique ID number written on a plastic-coated card. The same number was recorded on their questionnaire, medical records, and blood specimen. This card was also used for the distribution of the test results. Only those participants who produced the card

were provided with the HIV and syphilis test results verbally or written on the request of participants and with pre and post-test counseling.

Fieldwork Started on January 17, 2011 and Was Completed on March 17, 2011.

2.3.1 Ethical Review

The research was conducted in compliance with both ethical and human rights standards. These standards included maintaining participants' anonymity as well as providing pre- and post-test counseling. As this survey focused on individuals who are highly stigmatized and as injecting drugs is illegal in Nepal, ethical as well as "technical" approvals were obtained from Protection of Human Subject Committee (PHSC), FHI's ethical review body, Nepal Health Research Council (NHRC) prior to the commencement of the fieldwork. The survey protocols were carefully reviewed and approved by these organizations.

Verbal informed consent was obtained in the presence of a witness from all the participants prior to the interview and the collection of blood samples. The participants of the surveys were fully informed about the nature of the survey. They were informed that their participation was voluntary and that they were free to refuse to answer any question or to withdraw from the interview at any time. They were also briefed that such a withdrawal would not affect the services they would normally receive from their participation in the survey. A consent form describing the objectives of the survey, the nature of the participants' involvement, the benefits they would receive, as well as the confidentiality policy was clearly read aloud to them (Annex 7). Those who preferred to read it by themselves were provided the consent form in Nepali. Since the names and addresses of the interviewed IDUs were not recorded, the ID cards that were provided to the survey participants with specific numbers were the only identifications registered. The interviewer submitted the completed questionnaires to the field supervisor on the day of each interview. The supervisor kept those questionnaires in locked cabinets where no one else had access to them. The supervisor then transported the questionnaires after their review to the New ERA office every week where the questionnaires were kept in a locked coding room. Authorized data coding and data entry staff had access to the questionnaires. HIV test results were provided to the individual participants in the strictest confidence.

2.3.2 Clinical and Laboratory Procedure

The survey participants were clinically checked for any symptoms of STIs by the health assistant who also filled in a checklist with the information provided by the respondents (Annex 6). 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. Altogether six survey participants were treated with medicines free of cost for STI syndromes. They provided syndromic treatment to the respondents

Clinical Check-up Room

with STI symptoms in accordance with the "National STI Case Management Guidelines" of NCASC. Other over-the-counter medicines such as paracetamol, alkalysing agents, and vitamins were also given as necessary. Respondents with positive RPR tests were proposed a curative penicillin injection. There was provision of an 'on call' medical doctor to give the injection in Naulo Ghumti. However, none of the 4 RPR reactive cases gave their consent for the injection inspite of counseling and continuous follow up from the team members. In most cases the respondents were too scared to receive injections. Therefore, as an alternative treatment, oral medicines were provided to them as per the STI treatment guidelines.

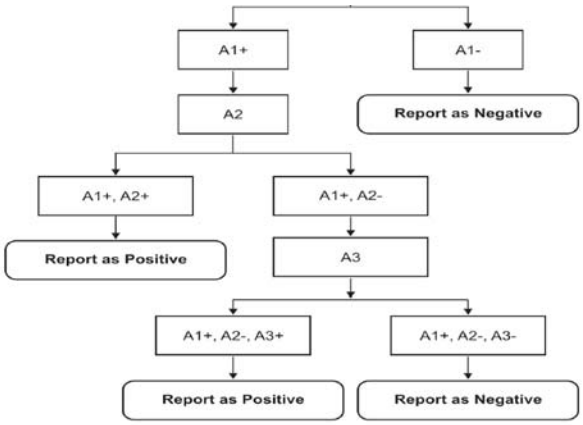

Laboratory Room

Laboratory service entailed an on-site rapid screening of HIV1/2 and syphilis followed by a confirmation test. About 5 ml of whole blood was drawn from each survey participant using disposable syringes. The blood sample was placed in a centrifuge to separate the blood cells from the serum. Each sample was labeled with the ID number of the survey participant. Both HIV rapid tests and syphilis RPR tests were performed using serum by a lab technician from Intrepid Pvt. Ltd. of Kathmandu. The laboratories were designed to have confidential testing for HIV and Syphilis as per the national guidelines. Universal precautions and stringent waste management protocols were followed. Quality assurance tests were performed on all positive and a random 10 percent of the negative samples in the national public health laboratory (NPHL) in Kathmandu for both HIV and Syphilis serum samples.

HIV1/ 2

The HIV screening of the serum sample was performed using rapid test kits following the HIV testing strategy II algorithm. Determine HIV 1/2 (Abbott, Japan), Uni-Gold HIV 1/2 (Trinity Biotech, Ireland), and SD Bioline HIV 1/2 (Standard Diagnostics. Inc. South Korea) were used as later flow (rapid immunochromatography) kits for testing for the presence of antibodies against HIV in the serum. Serum that tested positive with the initial kit was confirmed with the second kit. Samples that were found reactive on both tests were considered HIV antibody positive. Samples that were non-reactive on the first test were considered HIV antibody negative. Any sample that was reactive on the first test but non-reactive on the second was retested with the third "tie breaker" kit. The quality of the assay was assured by the in-built control of each kit.

HIV Testing Strategy II Algorithm



NOTE:	
A1 (First test) :	Determine HIV 1/2
A2 (Second test)	: Uni-Gold HIV
A3 (Third test)	: SD Bioline HIV 1/2
"+"	: Reactive
"-"	: Non-reactive

[1] Assay A1, A2, A3 represent 3 different assays.
[2] Such a result is not adequate for diagnostic purposes; use strategies II or III. Whatever the final diagnosis, donations which were initially reactive should not be used for transfusions or transplants.
[3] Report: result may be reported.
[4] For newly diagnosed individuals, a positive result should be confirmed on a second sample.
[5] Testing should be repeated on a second sample taken after 14 days.
[6] Result is considered negative in the absence of any risk of HIV infection.

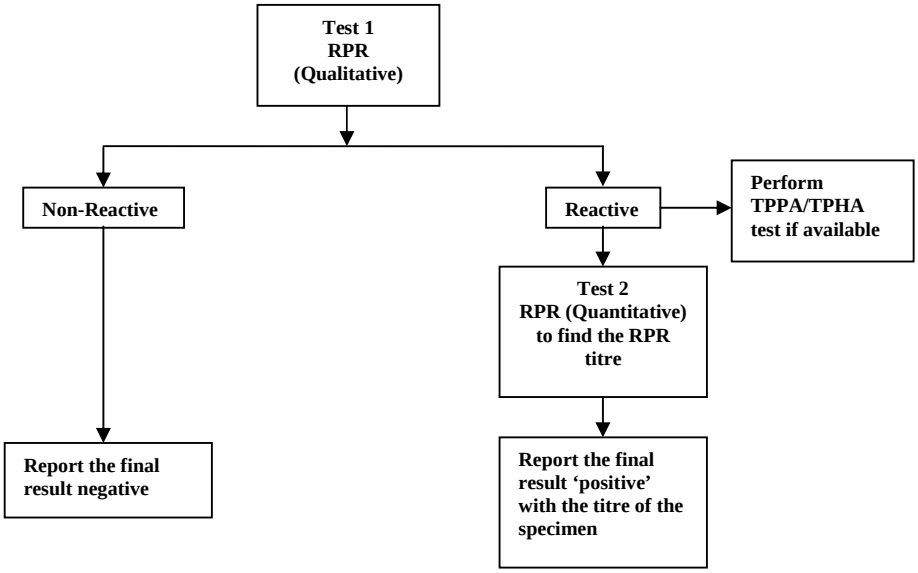
Sensitivity and Specificity of HIV 1/2 Kits

Test Kits	Company	Initial	Confirm	Tie Break	Antigen Type	Speci.	Sensi.
Determine HIV 1-2	Abbott, Japan Co. ltd	X			Recom HIV-1 and HIV-2	99.40%	100%
Uni-Gold HIV 1-2	Trinity Biotech, Dublin, ireland		X		HIV-1 and HIV-2	100%	100%
SD Bioline HIV 1-2	Standard Diagnostics, Inc, Kyonggii-do South Korea			X	HIV-1 (gp41;p24)-2 (gp36)	99.30%	100%

Syphilis

A syphilis test was performed following the national guideline (National guideline on case management of sexually transmitted disease, NCASC, 2009). The serum was tested for non-specific and specific treponemal agents. A non-treponemal test Rapid Plasma Regain (RPR) [Becton, Dickson, and company USA] was used for both qualitative screening and quantitative titration. All RPR reactive serum was confirmed using the specific Treponema Pallidum Particle Agglutination (TPPA) test (Fujirebio Inc.) at Intrepid Nepal Pvt. Ltd. Laboratory. 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.

Syphilis Testing Algorithm



2.3.3 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. 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 National Public Health Laboratory (NPHL) to test for HIV and syphilis. The same test kits and testing protocols were used in the NPHL for quality assurance.

2.3.4 External Quality Assessment

External quality assessment (EQA) is an evaluation of the performance of a testing laboratory by an external agency. An External Quality Assessment Scheme (EQAS) is very essential in such studies to determine the quality of testing. All HIV positive and 10 percent of all HIV negative samples were retested at NPHL in this survey as an EQA of HIV testing. Similarly, all RPR reactive and 10 percent of all RPR non-reactive samples were retested at NPHL as an

EQA of Syphilis testing. Aliquots of selected serum specimens were prepared in the field and sent to Intrepid Nepal's laboratory in Kathmandu within a week of specimen collection. Serum specimens were stored at Intrepid Nepal's laboratory at a temperature below -20°C. Once testing activities in the field were completed, Intrepid-Nepal handed over the serum specimens to NPHL for retesting. The test kits as those used in the field were also provided to the NPHL.

HIV Testing:

Altogether 48 serum specimens were retested for HIV at NPHL. Among them 16 were HIV positive in the field. The table below shows the comparison between results from field and NPHL. Sent percent agreement has been observed in rapid HIV test results between field and NPHL test results.

		NPHL results		
		Negative	**Positive**	**Total**
Intrepid Nepal results	Negative	32	0	32
	Positive	0	16	16
	Total	**32**	**16**	**48**

RPR Testing:

Altogether 38 serum specimens were retested for RPR at NPHL. Among them 4 were RPR reactive in the field. The table below shows the comparison between results from field and NPHL. Ninety five percent agreement has been observed in RPR test results between field and NPHL. Two samples which were reactive in the field were found to be non-reactive at NPHL.

		NPHL results		
		Negative	**Positive**	**Total**
Intrepid results	Negative	34	0	34
	Positive	2	2	4
	Total	**36**	**2**	**38**

TPPA Testing:

Four serum specimens were retested for TPPA at NPHL. Two of them were TPPA Positive at Intrepid Nepal's laboratory. The table below shows the comparison between results from field and NPHL. All results from Intrepid Nepal's laboratory agreed with results from NPHL.

		NPHL results		
		Negative	**Positive**	**Total**
Intrepid results	Negative	2	0	2
	Positive	0	2	2
	Total	**2**	**2**	**4**

2.3.5 Control of Duplication

Each participant who completed the survey was informed before issuing the recruitment coupons that the same person could not take part more than once in the survey. Therefore, they should not recruit the same person who had already received a coupon from others and/or had already participated in this survey. In order to avoid repeated interviews with the same IDUs, before issuing the ID number, the participants were asked several questions relating to their experience of having undergone blood tests, the part of the body from where the blood was taken, their experience of HIV testing or testing for other diseases, previous meetings with the New ERA staff and peer educators, and possession of an ID card with a survey number.

2.4 Survey Management

The overall monitoring of the survey was done by NCASC. NCASC called three monitoring meetings. Moreover, the SI Unit head at NCASC and the Surveillance officer at NCASC made monitoring visits to the Pokhara survey site.

The survey was conducted by a team comprised of one survey director, one project associate, two research assistants, and one field teams. The field teams formed for the survey included one research assistant, four supervisors/interviewers, one health assistant, one lab technician, one counselor, one runner, and local motivator/s (as needed). The laboratory portion of the survey was the responsibility of Intrepid Nepal, which they included one trained lab technician in each field team.

Before data collection started, a one-week intensive training was organized for the survey team. The training session familiarized the team with the survey objectives, characteristics of the target groups, rapport-building techniques, contents of the questionnaire, and the survey process. The training session also included theory and practical classes on pre-test counseling and questionnaire administration. Experienced counselors from Youth Vision conducted a separate session on pre-test counseling. Technical experts from FHI discussed STIs,

HIV/AIDS, and pre- and post-test counseling. The survey team was also familiarized with the general behavior of IDUs and skills required to deal with them by personnel from Youth Vision, an organization that works with IDUs. Additionally, the training focused on providing a clear concept of informed consent to the research team.

One centrally located survey center was established at Prithivi Chowk for the survey. Individual interviews, clinical examinations, blood collection, and counseling were carried out in separate rooms in this center.

2.4.1 Coordination and Monitoring

To ensure the quality of data under the leadership of NCASC, New ERA and ASHA Project staff supervised the fieldwork regularly. Moreover, monitoring of the field work was done by USAID Nepal as well. Field supervisors reviewed all the completed questionnaires and any inconsistencies in the responses were clarified through discussions with the concerned interviewer later that day. Cross-checking questions were also asked to the survey participants to avoid duplication.

New ERA carried out the overall coordination of the survey. Intrepid Nepal was responsible for setting up the laboratory and collecting, storing, and testing blood samples.

The key research team members monitored and supervised the field activities. The research assistant was responsible on a day-to-day basis for ensuring that the survey was implemented in the field according to the protocol. Team meetings were held every week to plan ahead and solve any field-level problems. The research assistant in the field reported to the senior research assistants or the project coordinator whenever necessary. ASHA Project staffs from the program, strategic information (SI) and technical unit also monitored the field work in alternate weeks. The observations and suggestions from ASHA Project monitors were shared with the research team in the field at the end of the monitoring visit and were also communicated with the team leader and project associate at New ERA and Intrepid Nepal. Even after the field work, ASHA Project SI unit staffs closely monitored the data entry, cleaning and analysis process. In addition, the key research team member from New ERA and Intrepid Nepal made periodic site visits throughout the fieldwork.

2.4.2 Constraints in the Field Work

It was a challenging task to convince the IDUs to participate in the survey. In many cases, the respondents were not interested in waiting for the test results, complaining that it took too much time. Frequent and strict police patrol also made it difficult for the researchers to find the survey population. Priority of the survey participants to get drugs from the 'drugs market' made difficult to speed up the survey. However, no major constraint was faced during the field work once the participants were recruited.

2.5 Post-Test Counseling and Test Result Distribution

All the survey participants received their test results after producing their ID cards. They were provided with HIV and syphilis test results and post-test counseling by a trained counselor at the survey site. The survey participants were informed about the operating hours of the survey site right after the collection of their blood sample for the test. A provision was made to provide test results to the survey participants on the same day of the interview.

Post-test counseling and individual report dissemination was completed within the survey period. Out of the 345 IDUs tested for HIV, only 135 (39.1%) turned up for the test results (Annex 8). Though the results were provided within an hour of drawing blood for the test in the survey center, many of the IDUs did not wait for their results. This might be because it took almost three hours to complete the entire survey, which included confirmation of IDU, verbal consent, an interview, pre-test counseling, a syndromatic examination for STI, a blood test for HIV, and RPR screening, and post-test counseling. The participants often said that they had no time, had to search for drugs, and would come the following day. But they did not return the next day. Many of the survey participants who received their test results visited the day after the test to receive their test results. There was no provision for reimbursement of transportation cost for those who wished to come back the next day, which might be one constraint for collecting the report. Trained counselors gave the test results to the participants in a private setting only after they had produced their ID cards. The counseling session was focused on high-risk behavior and other aspects of STIs and HIV. Some participants were also referred to Naulo Ghumti for further services.

2.6 Data Management and Analysis

Data was entered using FoxPro Software. A double entry procedure was performed. Respondent-Driven Sampling Analysis Tool (RDSAT) software (RDSAT 5.6, Cornell University, 2005) was used for analysis of the samples. This software is designed to control three types of potential biases in chain-referral sampling namely (1) affiliation bias (2) homophile and (3) network size bias (Salganik, M.J. etc., 2004).

The raw data was first prepared using SPSSWIN Version 11. This included generating new variables and re-coding missing values. Datasets were then converted to Microsoft Excel files and then to RDS files (Tab Delimitated Text). Frequency, cross-tabulation, and prevalence estimates of key-indicators were performed in RDSAT.

The network size reported by the IDUs as per the questionnaire and at the time of referral card distribution was reviewed to see if there is any major discrepancy. There was no major difference between the two reported network size, so network size reported during the interview was used to analyze the data. To eliminate extremely small and large network sizes, the reported network size was truncated to a minimum and a maximum possible value. For this, a sensitivity analysis was done where several truncation limits were calculated and tested. Finally, a value of minimum 4 and maximum 50 was setup. When the program encountered an individual whose average network size was outside of the specified bounds, it was changed manually to the set limits. For those whose average network was lower than 4 the value was changed to 4 and for those whose average network was more than 50 the value was set to 50. This criterion of each end of network distribution was recommended by the RDS expert team of FHI and New ERA to define the modest network size.

There were certain limitations in using RDSAT for the entire data in the report. Some data obtained from the survey did not meet the required numerator to be calculated with RDSAT. Such data have been calculated using SPSS and have been marked with asterisks in the tables in this report. They represent unadjusted proportions. Moreover, in some variables RDSAT had limited capacity to estimate the weighted percentages and ranges. Particularly when distribution of cases was heavy in one category such problems were seen and RDSAT gave strange results. In such case also SPSS result are used with notes.

Dissemination of IBBS survey findings

Dissemination of the IBBS surveys was conducted at three levels: First, the key findings were shared with the IDU community in Pokhara valley and their comments were incorporated to support the IBBS findings. Secondly, it was shared at the national level in Kathmandu among a wider group of government, non-government organizations, donor agencies and stakeholders working in the field of HIV and AIDS in Nepal. This was done primarily as an update on the status and the trends of the HIV epidemic among IDUs in Kathmandu valley and to draw possible policy and program implications. Lastly, dissemination meetings were organized at the regional level in Pokhara for all local government and non-government local stakeholders to share the survey findings so they can be used to improve the local response to the HIV epidemic.

2.7 Primary use of Survey Findings

The survey results are primarily intended to use (in reference to the IDU population in Pokhara) in for:

- Tracking the trend in HIV and STI prevalence
- Tracking the trend in high risk behaviors
- Estimating and projecting HIV infection
- Evaluating the progress of HIV prevention interventions

3. SOCIO-DEMOGRAPHIC CHARACTERISTICS OF IDUs

This chapter analyzes the socio-demographic characteristics of the IDUs in the Pokhara Valley.

3.1 Demographic Characteristics

The data presented in the table 3.1 reveals that a relatively high proportion of the surveyed IDUs were quite young. About 12 percent were under 20 and about eighty-three percent of respondents were in their teens or twenties. Only about 17 percent were aged between 30 and 42. The age of the participants ranged from 17 to 42 years with a median age of 24 years.

More than two-thirds of the IDUs (68.5%) were unmarried; 4.5 percent was either divorced/separated from their wives or was widowers. Nearly 94 percent of IDUs were married before they were 25 years old. The median age at which the IDUs were married for the first time was 22 years. Among those currently married, 96.3 percent lived with their wives, whereas the rest lived without a sexual partner (Table 3.1).

Table 3.1: Demographic Characteristics

Demographic Characteristics	Estimated Population Proportions (%) (N=345)	95% CI
Age		
≤19 Yrs	12.3	9.0-15.6
20-24	43.0	38.3-48.4
25-29	28.0	23.0-32.9
30-34	11.1	8.0-14.3
35-47	5.7	3.3-8.1
Median Age	**24.0**	
Marital status		
Married	27.0	22.0-31.6
Divorced/Separated/widower	4.5	2.4-6.7
Never married	68.5	63.8-73.5
IDUs living with		
Living without sexual partner/alone	74.1	69.6-79.0
Spouse	25.8	20.9-30.3
Living with female sexual partner	0.1	0.0-0.3
Age at first marriage	(n=?)	
≤19	38.2	18.6-49.9
20-24	55.4	43.9-77.9
25 and above	6.5	9.0-16.4
Median Age	**22.0**	
Married IDUs living with	**(n=?)**	
Wife	96.3	No Bound
Without sexual partner/alone	3.7	No Bound

No Bound – RDSAT conditions were not met

3.2 Social Characteristics

IDUs in Pokhara Valley were fairly educated with 85 percent of them having attended secondary school or higher education. About 14.1 percent had attended primary school, 0.4 percent were literate but had received no formal education, and another 0.4 percent was illiterate.

More than one third of IDUs belonged to the Gurung/Rai/Limbu communities (36.7%) followed by 21.8 percent Tamang/Lama/Magar, 13.3 percent Chhetri/Thakuri, 8.8 percent Newar ethnic group, 8.5 percent Occupational caste, and 3.5 percent Brahmin.

The majority of IDUs (63.3%) had been living in PokharaValley since their birth, 25.8 percent had spent five or more years in Pokhara Valley, while the rest had lived in Pokhara Valley for less than five years (Table 3.2).

Table 3.2: Social Characteristics

Social Characteristics	Estimated Population Proportions (%) (N=345)	95% CI
Education		
Illiterate	0.4	0.2-1.0
Literate, no schooling	0.4	0.1-1.1
Primary	14.1	10.1-18.6
Secondary	43.8	38.7-49.8
SLC and above	41.2	35.1-46.4
Ethnicity		
Gurung/Rai/Limbu	36.7	31.4-41.7
Tamang/Lama/Magar	21.8	17.3-26.6
Chhetri/Thakuri	13.3	9.7-16.7
Newar	8.8	5.8-12.6
Occupational caste	8.5	5.6-11.5
Brahmin	3.5	1.8-5.7
Others (Tharu, Marwadi,Terai caste, Sanyashi, Thakali,Majhi)	7.4	4.6-10.4
Duration of stay in Pokhara Valley		
Since birth	63.3	57.8-68.7
≤5 yrs.	10.9	7.7-14.3
More than 5 years	25.8	21.1-30.9

3.3 History of Imprisonment

In this round of IBBS among IDUs history of imprisonment was asked to all survey participants. About sixty-four percent of IDUs reported having ever been imprisoned or detained for any reason by police, 37.3 percent of them had been imprisoned or detained in the past year. Of the 100 respondents who were imprisoned or detained in the past year, 67 percent were jailed or imprisoned because of drugs, and 32.1 percent respondents were jailed/imprisoned two or more times in the past year. However, only 5.4 percent of the respondents had injected while they were imprisoned (Table 3.3).

Table 3.3: Imprisoned History

Description	Estimated Population Proportions (%) (N=345)	95% CI
Respondent ever imprisoned or detained for any reason		
Yes	64.2	58.5-69.3
No	35.8	30.7-41.6
Respondent imprisoned or detained for any reason in the past one year	**(n=238)**	
Yes	37.3	29.8-44.7
No	62.7	55.3-70.3
Respondent jailed/imprisoned in the past one year because of drugs	**(n=100)**	
Yes	67.0*	-
No	33.0*	-
Frequency of jailed/imprisoned in the past one year because of drugs	**(n=67)**	
Once	67.5	39.6-77.0
Twice	23.8	7.8-40.4
Three and more	8.8	4.1-38.0
Injected drugs during jailed /imprisoned	**(n=99)**	
Yes	5.4	0.7-15.5
No	94.6	84.6-99.3

Note: Estimated population Proportion (%) of the variables with asterisk (*) did not meet the required numerator to be calculated with RDSAT. The proportion represented is therefore unadjusted and no value is mentioned under CI.

4. PREVALENCE OF HIV AND STIS

4.1 HIV/STI Prevalence

In Pokhara Valley, about 4.6 percent of IDUs are estimated to be HIV-positive. Out of the 345 IDUs in the sample, only one IDU (0.3%) had active syphilis and three respondents (0.9%) had a history of syphilis. This indicates that sexually transmitted infections are a relatively minor problem among IDUs in the Pokhara valley (Table 4.1). HIV prevalence among the IDUs has decreased significantly since the first round in 2003 (22% in 2003 to 4.6% in 2011). Prevalence of active syphilis on the other hand is fluctuating around one percent since 2007 but the trend is not statistically significant. The trend in HIV and STI is presented in under Chapter 9, section 9.5.

Table 4.1: HIV and STI Prevalence

HIV and STI Prevalence	N=345	Estimated Population Proportions (%)	95% CI
HIV and STI Prevalence			
HIV	345	4.6	2.5-7.0
Active Syphilis	345	0.3	0.0-0.5
Syphilis History	345	0.9	0.3-0-1.9

4.2 Relationship between Socio-Demographic Characteristics and HIV Infection

Table 4.2 shows the relation of HIV infection and selected socio-demographic characteristics. HIV was found in 7.8 percent of IDUs aged above 20 years, while no HIV prevalence was seen with their younger counterparts.

HIV was found in 3.8 percent of IDUs who had been married before and 7.3 percent who had never been married which is not statistically significant.

Because of small number of Illiterate/literate no schooling and high number of formal schooling IDUs, significant test was not possible. One out of sixteen HIV infections was among illiterate/no schooling IDUs.

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

Socio-Demographic Characteristics	N=345	Estimated HIV Prevalence (%) (N=345)	95% CI
Age			
< 20 years	45	0.0	0.0
20 years and above	300	7.8	4.8-11.2
Marital status			
Ever married	114	3.8	1.5-6.6
Never married	231	7.3	2.4-12.5

4.3 Relationship between Drug Injection Behavior and HIV

The relationship between HIV prevalence and drug injection such as, duration of injection, frequency of drug injections during the preceding week, and types of syringes they used are reviewed in this section.

Injecting drugs and certain practices that respondents perform put them at an especially higher risk of HIV infection. A statistically significant relation was observed between duration of injecting drugs and HIV prevalence; about 13.3 percent of the IDUs who had been injecting drugs for five years or more were HIV-positive. The HIV prevalence was comparatively lower among those who had been injecting five years or less (1.1%) and non-prevalent among those who had been injecting for less than one year (Table 4.3).

Table 4.3: Relation between Drug Injecting Behavior and HIV Infection

Drug Injecting Behavior	N=345	Estimated HIV Prevalence (%) (N=345)	95% CI
Injecting drugs since			
< 1 year (up to 11 months)	41	0.0	-
1-2 years (12-24 months)	73	0.0	-
<2 – 5 years (25 – 60 months)	105	1.1	0-2.4
> 5 years (61 and more months)	126	13.3	7.5-20.6
Frequency of injected drugs in the past week			
Not injected	30	23.3*	-
Up to 6 times a week	172	1.2*	-
Everyday	95	4.2*	-
2 or more times a day	48	6.2*	-
Used other's previously used needle/syringe during the past week			
Not injected/Never Used	337	4.3	2.2-6.6
Used	8	26.8	9.3-72.7
Used a needle/syringe kept in public place during the past week			
Never Used	296	3.9	0.2-6.8
Used	19	6.7	2.5-18.4

Note: Estimated population Proportion (%) of the variables with asterisk (*) did not meet the required numerator to be calculated with RDSAT. The proportion represented is therefore unadjusted and no value is mentioned under CI.

Those IDUs who had not injected in the last week had about 23.3 percent HIV prevalence compared to those who had inject every day or occasionally (Table 4.3).

There are indications (Table 4.3) that HIV prevalence may be higher (i) among those who had injected with a previously used syringe at least once in the past week (26.8%) than the rest of the IDUs (4.3%); and (ii) among those who had used a syringe that was kept in public places in the past week (6.7%) were found to be more at-risk of contracting HIV compared to those who avoided this practice (3.9%).

4.4 Relationship between Sexual Behavior and HIV

This section examines sexual behavior and its association with HIV infection among IDUs in Pokhara Valley. Only 9 IDUs out of the 345 respondents had never had a sexual experience, while the rest (336) had entered into sexual relationships before participating in the survey.

The IDUs who had no sexual experience at all before the survey also had higher HIV prevalence compared to those who had sex (Table 4.4). The main route of HIV infection for these IDUs must have been mainly through HIV contaminated needle or syringes. There was no significant association between HIV prevalence and number of sexual partners for either FSW or non-regular female sex partner.

Table 4.4: Relation between Sexual Behavior and HIV Infection

Sex with Different Partners in the Past 12 Months	N=345	Estimated HIV Prevalence (%)	95% CI
Sex with regular female sex partner			
Yes	98	5.1 *	-
No	238	4.2 *	-
Never had sexual experience	9	11.1*	-
Sex with Non-regular female sex partner			
Yes	177	2.2	0.6-3.9
No	159	6.2	2.9-9.9
Never had sexual experience	9	33.9	0.0-66.4
Sex with female sex worker			
Yes	126	4.8	1.5-8.6
No	210	3.7	1.4-6.3
Never had sexual experience	9	30.0	0.0-62.4
Number of regular female sex partner in the past 12 months	**N=98**		
One partner	97	5.2 *	-
More than one partner	1	0.0*	-
Number of non-regular female sex partner in the past 12 months	**N=117**		
One partner	83	1.2	0-2.9
Two or more partners	94	1.5	0-5.8
Number of female sex workers in the past 12 months	**N=126**		
One sex worker	37	3.7	0-13.9
Two or more sex workers	89	3.9	0-9.7

Note: Estimated population Proportion (%) of the variables with asterisk (*) did not meet the required numerator to be calculated with RDSAT. The proportion represented is therefore unadjusted and no value is mentioned under CI.

5. DRUG USE, NEEDLE SHARING, AND TREATMENT

IDUs are considered to be one of the core groups responsible for HIV transmission primarily because of their unsafe drug using and needle sharing habits. An understanding of current practices of IDUs helps design effective intervention strategies to improve the quality of life of IDUs and the general population. This chapter deals with alcohol intake, drug using, and needle sharing habits as well as addiction treatment of IDUs in the Pokhara Valley.

5.1 Alcohol Consumption and Oral Drug Use

Alcohol consumption was common among the IDUs in Pokhara Valley. More than three-quarters of IDUs (80.6%) had consumed alcohol at least once in the past month. About 26 percent consumed alcohol everyday in the past month, while over half (13.4%) of respondents had an alcoholic drink more than once a week during the past month (Table 5.1).

Notably, oral drug use was more common than alcohol intake among IDUs in Pokhara Valley. All respondents reported using oral drugs. The majority of IDUs had been using oral drugs for more than two years (90.9%), around 59 percent had been taking oral drugs for five years or more, while a small proportion (1.2%) had started using oral drugs for less than one year (Figure 1).

Figure 1: Duration of Drug Use

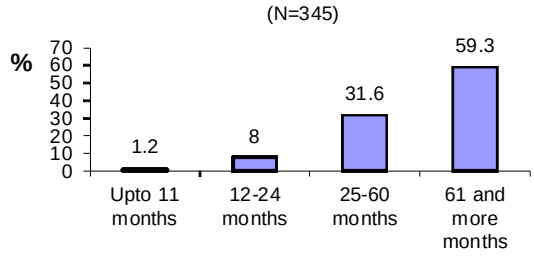


Table 5.1: Alcohol Intake and Oral Drug Use

Alcohol Consumption and Oral Drug Use	Estimated Population Proportions (%) (N=345)	95% CI
Alcohol used during the past month		
Everyday	26.1	21.8-30.8
More than once a week	13.4	9.8-17.3
Once/Less than once a week	41.1	35.9-46.6
Never	19.3	15.1-23.1

IDUs preferred inhaling drugs such as marijuana, locally known as *Ganja,* with 78.3 percent having used it in the week preceding the survey. Other common drugs were Nitrovate (27.2%), Nitrosun (22.5%), Brown sugar (18.3%), Proxygin (6.2%), and Codine (3.1%) (Table 5.2).

Table 5.2: Types of Drugs Used by IDUs in the Past Week

Types of Drugs Used	Estimated Population Proportions (%) (N=345)	95% CI
Types of orally used drugs		
Ganja	78.3	74.0-82.6
Nitrovate	27.2	22.5-32.6
Nitrosun	22.5	17.5-27.3
Brown sugar	18.3	13.8-23.0
Proxygin	6.2	3.7-9.0
Codeine	3.1	1.4-5.2
Chares	0.9	0.6-12.0
White sugar	0.7	0.6-2.0
Velium 10	0.5	0.1-11.0
Avil	0.4	0.0-0.5
Cocain	0.4	0.4-1.2
Phensydyl	0.3	0.1-0.7
Combination	0.8	0.1-2.1

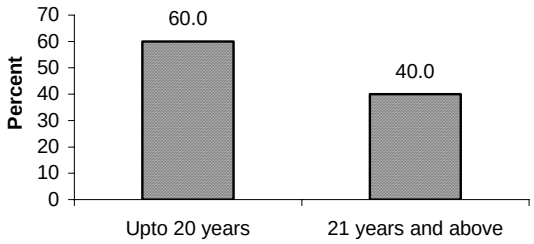
Others	9.0	5.8-12.2

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

5.2 Drug Injecting Practices

About a third of the respondents (31.3%) had been injecting drugs for the past two to five years, and a similar proportion (32.6%) reported injecting drugs for more than five years. A relatively higher proportion of IDUs (36%) had started injecting less than two years before the survey. It is important to note that a higher proportion of the respondents had been using oral drugs longer than they had been injecting drugs.

Figure 2: Age at First Drug Injection



As seen in Figure 2, IDUs in the Pokhara Valley had mostly started injecting drugs at quite a young age. Sixty percent injected their first shots when they were 20 or younger.

Table 5.3: Drug Injecting Practice

Drug Injecting Practice	Estimated Population Proportions (%) (N=345)	95% CI
Duration of drug injection		
Up to 11 months	16.0	11.4-20.5
12-24 months	20.0	15.6-24.2
25-60 months	31.3	26.4-36.8
61 and more months	32.6	27.6-38.3
Mean duration of drug injecting habit	5.1 years	
Frequency of drug injections within the past week		
Not injected	10.1	6.9-13.6
Once a week	12.1	8.9-16.6
2-3 times a week	19.6	15.4-23.9
4-6 times a week	19.5	15.4-23.9
Once a day	27.0	21.7-31.3
2-3 times a day	11.6	8.3-14.9
4 or more times a day	0.2	0.1-0.5
Mean/median	3.6 /4.0 times	
Frequency of drug injection in the last day		
Once	66.1	61.2-71.0
Twice	24.9	20.3-29.5
3 or more times	9.0	6.2-11.9

One in ten respondents (10.1%) had not injected during the week preceding the survey. About a fifth (19.6%) had injected two to three times in the last week, and the same proportion (19.5%) had injected four to six times during the same period of time. Overall, 38.8 percent had injected everyday of the week (one time a day or more). Over a fourth (27%) had one shot a day, 11.6 percent had injected drugs two to three times a day, and 0.2 percent had done so four or more times a day the week before the survey.

Respondents were also asked about the frequency of injections on the last day they injected drugs. About two-thirds (66.1%) of respondents had injected once, while a fourth (24.9%) had injected twice, and 9 percent had three or more times on the day they last injected drugs (Table 5.3).

Overall, 10.1 percent of respondents reported not injecting drugs on the day before the interview. The main reason was that they were not regular users (22.6%). The other common answers were: They were short of money (22.2%), drugs were unavailable on the market

(15.1%), they were trying to quit the habit slowly (11.7%), or they were using other drugs/medicines instead (10.7%) (Annex 9).

The respondents injected in different parts of their body according to the ease with which they could locate veins. More than half (54.3%) of them had injected on the joints between legs and hip, 34.7 percent on wrists, 4.8 percent on arms, and 4 percent on elbows (Annex 10).

Around forty percent of the IDUs injected drugs either in their own room or at a friend's place. Other places where they gathered to inject drugs included forests/bush, the riverbank, and toilets (Annex 11).

IDUs in Pokhara Valley mostly used combinations of drugs (Table 5.4). About 88 percent of the IDUs used a combination of different drugs (Annex 12), while only five of them used just Phenargan.

Table 5.4: Types of Drugs Injected

Types of Drugs Injected	Estimated Population Proportions (%) (N=345)	95% CI
Combination	88.3	84.2-91.8
Phenergan	0.9	0.2-2.1
Avil	0.7	0.2-0.13
Diazepam	0.4	0.2-1.0
Tidigesic	0.3	0.2-0.8
Brown sugar	0.0	No Bound
Others	1.9	0.6-3.6

Note: Because of multiple answers percentage may add up to more than 100.
No Bound - RDSAT conditions were not met

In the past month, only eight IDUs (2.2%) had switched from one drug to another. All of them had switched from their previous practice of injecting one type of drug to injecting different types of combinations of drugs. Twenty-five percent each reported having nerve problem, trying to avoid drugs injection and trying to avoid drugs respectively (Annex 13).

In the past year, about 27 percent of the respondents had switched their habit from sharing to not sharing needles/syringes, and 44.8 percent reported that they never shared a needle/syringe. However, about 28 percent had not changed their habit from sharing to non-sharing (Table 5.5).

Table 5.5: Switching Practice from Sharing to Non-Sharing Behavior in the Past Year

Injection Sharing to Non-sharing Behavior	Estimated Population Proportions (%) (N=345)	95% CI
Switched from sharing to non-sharing behavior in the past year		
Yes	27.1	22.3-32.2
No	28.1	22.9-33.4
Never shared needle/syringe	44.8	38.8-50.9

5.3 Syringe Use and Sharing Habits

Syringe use and needle sharing habits were assessed in terms of their last three injections. Respondents were specifically asked about the sources of needles/syringes used in the last three injections. Answers provided by the IDUs have been categorized as low risk (use of new needles and syringes obtained from different places) or high risk (use of previously used syringe, use of needles and syringes given by friends or relatives, use of needles and syringes kept in public places by himself or others) injecting behavior in the following table (Table 5.6).

Table 5.6: Syringe Use and Needle Sharing Habits during the Last Three Injections

Needle/syringe Use During Recent Drug Injections	Drug injecting Acts					
	Most Recent		Second Most Recent		Third Most Recent	
	Estimated Population Proportions (%) (N=345)	95% CI	Estimated Population Proportions (%) (N=345)	95% CI	Estimated Population Proportions (%) (N=345)	95% CI
Needle/syringe used:						
Low risk behavior	98.7	97.3-99.7	97.6	96.0-99.0	98.2	97.8-100.0
High risk behavior	1.3	0.3-2.7	2.4	1.0-4.0	1.8	0.0-2.2
Persons in the group using the same needle/syringe						
Among two persons	0.3	0.1-3.1	1.6	0.4-3.0	1.8	0.0-2.1
Among four persons	2.1	No Bound	0	-	0	-
Alone	94.9	No Bound	98.4	97.0-99.6	98.2	97.9-100.0

No Bound – RDSAT conditions were not met

As reflected in the table above, most of the IDUs had consciously avoided high risk behaviors like the use of pre-used needles and syringes in their last three injections. Almost 98 percent of them had used a new needle, either self-purchased or given by NGO staff or friends, for each of their last three injections.

Only about two percent of IDUs have practiced high risk injecting behavior in their most recent three injections. Most of these IDUs had re-used needles/syringes that were used previously either by themselves or their friends/relatives. The majority of IDUs had injected their last three injections alone. About two in a hundred had shared needles/syringes during their most recent three injections (Table 5.6).

Data on needle/syringe-using behavior in the last week as well as in the last three most recent injections points towards an increasing consciousness among current IDUs regarding the risks associated with needle/syringe sharing. More than ninety percent of the IDUs had not injected with a used needle/syringe (98.4%) or with a needle/syringe left in a public place (95.5%) in the week preceding the survey (Table 5.7).

Table 5.7: Past Week's Syringe Use and Sharing Behavior

Needle/Syringe Use Throughout the Past Week	Estimated Population Proportions (%)	95% CI
Used a needle/syringe that had been used by other	**(N=345)**	
Never used/Not injected	98.4	97.0-99.5
Used	1.6	0.5-3.0
Used a needle/syringe that had been kept in public place	**(N=315)**	
Never used/Not injected	95.5	93.4-97.3
Used	4.5	2.7-6.6
Gave a needle/syringe to some one	(N=315)	
Yes	1.7	0.5-0.34
No/Not injected	98.3	96.6-99.5
Number of needle/syringe shared partners	(N=315)	
None/Not injected	97.5	95.1-98.9
Two Partners	2.5	1.1-4.9
Three or more partners	0.0	No Bound
Shared needle/syringe with	(N=315)	
Friends	2.5	1.1-5.0

No Bound – RDSAT conditions were not met

Only about 1.7 percent IDUs reported passing their used needle/syringe to others, 1.6 percent had used somebody else's syringe, and 4.5 percent had used a syringe kept in a public place

during the past week. The IDUs who shared their needles/syringes in the past week shared them only with their friends (2.5%) (Table 5.7).

5.4 Drug-Sharing Behavior

Some IDUs had participated in some risky drug sharing practices in the past week; 2.8 percent had injected with a pre-filled syringe, and 0.6 percent had injected with a syringe that was filled with drugs transferred into it from another syringe. Moreover, about eighty percent of the IDUs had shared one or more piece of injecting equipment like a bottle, spoon, cooker, vial/container, cotton/filter, or rinse water with others at least once in the last week. A few IDUs (4.2%) also shared a container for drawing solution at least once in the previous week (Table 5.8).

Table 5.8: Past Week's Drug-Sharing Behavior

Drug Sharing Practice during Past Week	Estimated Population Proportions (%)	95% CI
Injected with a pre-filled syringe	**(N=315)**	
Yes	2.8	1.1-4.8
No	97.2	95.2-98.9
Injected with a syringe after drugs were transferred into it from another's syringe		
Injected with such syringe	0.6	0.1-1.2
Never injected with such syringe	99.4	98.8-99.9
Shared a bottle, spoon, cooker, vial/container, cotton/filter and rinse water		
Shared	80.4	74.5-85.2
Never shared	19.6	14.8-25.5
Drew drug solution from a common container used by others		
Drew at least once	4.2	2.2-7.6
Never	95.8	92.4-97.8

A majority of the IDUs in Pokhara (90.5%) had not used previously used non-sterile needles/syringes in the past months; however, the remaining 9.5 percent were still using such needles/syringes in the past months. Similarly, 6.9 percent had used non-sterile injecting equipment like a bottle, spoon, cotton/filter, cooker and container with others at least once in the past month (Table 5.9).

Table 5.9: Needle/Syringe and Injecting Equipment Used in the Past Month

Needle/Syringe Use in the Past Month	Estimated Population Proportions (%) (N=345)	95% CI
Used previously used non-sterile needle/syringe in the past month		
Yes	9.5	6.4-12.9
No	90.5	87.1-93.6
Used non-sterile injecting equipments at any time in the last month		
Yes	6.9	4.1-0.1
No	93.1	90.1-95.9

Information on the movement of the IDUs both within and outside the country and their injecting practices in the place/s they visited was also collected during this survey. About 37.6 percent had injected drugs in places (within other parts of the country or outside the country) that they had visited in the past year. Among these IDUs in the sample who had injected drugs outside the Pokhara Valley, 6.4 percent had injected with somebody else's previously used syringe and about 5 percent had passed their used needle/syringe to others (Table 5.10).

Table 5.10: Injecting Behavior in Other Parts of the Country and Out of Country

Injecting Practice in Other Parts/Out of the Country	Estimated Population Proportions (%) (N=345)	95% CI
Injected in other parts of country as well as out of country		
Yes	37.6	32.2-43.4
No	62.4	56.6-67.8
Used a needle/syringe that had been used by other	**(n=141)**	
Yes	6.4	0.7-7.7
No	93.6	92.4-99.3
Gave a needle/syringe to someone after use	**(n=141)**	
Sometimes – always	4.7	0.0-6.8
Never	95.3	93.3-100.0

5.5 Needle/Syringe Cleaning Practices

Improper methods of cleaning not only reflect a lack of awareness but also put IDUs at a higher risk of HIV transmission. In the Pokhara Valley, about nine percent of IDUs had cleaned re-used needles/syringes in the past week. Among them, only 2.9 percent had cleaned the needle/syringe with bleach, others (97.1%) had cleaned them with substances like saliva, water, distilled water, paper, or urine (Table 5.11).

Table 5.11: Needle/Syringe Cleaning Practice

Needle/Syringe Cleaning Behavior	Estimated Population Proportions (%)	95% CI
Cleaned previously used needle/syringe in the past week	**(n=315)**	
Yes	9.2	6.2-12.5
No	1.2	0.1-2.7
Never used/Not injected	89.6	85.9-93.0
Ways of cleaning needle/syringe	**(n=34)**	
Bleach	2.9 *	-
Without bleach	97.1*	-

Note: Estimated population Proportion (%) of the variables with asterisk (*) did not meet the required numerator to be calculated with RDSAT. The proportion represented is therefore unadjusted and no value is mentioned under CI.

5.6 Availability of New Syringes

A total of 98.7 percent of IDUs knew that they could obtain new needles/syringes from various sources. Among them, nearly all stated they could get a new needle/syringe from a drugstore (98.4%). Little more than a third of IDUs (34.5%) knew they could obtain new syringes from needle exchange programs being run by Richmond. About thirty percent mentioned friends and about seven percent referenced hospitals as a source for obtaining new needles/syringes. Around eighty-two percent of the IDUs reported that they received new syringes through needle exchange programs or from outreach worker/peer educators in past year (Table 5.12).

Table 5.12: Knowledge of Sources of New Syringe

Descriptions	Estimated Population Proportions (%)(N=345)	95% CI
Could obtain new syringe		
Yes	98.7	98.1-100.0
No	1.3	0.0-1.9
Could obtain syringe from #	**(n=344)**	
Drugstore	98.4	97.2-99.4
Richmond	34.5	28.9-40.4
Friends	30.1	25.2-35.1
Hospital	6.9	4.4-9.7
Drug seller	0.5	0.1-0.9
Drug Whole-seller	0.4	0.2-1.0
LALS	0.1	0.1-0.3

Descriptions	Estimated Population Proportions (%)(N=345)	95% CI
Given a new needles/syringes by outreach worker/peer educators or obtained from needle exchange program in the past year	**(N=345)**	
Yes	82.4	78.0-87.1
No	17.6	12.9-22.0

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

5.7 Treatment Status

Table 5.13 shows the status of treatment received by IDUs in Pokhara Valley. The majority of the IDUs (52.6%) had not received any kind of treatment so far. Among those who had received some treatment, more than half of the respondents (54%) had done so less than a year ago, whereas the rest had been treated more than a year ago. Around 82 percent of IDUs had been treated under residential rehabilitation programs run by different NGOs (See Annex 14 for list of NGOs and treatment provided).

Table 5.13: Treatment Received

Treatment for De-Addiction	Estimated Population Proportions (%)(N=345)	95% CI
Treatment status		
Ever treated	47.4	41.8-53.2
Never treated	52.6	46.8-58.2
Last treatment received	**(n=179)**	
Less than 6 months	29.2	19.3-38.1
6-11 months before	24.8	13.9-31.5
12-23 months before	12.4	8.8-22.2
24-35 months before	17.2	10.5-24.4
36-47 months before	9.4	4.7-17.9
48 or more months before	7.0	1.6-11.9
Types of treatment received#	**(n=179)**	
Residential rehabilitation	81.8	72.5-88.9
Detoxification w/other drugs	7.2	3.3-11.6
Outpatient counseling	5.5	1.4-12.4
Maintenance with methadone	4.3	1.7-10.1
Detoxification with no drug m	3.2	0.0-7.0
Helped for cold turkey	2.1	0.0-2.7
Forced for cold turkey	2.1	0.0-2.7
Detoxification with methadone	1.6	0.4-2.7

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

6. SEXUAL BEHAVIOR AND CONDOM USE

In this chapter the sexual behavior of the respondents and their sex partners is analyzed. HIV transmission among drug users is most often correlated with their needle/syringe-sharing behavior. In addition, practice of risky sexual behavior contributes greatly towards making IDUs more vulnerable to HIV transmission. HIV infected IDUs further transmit the virus to their spouses or sex partners through unsafe sexual contact. In this chapter the sexual behavior of the respondents and their sex partners have been reviewed. This chapter also discusses sexual history and condom use among IDUs.

6.1 Sexual Behavior

The majority of IDUs in Pokhara were sexually active; 97.6 percent had experienced sexual intercourse before, and 83.9 percent had had sex in the past 12 months. Among those who had had sexual intercourse before, a high proportion (87.5%) was less than 20 years old at the time of their first sexual contact, and the median age was 17 years.

Table 6.1: Sexual History

Sexual Behavior	Estimated Population Proportions (%)	95% CI
Ever had sexual intercourse	**(N=345)**	
Yes	97.6	95.8-99.1
No	2.4	0.9-4.2
Age at first sexual intercourse	**(n=336)**	
Below 20 years	87.5	84.1-91.2
20 years & above	12.5	8.8-15.9
Median Age	**17.0**	
Sexual intercourse in the past 12 months		
Yes	83.9	80.6-88.0
No	16.1	12.0-19.4
Numbers of different sexual partners in the past 12 months	**(n=280)**	
1 partner	33.8	27.6-39.7
2 –3 partners	36.7	30.9-43.0
4-6 partners	14.4	9.6-18.4
Seven and more partners	15.1	11.2-20.7

Among those who had sex in the past 12 months, a third of the respondents (33.8%) had sex with one partner. Fifteen percent of IDUs reported having as many as seven or more partners in the course of the year preceding the survey (Table 6.1).

Respondents were asked about the types of sexual partners they had had in the last year. The table below summarizes the data on regular female sex partners.

Table 6.2: Sexual Behavior with Regular Female Sex Partners

Sexual Practice	Estimated Population Proportions (%)	95% CI
Sex with a regular female sex partner during the past 12 months	**(n=336)**	
Yes	27.0	22.4-32.2
No	73.0	67.8-77.6
Number of regular partner	**(n=98)**	
1 partner	99.0*	-
More than one partner	1.0*	-
Sex with a regular female sex partner during last month	**(n=98)**	
Yes	92.5	88.3-99.3
No	7.5	0.7-11.8
Frequency of sex with last regular female sex partner during last month	**(n=88)**	
1- 4 times	26.1*	-
Five and more times	73.9*	-

Note: Estimated population Proportion (%) of the variables with asterisk (*) did not meet the required numerator to be calculated with RDSAT. The proportion represented is therefore unadjusted and no value is mentioned under CI.

More than one fourth of IDUs (27%) reported having sex with a regular female partner in the last 12 months. Almost all (97 out of the 98) of those IDUs had only one regular partner, and 92.5 percent had had sex with their regular partner in the last month. Around 74 percent of those who had had sex with their regular partners last month had done so more than four times.

A different pattern emerged when respondents were asked about their sexual encounters with their non-regular female sex partners. The definition of "non-regular partner" included neither those sex partners who are neither respondent's spouses nor their live-in partners, and they did not exchange money or drugs for sex.

Table 6.3: Sexual Intercourse with Non-Regular Female Sex Partners

Sexual Practice	Estimated Population Proportions (%)	95% CI
Sex with non-regular female sex partner in the past 12 months	**(n=336)**	
Yes	51.6	46.8-58.2
No	48.4	41.8-53.2
No. of Non-Regular female sex partner in the past 12 months	**(n=177)**	
1 partner	50.5	44.2-63.6
More than one partner	49.5	36.4-55.8
Sex with non-regular female sex partner during last one month	**(n=177)**	
Yes	47.4	38.7-59.2
No	52.6	40.8-61.4
Frequency of sex with last non regular female sex partners during last one month	**(n=86)**	
1- 4 times	69.4	50.6-83.9
Five and more times	30.6	16.1-49.4

More than half of IDUs (51.6%) reported having non-regular female partners in the last year. Almost half of them (50.5%) had one partner, while about the same proportion of IDUs (49.5%) had two or more partners. About 47 percent of them had had a sexual encounter with a non-regular partner in the month preceding the survey. Around thirty-one percent of those who had had sex with their non-regular partners last month, had sex more than four times in the past month.

In order to further examine the sexual behavior of IDUs, respondents were asked if they had ever maintained sexual relations with female sex workers. In this context, "female sex workers" were defined as those who bought or sold sex in exchange for money or drugs.

Overall, 37.5 percent of respondents had had sex with a FSW in the past 12 months. Among them, more than three-fourths (77.7%) had had sex with two or more paid partners in the last year, while 34.2 percent had had their sexual experiences with FSWs during the course of the month preceding the survey. Almost all the IDUs who had sex with a FSW in the past month had fewer than four encounters (Table 6.4).

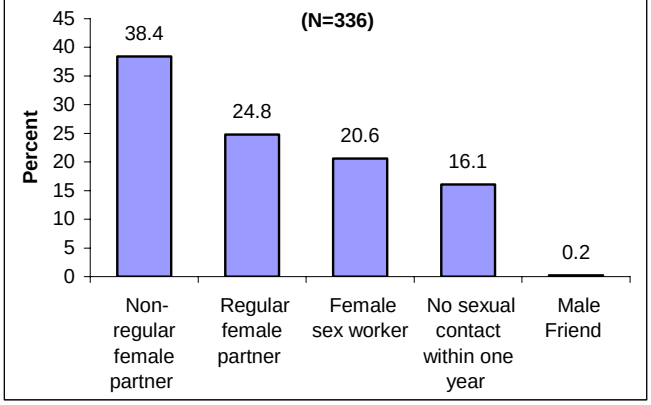
Table 6.4: Sexual Intercourse with Female Sex Worker

Sexual Practice	Estimated Population Proportions (%)	95% CI
Sex with female sex worker in the past 12 months	**(n=336)**	
Yes	37.5	31.9-43.5
No	62.5	56.5-68.1
Number of female sex workers in the past 12 months	**(n=126)**	
1 partner	22.3	11.0-35.0
More than one partner	77.7	65.1-89.0
Sex with female sex worker during last one month		
Yes	34.2	24.1-56.9
No	65.8	43.1-76.0
Frequency of sex with last female sex worker during the last month	**(n=42)**	
1- 4	95.2*	-
More than four	4.8*	-

Note: Estimated population Proportion (%) of the variables with asterisk (*) did not meet the required numerator to be calculated with RDSAT. The proportion represented is therefore unadjusted and no value is mentioned under CI.

The IDUs were further asked about their most recent sexual partner in the preceding year. Figure 3 reveals that 16.1 percent of the IDUs reported not having sex with anyone in the past year. A higher proportion of IDUs (38.4%) stated that the last time they had sex was with their non-regular female partners. About a fourth (24.8%) said that they last had had sex with regular partners while, 20.6 percent reported having engaged in sexual intercourse with female sex workers. One participant (0.2%) reported having sex with male friend in the last sex.

Figure 3: Types of Sex Partners in the Past Year

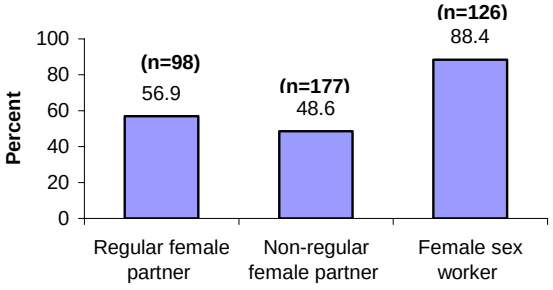


Moreover, the IDUs were asked if they ever had sex in exchange for money or drugs. In total 13 respondents ever have had such sex, and two of them had such acts before starting injection while 11 had practiced after they began to inject drugs. Two of them had been selling sex for money or drugs in the past year, one of them had one partner and the other had two such partners (Annex 16).

6.2 Knowledge About and Use of Condom

Condom promotion has been one of the most important components of HIV/AIDS awareness campaigns. All the IDUs had heard of condoms before. However, consistent condom use was not common among participants. The rate of using condoms in the last time the survey participants had sex was 56.9 percent with regular partners, 48.6 percent with non-regular partners, and 88.4 percent with paid sex workers (Figure 4).

Figure 4: Condom Use with Different Partners in the Last Sex



Respondents who reported not using condoms during their last sexual contact with different partners were asked their reasons for not using one. Data obtained from the survey participants, as shown in Annex 15, indicate that those IDUs who did not use condom during their last sex mostly mentioned that they had done so because they do not like to use condom (64.3% in last sex with sex worker, 39.1% in last sex with regular partner, 38.7% with non-regular partner). Reasons such as trusting their partners, condoms perceived as a contraceptive method and did not consider it necessary to use condom, were some other reasons cited by the respondents (Annex 15).

About 64 percent of participants, who had not used condoms during their most recent sexual intercourse with FSWs, said that they did not like them, while about 21 percent respondents reported that condoms were not available at the time (Annex 15). Other reasons cited by the participant were that did not think using condom (14.3%), condoms caused sexual dissatisfaction (7.1%), or their female sex partners were using other types of contraception (7.1%).

Of the IDUs who had sex with non-regular partners without using a condom, 39 percent of the IDUs did not like using condoms at the time. Other reasons cited by the IDUs for not using condoms in their most recent sexual contact with non-regular female regular partners were that they trusted their partners (36.5%), did not think it necessary (32.6%), and did not have condoms with them at that moment (23.4%). Some of them (6.9%) reported that condoms also cause sexual dissatisfaction (Annex 15).

HIV/AIDS prevention campaigns focus on educating their target groups about using condoms in every instance of sexual contact to avoid HIV transmission. In this regard, the IDUs were also asked about the consistent use of condoms with their sex partners in the past year. Comparing their responses for three categories of partners - regular, non-regular, and female sex workers, it was noted that respondents had used condoms more consistently with female sex workers than with regular and non-regular partners.

Figure 5: Consistent Use of Condom by IDUS with Different Sex Partners in the Past Year

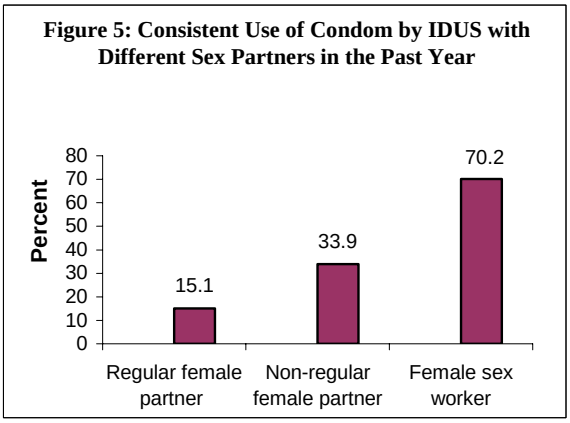


Figure 5, shows 70.2 percent of IDUs had used condoms consistently with female sex workers compared to 33.9 percent with non-regular female sex partners and 15.1 with regular female sex partners in the past year also.

6.3 Sources of Condoms

IDUs were asked if they knew about the places from where they could obtain condoms. All IDUs cited at least one source. Among them, 96.7 percent said that they could obtain condoms from a pharmacy. Other common sources of condom were Peer educators/outreach workers (41.3%), Naulo Ghumti (40.3%), shops (32.8%), hospitals (22.6%), Richmond Fellowship (12.9%), friends (11.8%), clinics (11.4%) and bar/guest houses (10%). Most of the IDUs said that they could have them if necessary in less than 30 minutes (99.8%) indicating condoms are readily available at these sources. About 15 percent of IDUs reported that they usually carry condoms with them; however, only eight percent could present condoms when asked during the interview (Table 6.5).

Table 6.5: Sources of Condom and Time Needed to Obtain It

Sources of Condom and Time to Obtain It	Estimated Population Proportions (%) (N=345)	95% CI
Place/person from where condom can be obtained#		
Pharmacy	96.7	94.8-98.4
Peer educator/outreach worker	41.3	35.6-47.2
Naulo Ghumti	40.3	35.4-45.2
Shop	32.8	27.7-37.8
Hospital	22.6	18.1-27.5
Richmond	12.9	9.7-16.5
Friends	11.8	8.3-15.6
Clinic	11.4	8.0-14.9
Bar/Guest house/hotel	10.0	7.0-13.2
Pan shop	5.6	3.1-8.1
Family planning center	3.1	1.2-5.0
Health worker/health post	3.0	1.5-4.6
Others	1.3	0.4-2.2
Time taken to obtain condom		
≤ 30 minutes	99.8	99.6-100.0
≥ 31 and more minutes	0.2	0.0-0.4
Respondent mostly carry condom		
Yes	15.3	11.4-19.1
No	84.7	80.9-88.6
Number of condom carried now	**(n=?)**	
None	92.0	89.2-94.7
One	2.9	1.3-4.6
Two and more	5.1	0.3-7.5

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

6.4 Sources of Information about Condoms

IDUs had heard about condoms from different sources. The most common sources of information, cited by more than nine in ten respondents were television (95.8%), radio (95%), newspapers/posters (93.1%), and pharmacies (90.8%). The list of other sources of information as mentioned by the respondents is shown in Table 6.6 below.

Table 6.6: Sources of Information about Condoms in the Past Year

Sources of Knowledge of Condom	Estimated Population Proportions (%) (N=345)	95% CI
Television	95.8	93.4-98.0
Radio	95.0	90.0-97.1
Newspapers/posters	93.1	90.2-95.9
Pharmacy	90.8	87.5-93.7
NGO workers	88.1	84.2-91.8
Friends/neighbors	86.5	83.0-89.8
Bill board/sign board	81.8	77.1-85.9
Hospital	76.5	72.1-81.1
Health workers/volunteers	43.9	39.0-50.1
Health Center/Health Post	43.8	37.8-49.9
Cinema hall	26.7	21.8-31.8
Street drama	25.6	20.2-30.3
Community event/training	25.2	20.0-29.8
Comic books	23.8	19.1-28.4
Community worker	12.9	9.7-16.7
Video van	7.4	4.8-10.6

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

In order to further analyze the exposure of IDUs to the ongoing initiatives to educate the target groups about condoms, the IDUs were asked if they were aware of any of the messages being publicized via Information, Education and Communication (IEC) materials like posters, pamphlets, and billboards or shows aired on radio or television. The survey asked the respondents about certain specific messages used by governmental and non-governmental campaigns regarding condoms and HIV/STI prevention. A good proportion of the respondents were aware of messages like *Youn rog ra AIDS bata bhachnalai (85.4%), Condom kinna ma bhaya hunna ra (80.1%), Condom bata surakchhya youn swastha ko rakchhya (78.4%), Ramro sanga prayog gare jokhim huna dinna (77.7%), Jhilke dai chha chhaina condom (73.7%), HIV/AIDS bare aajai dekhi kura garau (67.8%), and Maya garaun sadbhav badaun (30%).*

Table 6.7: Exposure of IDUs to Specific Messages in the Past Year

Heard/Seen/Read the Following Messages/Characters in Past One Year	Estimated Population Proportions (%) (N=345)	95% CI
Youn Rog Ra AIDS Bata Bachnalai Rakhnu Parchha Sarbatra Paine Condom Lai	85.4	81.6-88.9
Condom Kina Ma Bhaya Hunna Ra	80.1	75.4-84.8
Condom Bata Surakchhya Youn Swastha ko Rakchhya	78.4	73.8-82.7
Ramro Sanga Prayog Gare Jokhim Huna Dinna Bharpardo Chhu Santosh Dinchhu Jhanjhat Manna Hunna	77.7	73.5-82.2
Jhilke Dai Chha Chhaina Condom	73.7	68.4-79.0
HIV/AIDS Bare Aaji Dekhi Kura Garaun	67.8	65.5-73.7
Maya Garaun Sadbhav Badaun	30.0	25.2-34.9
Manis Sanga Manis Mile Hara Jeeta Kasko Hunchha	22.4	18.1-26.9
Ek Apas ka kura	13.6	9.4-18.2
Others	11.4	8.3-15.1
Des Pardes	8.2	5.2-11.7

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

7. KNOWLEDGE ABOUT STIs AND HIV/AIDS

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

7.1 Knowledge about STIs

A relatively high proportion of the IDUs (83.7%) in the Pokhara Valley had heard of STIs before the survey. IDUs who had heard about STIs had a general understanding of male and female STI symptoms. The most commonly cited symptoms were genital discharge (69.2% in female and 76.4% in male) and genital ulcers/sores blister (65% in female and 74.3% in male). Symptoms like foul smelling discharges (30.7%) and abdominal pain (17.4%) were specifically mentioned as female STI symptoms by some IDUs. In the same way, a burning sensation while urinating was mentioned as a male STI symptom by 35 percent of respondents.

Table 7.1: Knowledge about STI Symptoms

Knowledge of Symptoms of STIs	Female STI Symptoms (n=298)		Male STI Symptoms (n=298)	
	Estimated Population Proportions (%)	95% CI	Estimated Population Proportions (%)	95% CI
Genital discharge	69.2	63.6-74.4	76.4	71.5-82.3
Genital ulcer/sore blisters	65.0	59.9-71.0	74.3	68.9-80.2
Foul-smelling discharge	30.7	25.3-36.2		
Itching	26.8	20.9-31.3	23.2	17.9-27.3
Burning/pain during urination	18.1	13.7-23.1	35.0	29.0-41.7
Swelling in groin area	11.2	7.7-15.9	12.1	8.1-16.9
Abdominal pain	17.4	11.8-21.9		
Others	2.4	0.9-3.9	0.9	0.1-1.6
Don't know	6.9	4.2-10.7	3.2	1.1-5.5

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

All the respondents were asked if they had ever experienced symptoms like genital discharge or genital ulcers/sores in the past year. Overall, 92.5 percent had never experienced any STI symptoms. Of the respondents who had ever experienced STI symptoms, 4.8 percent of IDUs said that they had had genital discharge, while 4.9 percent of them mentioned that they had experienced genital ulcers/sores in the past year. Among those IDUs who reported having had genital discharge in the past year, 41.7 percent said that they had been experiencing genital discharge at the time of the survey. Similarly, among those IDUs who had had genital ulcers/sores in the past year, 75.4 percent reported having the symptom at the time of survey (Table 7.2).

Table 7.2: STI Symptom/s Experienced

STI symptoms Experienced	Estimated Population Proportions (%)	95% CI
Had genital discharge in the past year	**(N=345)**	
Yes	4.8	2.5-7.3
No	95.2	92.7-97.5
Had genital ulcer/sore blister in the past year		
Yes	4.9	2.6-7.7
No	95.1	92.4-97.4
Currently had genital discharge	**(n=12)**	
Yes	41.7*	-
No	58.3*	-
Currently had ulcer/sore blister	**(n=14)**	
Yes	75.4	No Bound
No	24.6	No Bound

About 52.4 percent of those IDUs who had ever experienced an STI symptom had never sought any treatment. However, among those who had treatments, 70 percent had been to a private doctor and 20 percent had been to a hospital/health post to seek treatment.

Table 7.3: STI Symptoms Experienced and Treatment Sought

STI Symptoms and Treatment	Estimated Population Proportions (%)	95% CI
STI experienced in the past year	**(N=345)**	
Yes	7.2	4.4-10.1
No	92.8	89.9-95.6
STI treatment sought in the past year	**(n=21)**	
Yes	47.9*	-
No	52.4*	-
Source of treatment	**(n=10)**	
Private Doctor	70.0*	-
Hospital/Health Post	20.0*	-
Others	10.0*	-

Note: Estimated population Proportion (%) of the variables with asterisk (*) did not meet the required numerator to be calculated with RDSAT. The proportion represented is therefore unadjusted and no value is mentioned under CI.

7.2 Knowledge about HIV/AIDS

All respondents had heard about HIV/AIDS before. A good proportion of them (67.4%) knew people who had either died due to AIDS or currently had HIV/AIDS. When asked about their relations to those who had HIV/AIDS or had lost their lives because of AIDS, 51.3 percent said that they were their close relatives and 9.7 percent said that they were their close friends (Table 7.4).

Table 7.4: Awareness of HIV/AIDS

Knowledge about HIV/AIDS	Estimated Population Proportions (%) (N=345)	95% CI
Know anyone who had HIV/AIDS/died due to AIDS		
Yes	67.4	62.1-72.6
No	32.6	27.4-38.0
Nature of relationship with the person living with HIV/AIDS /died due to AIDS		
Close friend	9.7	5.7-13.6
Close relative	51.3	43.6-57.5
Both (Close friend and relative)	37.9	31.7-46.0
No relation	1.0	0.2-2.5

About a third (31.8%) respondents reported that they know an IDU who died in the last year, while about 19 percent knew about the deaths of 2 or more IDUs in the past year who died (Table 7.5).

Table 7.5: Number of Known IDUs Died in the Past Year

Number of IDUs died	Estimated Population Proportions (%)	95% CI
Known IDUs died in the past one year	**(N=345)**	
None	49.1	42.9-54.7
1	31.8	26.5-37.5
2	10.8	8.1-14.2
3 and more	8.3	5.7-11.4

IDUs' knowledge about the ways in which HIV is transmitted was further analyzed with the help of some questions on HIV/AIDS prevention. Their understanding of the three major HIV/AIDS prevention measures - (A) abstinence from sex, (B) being faithful to one sex partner, and (C) regular condom use - was assessed. In total, 68.4 percent IDUs were aware of all three knowledge indicators. Fewer respondents were aware that abstinence from sex (71.7%) than those who knew that being faithful (91.6%) and using condoms regularly (97.1%) could prevent HIV transmission.

Additionally, 96.6 percent were aware that (D) a healthy-looking person can be infected with HIV, and a similar proportion (96.2%) also knew that (F) sharing meal with an HIV infected person did not put them at-risk of contracting HIV. However, a relatively low proportion of IDUs (81.8%) agreed that (E) a person cannot get the HIV virus from a mosquito bite. In total 71.2 percent of IDUs were aware of all the five major indicators (BCDEF, which excludes abstinence) (Table 7.6).

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

Knowledge of Six Major Indicators on HIV/AIDS	Estimated Population Proportions (%) (N=345)	95% CI
HIV transmission can be avoided through		
A Abstinence from sexual contact	71.7	66.7-76.5
B Being faithful to one partner	91.6	88.3-94.5
C Condom use during each sexual contact	97.1	94.8-99.0
Perception on HIV/AIDS transmission		
D A healthy-looking person can be infected with HIV	96.6	94.7-98.1
E A person can not get the HIV virus from mosquito bite	81.8	78.6-86.7
F Sharing a meal with an HIV infected person do not transmit HIV	96.2	93.9-98.2
Knowledge of all three **ABC**	68.4	63.3-73.4
Knowledge of all five **BCDEF**	71.2	66.0-76.0

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

IDUs' understanding of HIV/AIDS and its different modes of transmission were further assessed with the help of probing questions. More than ninety percent said that a person can get HIV by using a previously used needle/syringe (100%), HIV can be transmitted through the transfusion of blood from an infected person to another (97.4%), and a person cannot get HIV by holding an HIV infected person's hand (96.7%). A considerable proportion of respondents also said that a drug user can protect himself from HIV by switching to non-injecting drugs (88.3%) and a pregnant woman infected with HIV/AIDS can transmit the virus to her unborn child (77%). A relatively lower percentage of respondents (43.9%) believed that women with HIV could transmit the virus to their newborn child through breast-feeding.

Those IDUs who said that a HIV infected pregnant woman could transmit the virus to her unborn child were asked if they were aware of any measures that could reduce such risk of HIV transmission. Among them, about two-fifths (38.1%) of respondents suggested that the

expecting mother could take medicine or antiretroviral treatment. Others suggested different measures like consulting with the doctor or performing a Cesarean delivery.

Table 7.7: Knowledge of Ways to Transmit HIV/AIDS

Statements Related to HIV/AIDS#	Estimated Population Proportions (%) (N=345)	95% CI
A person can get HIV by using previously used needle by others	100.0	No Bound
Blood transfusion from an infected person to the other transmit HIV	97.4	95.3-99.2
A person can not get HIV by holding an HIV infected person's hand	96.7	94.7-98.6
An IDU can protect themselves from HIV/AIDS by switching to non-injecting drugs	88.3	84.6-91.6
A pregnant woman infected with HIV/AIDS can transmit the virus to her unborn child	77.0	72.6-81.5
A woman with HIV/AIDS can transmit the virus to her new-born child through breast feeding	43.9	38.2-49.3
Ways by which a pregnant woman can reduce the risk of transmission of HIV to her unborn child	**(n=261)**	
Take medicine (Anti retro viral)	38.1	31.9-46.2
Others	8.9	4.9-14.3
Don't know	53.0	44.9-59.1

Note: # Because of multiple answers percentage may add up to more than 100.
No Bound – RDSAT conditions were not met

7.3 Knowledge about HIV Testing Facilities

Survey participants were asked about the availability of a confidential HIV testing facility and that allows people to take the HIV test promptly and without the fear of being exposed for taking the test. Although a good proportion of the IDUs (95.1%) were aware of the existence of such facilities in their communities, a little above one third (34.1%) of respondents had never been tested for HIV, while the rest (65.9%) had been HIV tested before. Among those who had tested themselves, 91 percent had taken the test as required and 94.3 percent of them had received their test results. 51.2 percent of IDUs had taken the test in the last year; however, the rest of the IDUs had been tested more than a year ago (Table 7.8).

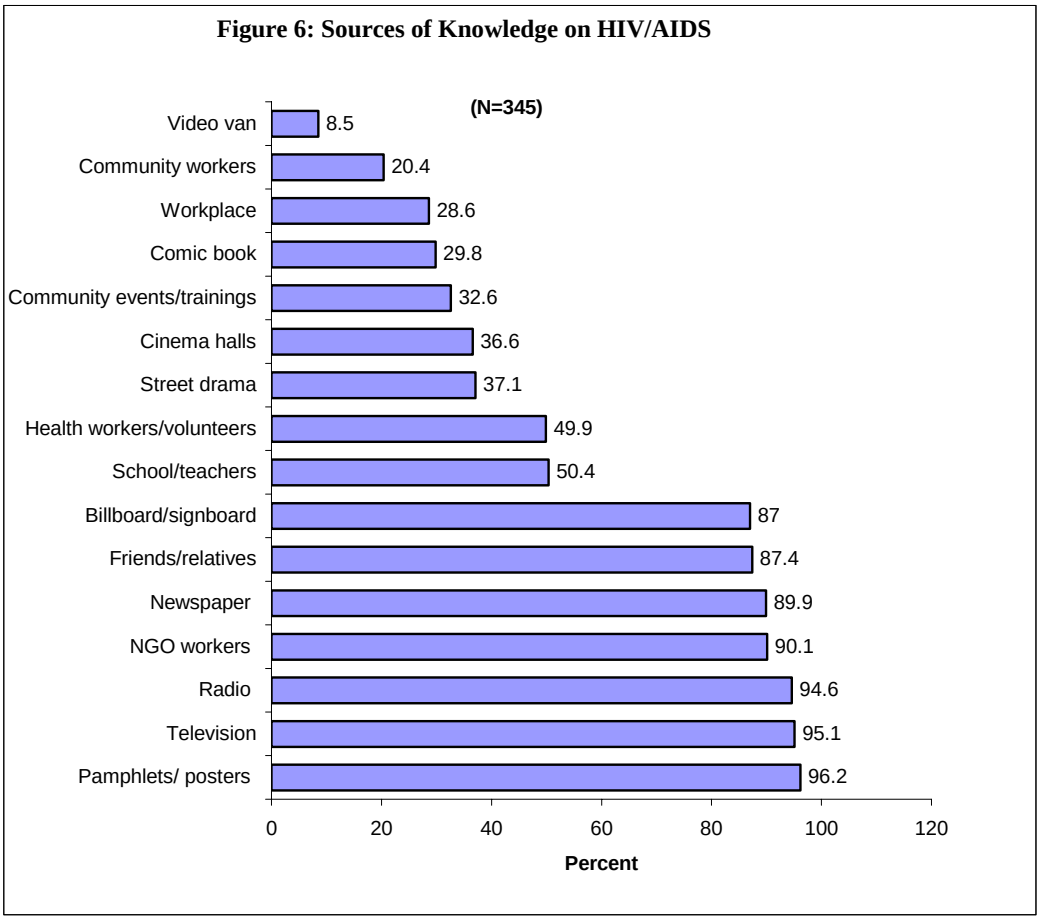
Table 7.8: Knowledge about HIV Testing Facilities and History of HIV Testing

Description of HIV Testing	Estimated Population Proportions (%) (N=345)	95% CI
A confidential HIV testing facility available in the community		
Yes	95.1	94.0-97.9
No	2.9	1.3-4.0
Don't know	2.1	0.1-3.1
Ever had HIV test		
Yes	65.9	60.6-71.5
No	34.1	28.5-39.4
Types of test taken	**(n=245)**	
Required HIV test	91.0	86.2-94.3
Voluntary HIV test	9.0	5.7-13.8
Test result received		
Yes	94.3	91.2-97.4
No	5.7	2.6-8.8
Timing of last HIV test		
Within the past 12 months	51.2	45.5-59.6
Between 13-24 months	29.6	20.7-34.5
Between 25-48 months	14.7	9.7-20.8
49 and more months	4.6	2.1-8.5

7.4 Source of Knowledge about HIV/AIDS

As indicated in Figure 6, pamphlets/posters and television were the two most cited sources of information regarding HIV/AIDS among the IDUs. These sources of information were mentioned by around 96 percent and 95 percent, respectively, of the survey population. A similar proportion of the respondents had learned about HIV/AIDS via the radio (94.6%), NGO workers (90.1%), newspaper/magazines (89.9%), friends/relatives (87.4%), and billboards/signboards (87%). About 50 percent had mentioned school/school teachers, and 50 percent had also mentioned health workers/volunteers. Other sources of information mentioned by the IDUs are presented in the Figure 6.

Figure 6: Sources of Knowledge on HIV/AIDS



In the past year, IDUs had also received HIV/AIDS related IEC materials from different sources. HIV related information had been disseminated to 89.3 percent of the respondents. IEC materials like brochures/booklet/pamphlets on HIV/AIDS had reached 70.6 percent of the IDUs, while other IEC materials reached 65.8 percent, and 52.6 percent had received condoms/information relating to condoms (Table 7.9).

Table 7.9: Information/Materials Received During the Past Year

Informative Materials Received	Estimated Population Proportions (%)	95% CI
Received information on Condom		
Yes	52.6	47.1-58.0
No	47.4	42.0-52.9
Received brochures/booklets/pamphlets on HIV/AIDS		
Yes	70.6	65.4-75.8

Informative Materials Received	Estimated Population Proportions (%)	95% CI
No	29.4	24.2-34.6
Received information on HIV/AIDS		
Yes	89.3	85.5-93.0
No	10.7	7.0-14.5
Received other IEC materials		
Yes	65.8	60.0-71.4
No	34.2	28.6-40.1

7.5 Perception of HIV/AIDS

The stigma associated with HIV/AIDS increases the impact of HIV on the patients as well as on MARPs. The perception of the IDUs regarding HIV-infected persons and the stigma associated with the disease was examined with the help of series of questions.

Almost all of the respondents were prepared to take care of both an HIV-positive male relative (97.4%) or an HIV-positive female relative (97.4%) in their homes if such a need arose. Nearly half of the sample population, however, said that if a family member had HIV they would rather keep it confidential and not talk about it with others.

The majority of the participants (96.2%) said that they would readily buy food from a HIV-positive vendor. Ninety-nine percent agreed that, unless very sick, people with HIV/AIDS should be allowed to continue their jobs.

When asked about the health care needs of HIV infected persons, 53.7 percent of the IDUs maintained that they should be provided with the same care and treatment necessary for chronic disease patients, while 41.7 percent believed that the health care needs of a HIV infected person were more than those of people suffering from chronic diseases.

Table 7.10: Attitude towards HIV/AIDS

Stigma and Discrimination	Estimated Population Proportions (%) (N=345)	95% CI
Willing to take care of HIV positive male relative in the household		
Yes	97.4	95.5-98.9
No	2.6	1.1-4.5
Willing to take care of HIV positive female relative in the household		
Yes	97.4	96.6-98.9
No	2.6	1.1-4.4
Willing to maintain confidentiality of a HIV positive family member		
Yes	49.6	43.9-55.4
No	50.4	44.6-56.1
Willing to buy food from HIV infected shopkeeper		
Yes	96.2	93.4-98.3
No	3.8	1.7-6.6
HIV infected person should get the same, more or less health care than someone with any other chronic disease		
Same	53.7	48.9-58.9
More	41.7	36.5-46.4
Less	4.5	2.2-7.2
HIV infected person should be allowed to continue working together		
Yes	98.8	97.5-99.7
No	1.2	0.3-2.5

8. EXPOSURE TO HIV/AIDS AWARENESS PROGRAMS

The exposure of the IDUs to the ongoing HIV/AIDS awareness programs and their participation in these activities has been examined in this survey. Respondents were asked several questions relating to some of the most important components of the current HIV/AIDS-related programs run by different organizations.

8.1 Peer/Outreach Education

The peer/outreach education component consists of activities that involve the mobilization of peer educators (PEs) and outreach educators (OEs) for conducting awareness-raising activities in community sites. They meet the target groups and hold discussions with them regarding HIV/AIDS and safe injecting practices, safe sex, and other related topics. They also distribute IEC materials, condoms, and refer the target group to drop-in centers and STI treatment services. Some also carry new needles/syringes for distribution among the IDUs.

More than eighty percent (82.2%) of participants had met at least twice with one PE/OE before. During their meetings, 75.5 had discussed safe injecting behavior, 69 percent had received new syringes, while 29.9 percent had been taught about how HIV is transmitted. IDUs had also been informed about regular/non-regular use of condoms (6.8%) and told about how STIs are transmitted (6.4%).

The majority of the meetings were held by the OE/PE from Naulo Ghumti (86.3%) followed by the Richmond Fellowship (36.5%). It is further evident that IDUs met PE/OEs quite frequently in the past year (Table 8.1).

Table 8.1: Meeting with Peer Educators and Outreach Educators in the Last 12 months

Meeting with Peer Educators (PE) or Outreach Educators (OE) in the Last 12 Month	Estimated Population Proportions (%)(N=345)	95% CI
Met or discussed or interacted with PE or OE in the last 12 months		
Yes	82.2	78.0-86.5
No	17.8	13.5-22.0
Activities carried out with OE/PE#	**(n=295)**	
Discussion on safe injecting behavior	75.5	69.8-82.1
Given syringe	69.0	62.7-74.5
Discussion on how HIV/AIDS is/isn't transmitted	29.9	22.0-34.2
Discussion on regular/non-regular use of condom	6.8	3.8-11.0
Discussion on how STI is/isn't transmitted	6.4	3.5-10.4
Demonstration on using condom correctly	2.8	0.9-4.7
Discussion of giving up drugs	2.5	0.6-5.1
Given condom	0.4	1.8-6.8
Others	14.0	10.0-18.0
Organizations represented by OE/PE#		
Naulo Ghumti	86.3	81.5-90.1
Richmond	36.5	29.8-43.2
Others	2.3	0.9-4.5
Number of meeting with PE or OE		
2-3 times	3.6	1.7-6.6
4-6 times	10.5	7.2-14.8
7-12 times	16.0	12.2-22.5
13 and more times	69.9	62.4-73.3

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

8.2 Drop-in-Center

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

A total of 71 percent of respondents had visited a DIC in the past year. Among them, the majority (99.7%) had been to a DIC to get a new syringe. IDUs had also collected condoms from DICs (16.6%), learned about safe injection behavior (14.8%), and some had collected alcohol pads/swabs from the DIC (10.6%) (Table 8.2).

DICs run by Naulo Ghumti (82.4%) and the Richmond Fellowship (29.2%) were the most frequented centers. The majority of IDUs (99.2%) had been to DICs more than once in the past year.

Table 8.2: DIC Visiting Practices

DIC Visiting Practices	Estimated Population Proportions (%)	95% CI
Visited DIC/IC/CC in the last 12 months	**(N=345)**	
Yes	71.1	65.6-76.4
No	28.9	23.6-34.4
Participated activities at DIC/IC/CC #	**(n=268)**	
Got new syringe	99.7	99.3-99.9
Collected condoms	16.6	11.0-21.5
Learnt about safe injecting behavior	14.8	10.5-21.4
Collect alcohol pad/swab	10.6	6.7-17.1
Had treatment/medicine	4.5	2.5-7.3
Participated in discussion on HIV transmission	3.8	1.7-7.0
Learnt the correct way of using condom	2.6	0.8-4.9
Got distilled water	1.4	0.5-2.5
Had wound dressing	1.0	0.3-2.0
Watched TV/film	0.6	0.5-1.7
Others (discussion on drug reduction, play games and read paper/magazine)	9.8	No Bound
Name of organizations that run DIC/IC/CC visited by them#		
Naulo Ghumti	82.4	78.1-87.8
Richmond	29.2	23.3-36.5
Others	1.0	0.2-1.4
Number of visits to the DIC/IC/CCs		
Once	0.8	0.2-1.6
2-3 times	8.5	4.2-11.9
4-6 times	12.1	8.9-16.4
7-12 times	20.9	13.7-25.6
13 and more times	57.8	53.5-65.6

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

8.3 STI Clinics

Timely detection of STIs may prevent serious health hazards. In Nepal, there are several clinics being run by different government as well as non-governmental organizations for providing STI testing and treatment facilities. In this survey, only ten (3.5%) of the IDUs had visited an STI clinic in the past year. Half of them each had participated in physical examination for STI and accompanied with the friend respectively. Twenty percent had

discussed regular/non-regular use of condoms. Half of them had visited the clinic run by Naulo Ghumti, and the rest had visited private clinics. Eighty percent paid just one visit, while the others had been there two or more times in the past year.

Table 8.3: STI Clinic Visiting Practices

STI Clinic Visiting Practices	Estimated Population Proportions (%) (N=345)	95% CI
Visited any STI clinic in the last 12 months		
Yes	3.5	1.5-5.7
No	96.5	94.3-98.5
Participated activities at STI clinic#	**(n=10)**	
Participated in physical examination for STI identification	50.0*	-
Regular/non-regular use of condom	20.0*	-
Blood tested for STI detection	10.0*	-
Participated in discussion STI transmission modes	10.0*	-
Others (Took a friend with me)	50.0*	-
Name of organizations that run STI clinic visited#		
Naulo Ghumti	50.0*	-
Private Clinic	20.0*	-
Others	40.0*	-
Number of visits to STI clinics		
Once	80.0*	-
2-3 times	10.0*	-
4-6 times	10.0*	-

Note: #Because of multiple answers percentage may add up to more than 100.
Estimated population Proportion (%) of the variables with asterisk (*) did not meet the required numerator to be calculated with RDSAT. The proportion represented is therefore unadjusted and no value is mentioned under CI.

8.4 VCT Centers

VCT centers form an integral part of the HIV/AIDS prevention programs. They provide HIV/AIDS and STI testing facilities and offer pre- and post-test counseling. Moreover, information related to safe injecting practices, HIV/AIDS, and STI transmission, and treatment facilities are also provided at these centers.

About sixty-nine percent of IDUs in Pokhara had not visited any of the VCT centers in the last year. Of the 31.3 percent of respondents who had been to a VCT center in the past year, all of them had visited the center to give their blood sample for HIV testing. About 97 of them had received the results, and almost 92.4 percent of the respondents had received pre-HIV test counseling or post-HIV test counseling (85.9%). Some respondents had also received information on the window period of HIV (32.4%), correct use of condoms (11.9%), or safe injecting behaviors (7.3%) at these centers.

Among the IDUs who had visited the VCT centers, 85.4 percent had visited a center just once. The VCT center run by Naulo Ghumti (76.8%) was the most popular among the IDUs (Table 8.4).

Table 8.4: VCT Center Visiting Practices

VCT Center Visiting Practices	Estimated Population Proportions (%) (N=345)	95% CI
Visited VCT center in the last 12 months		
Yes	31.3	26.5-36.3
No	68.7	63.7-73.5
Participated activities at VCT center #	**(n=122)**	
Gave blood sample for HIV test	100.0	100.0-100.0
Received HIV test result	97.0	No Bound
Received pre-HIV test counseling	92.4	87.0-98.0
Received post HIV test counseling	85.9	80.0-96.3

VCT Center Visiting Practices	Estimated Population Proportions (%) (N=345)	95% CI
Got information on HIV/AIDS window period	32.4	21.2-50.8
Received counseling on using condom correctly in each sexual intercourse	11.9	3.1-22.5
Received information on safe injecting behavior	7.3	4.1-23.7
Name of the organization that run the VCT centers visited#	**(n=122)**	
Naulo Ghumti	76.8	64.5-90.6
Hospital	2.8	No Bound
Others	29.4	14.3-44.4
Number of visits to VCT centers	**(n=121)**	
Once	85.4	71.3-95.3
2-3 times	13.3	2.5-26.8
More than 12 times	1.3	1.1-4.6

Note: #Because of multiple answers percentage may add up to more than 100.
No Bound – RDSAT conditions were not met

8.5 Participation in HIV/AIDS Awareness Programs

Various governments as well as non-governmental organizations have been involved in implementing HIV/AIDS awareness activities. Their programs include workshops, group discussions, talk programs, training sessions, radio programs, condom day/AIDS Day celebrations, and street dramas. Some of these programs specifically target the most at-risk populations, while some also include the general population.

About a third (31.2%) of the IDUs in Pokhara Valley had participated in HIV/AIDS awareness programs. Sixty percent of them had participated in AIDS Day celebrations, 45.7 percent in Condom Day celebrations, and 38.4 percent in group discussions.

The activities in which the respondents participated were conducted by Richmond Fellowship (100%), Naulo Ghumti (55.1%), and schools (13.2%). A majority of the survey participants (44.2%) did not participate in any programs in the past year. Nearly one third (31.7%) had participated in two or three programs while one fifth (21.9%) had taken part in one program.

Table 8.5: Participation in HIV/AIDS Awareness Programs

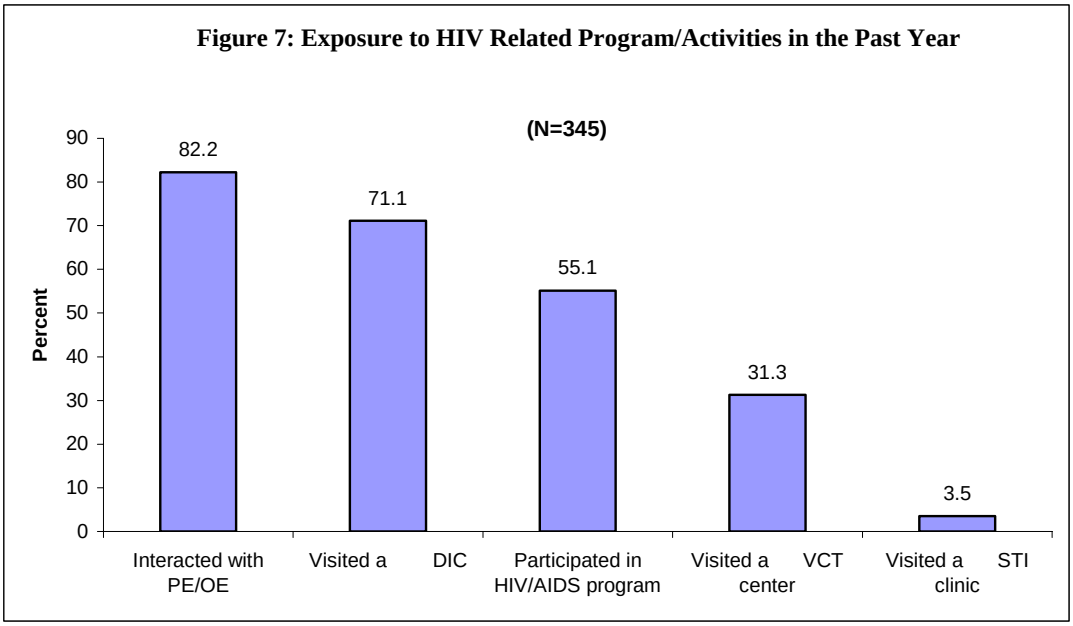
Participations in HIV/AIDS Awareness Programs	Estimated Population Proportions (%) (N=345)	95% CI
Ever participated in HIV/AIDS awareness raising program or community events		
Yes	31.2	26.3-36.2
No	68.8	63.8-73.7
Participated in HIV/AIDS awareness raising program or community events in the Past Year	**(n=125)**	
Yes	55.1	40.6-81.6
No	44.9	18.5 -59.5
Activities participated in#		
AIDS Day celebration	60.5	43.1-80.0
Condom Day celebration	45.7	34.3-65.4
Group discussions	38.4	23.6-54.3
HIV/AIDS related training	11.9	2.3-33.0
Street drama	5.8	0.9-6.6
HIV/AIDS related Workshops	1.8	No Bound
Condom use demonstrations	0.8	No Bound
Others (Talk program)	9.5	2.4-18.0
Name of the organizations that organized such activities#		
Richmond	100.0	No Bound
Naulo Ghumti	55.1	47.6-77.7
School	13.2	7.4-25.5
Gateway Foundation Rehabilitation	8.2	3.1-20.7

Participations in HIV/AIDS Awareness Programs	Estimated Population Proportions (%) (N=345)	95% CI
Recovery Nepal	2.7	0.0-3.6
Manish Care Foundation	1.9	1.4-9.2
Others	26.1	9.7-36.0
Don't Know	6.1	No Bound
Frequency of such participation in past 12 months		
Once	21.9	No Bound
2-3 times	31.7	No Bound
4-6 times	0.2	No Bound
7-12 times	0.7	No Bound
More than 6 times	1.2	No Bound
Not Participated During the Past Year	44.2	No Bound

Note: #Because of multiple answers percentage may add up to more than 100.
No Bound – RDSAT conditions were not met

As seen in Figure 7, a higher proportion (82.2%) of IDUs had interacted with OEs/PEs in the past year. About three quarters (71.1%) had visited DIC/IC/CC while 31.3 percent had visited VCT centers and same proportion (31.2%) had participated in HIV/AIDS related program. The practice of visiting an STI clinic was lowest (3.5%). This is probably because IDUs usually do not consider themselves at the risk of STI transmission. That is why although 20.2 percent of the respondents had visited a VCT center only 2.9 percent had been to an STI clinic despite the fact that VCT centers also provide information about STI clinic and encourage IDUs to visit them

Figure 7: Exposure to HIV Related Program/Activities in the Past Year



It is likely that those IDUs who come into contact with OE/PE also come to know about other services from them. Further analysis was carried out to know what proportion of respondents who had met/interacted with PE/OE had also visited such service centers in the past year. Data presented in Table 9 in Annex 2 shows that among the IDUs who had met OE/PE in past year, 87.8 percent had been to a DIC and 39 percent of them had visited a VCT center. However only 22.7 percent of them had participated in HIV/AIDS awareness program, while only 3.1 percent had been to a STI clinic (Annex 17).

9. COMPARATIVE ANALYSIS OF SELECTED CHARACTERISTICS

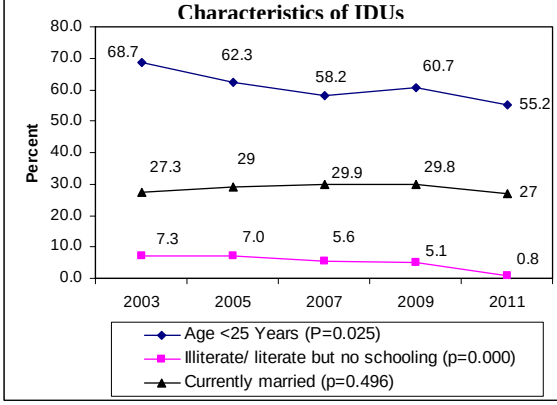
This chapter analyzes the trend in the selected indicators by comparing the data obtained from all five rounds of IBBS among IDUs conducted in the Pokhara Valley. It focuses on socio-demographic characteristics, drug injecting habits, needle/syringe using practices, and condom use among IDUs. In all rounds of IBBS among IDUs in Pokhara RDS sampling methods were used. However, in the 2003 round of IBBS, RDS was used with limitations. For instance, in the first round conducted in 2002, relatively large numbers of seeds were used in RDS. Moreover, SPSS was used to analyze the data from 2003 and 2005 survey and RDSAT was used to analyze the data from 2007 onwards.

Although there have been some minor changes in the sampling methodology in some rounds as per the assessment of the situation in the survey areas, largely we are safe to compare these data for trend analysis. For instance in the first round IBBS among IDUS in Pokhara conducted in 2003, relatively large number of seeds were used in RDS.

9.1 Socio-Demographic Characteristic

The socio-demographic characteristics of IDUs in Pokhara presented similar patterns in all of the five rounds. This is to a certain extent, a consequence of adopting the same sampling methodology for all five rounds.

Figure 8: Trend Analysis of Socio Demographic Characteristics of IDUs

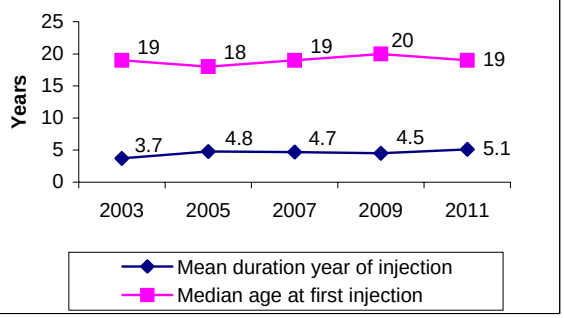


As seen in Figure 8, the percentage of the young IDUs less than 25 years old decreased to 55.2 percent in 2011 from 68.7 percent in 2003 (p=0.025). Similarly, the educational background of the IDUs in Pokhara valley showed some significant changes as the percentages of IDUs who were illiterate or literate but had not attended school decreased significantly over the years (7.3% in 2003 to 0.8% in 2011) (p=0.000). Marital status of the IDUs in Pokhara valley however has not changed much as 27-29 percent of the IDUs were married at the time of the survey throughout the survey years.

9.2 Drug Injecting Practices

The average amount of time respondents have been injecting drugs has increased to 5.1 years in the current 2011 survey from 3.7 years in 2003. The median age of the respondents at their first injection has come remained the same as in 2003 and 2007 (Figure 9).

Figure 9: Trend Analysis of Mean years of Duration of Drug Injection and Median Age at First Injection

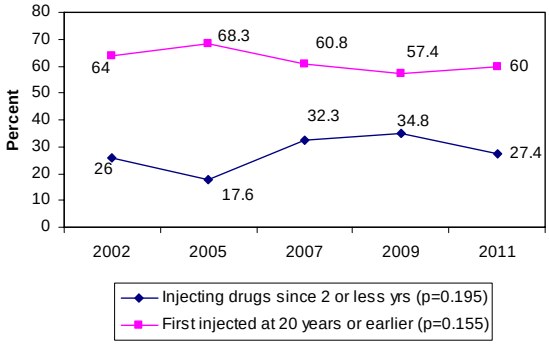


As in the previous rounds of the survey, a large percentage of respondents reported injecting drugs since the past two years or more. However, as seen in

figure 10 the proportion of IDUs injecting for less than two years did not show significant change since 2002 (26% in 2002 to 27.4% in 2011) (p=0.195).

IDUs generally get into injecting practice at quite a young age. As see in Figure 10, the percentage of IDUs who had started to inject drugs at the age of less than 20 years has remained somewhat stable at around 60 percent since the first round of the survey (p=0.000).

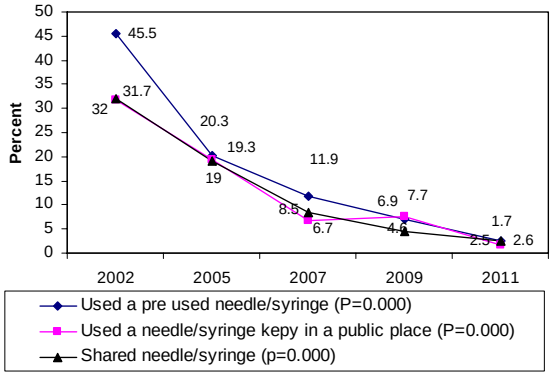
Figure 10: Trend Analysis of Injecting Behavior of IDUs



9.3 Needle/Syringe Using Practices in the Past Week

The trend analysis of proportion of IDUs who had avoided unsafe injecting practices in the week preceding the survey has decreased significantly since the first round survey in 2003. High risk behavior like injecting with a previously used needle/syringe went down from 21 percent in 2003 and decreased gradually to 1.6 percent in 2011.

Figure 11: Trend Analysis of Needle/Syringe Use and Sharing Behavior in the Past Week



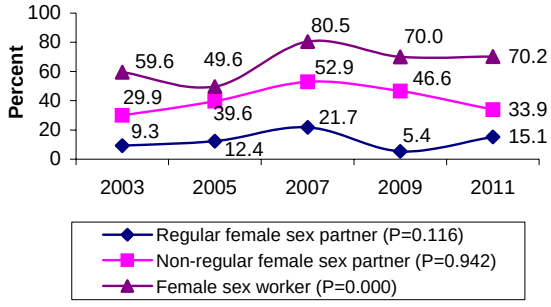
In the same way, 20.3 percent of IDUs had injected with syringes left in a public places in the week preceding the 2003 survey; and this percentage also went down to 4.5 percent in the fifth round which is statistically significant decrease but this risk behavior was among 25 percent of the IDUs in 2009.

Moreover the proportion of IDUs who reported sharing their needle/syringe with anyone in the past week decreased significantly from 32 percent in 2003 to 2.5 percent in 2011 (P<0.01).

9.4 Condom Use with Different Partners

IDUs who reported using condoms consistently with their regular sex partners and non-regular partners in this fifth round had increased compared to the first round in 2003. The increase is statistically significant in consistent condom use with female sex workers but, this not statistically significant, with the other sex partners (Figure 12).

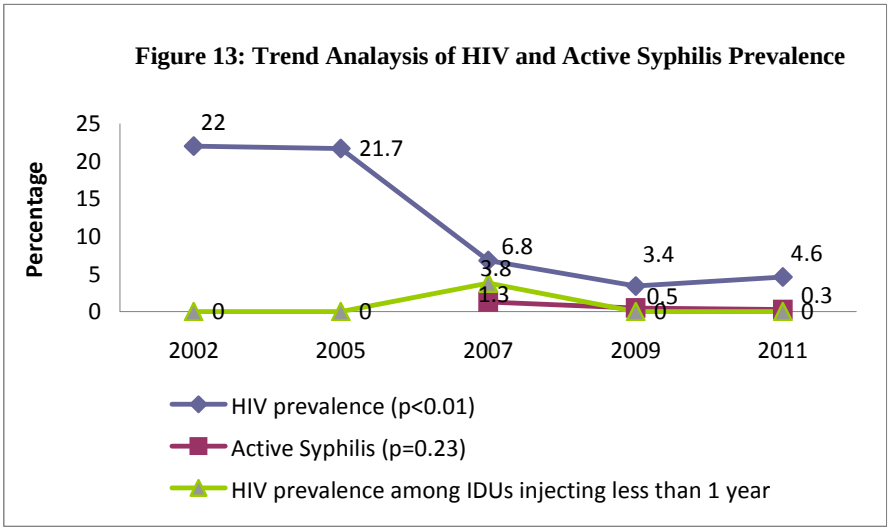
Figure 12: Trend Analysis of Consistant Use of Condom with Different Sex Partners in the Past Year



9.5 HIV and Syphilis Prevalence

HIV prevalence among the IDUs has been gradually, but significantly, decreasing since the first round in 2003. The first round of IBBS found 22 percent of IDUs were HIV-positive respondents, which decreased to 4.6 percent in 2011 among IDUs in the Pokhara Valley. Syphilis test was introduced only from the third round of IBBS in 2007. Figure 13, also illustrates the trend of HIV among those IDUs who started injecting drugs less than 1 year ago. There was no HIV infection case among the new IDUs in 2002, 2005, 2009 and 2011 rounds but the prevalence was 3.8% in 2007. The HIV prevalence for this group can also be a proxy on the HIV incidence among IDUs. Active syphilis is fluctuating around one percent but the trend is not statistically significant (Figure 13).

Figure 13: Trend Analaysis of HIV and Active Syphilis Prevalence

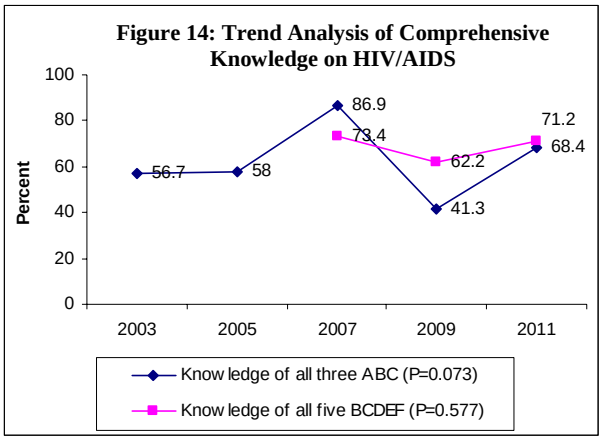


9.6 Knowledge and Behavior

IDUs' knowledge about HIV/AIDS prevention and ways in which HIV is transmitted was assessed. They are: (A) abstinence from sex, (B) being faithful to one sex partner, and (C) regular condom use. The percentage of IDUs who were aware of all three increased to 68.4 percent in 2011 from 56.7 percent in 2003 with a hike in 2007 and down in 2009. The overall trend, however, is not statistically significant.

Comprehensive knowledge (BCDEF) of HIV was also assessed. The proportion of the comprehensive knowledge has not changed significantly (Figure 14).

Figure 15 shows that the knowledge of the availability of confidential HIV testing in their community and ever had an HIV test and received the test result all significantly increased in 2011 from 2003. Not certain if the blue triangle is actually significant.



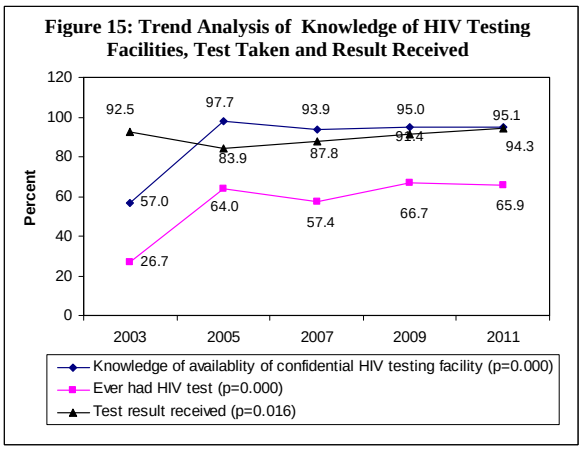
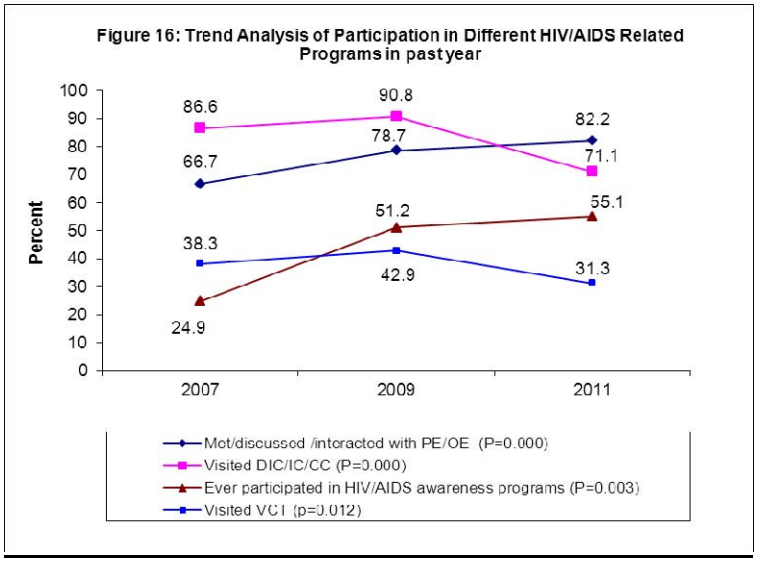


Figure 16 indicates that the proportion of survey participants who interacted with OEs or PEs, and participated in HIV/AIDS awareness-raising programs and community events increased significantly over the time. However, the number of respondents who visited DIC/IC/CCs decreased in 2011 from 2007.



10. SUMMARY OF MAJOR FINDINGS AND RECOMMENDATIONS

10.1 Summary of Major Findings

The HIV prevalence rate among IDUs in the Pokhara Valley is still high at 4.6 percent and ranges between 2.5-7.0 percent at a 95 percent confidence interval. However, this survey represents a significant decrease from the previous round of the survey.

Compared with HIV, STIs are a relatively minor problem among IDUs; a history of syphilis was detected among 0.9 percent of IDUs, while only 0.3 percent had active syphilis (RPR Positive in 1:8 titers) at the time of this survey.

HIV prevalence differed significantly according to age, literacy, and duration of drug injection. Those IDUs who were older than 20 years were more likely to be HIV-positive (7.8%) than those who were less than 20 years as the data showed that no IDUs younger than 20 years old were HIV-positive. HIV prevalence among literate IDUs was 4.5 percent, while among illiterate IDUs it was 44.4 percent. Likewise, HIV prevalence was significantly higher among those who had been injecting drugs for more than five years (13.3%) than those who have been injecting drugs for less than five years (1.1%).

The IDUs consisted predominantly of young people; 83.3 percent were below the age of 30 years. More than half (55.3%) were younger than 25 years, and almost 68.5 percent were never married.

Drinking alcohol and abuse of oral drugs were common among IDUs; all of the respondents had taken oral drugs, while 80.5 percent had consumed alcohol in the week preceding the survey. A significantly large portion of the sample (90.9%) had been using oral drugs for more than two years. However, 19.3 percent had never consumed alcohol.

About 36 percent of IDUs had begun injecting drugs in the last two years, while the majority had been injecting for more than two years. Most of them (60%) had started injecting drugs while in their teens.

The proportion of IDUs who had avoided unsafe injecting practices in the week preceding the survey has been increasing steadily since the first round. High risk behavior such as injecting with previously used needles/syringes decreased significantly from 21 percent in the first round to 1.6 percent in this fifth round. Additionally, the proportion of IDUs who had not shared their needles/syringes with anyone in the past week increased from 68 percent in 2003 to 97.5 percent in 2011.

Injecting practices in the past week indicate that 1.6 percent had injected with a syringe used by others, and 4.5 percent had used a syringe left at a public place.

Around 98 percent of IDUs reported having had sexual intercourse before the survey. Among them, 83.9 percent reported being sexually active in the past year. In the year preceding the survey, 27 percent had had sex with a regular partner, and 51.6 percent had had sex with non-regular partners, while 37.5 percent had had sex with FSWs.

The proportion of those who used condoms in the most recent instance of sexual intercourse with regular partners was 56.9 percent, 48.6 percent with non-regular partners, and 88.4

percent with FSWs. A similar pattern was observed in consistent condom use in the past year. It was highest with FSWs (70.2%) followed by non-regular partners (33.9%). Consistent use of condoms with regular sex partners was lowest, with only about 15 percent of IDUs using condom consistently in the past year.

There were 16.3 percent of the IDUs who had not heard of STIs before. Overall 4.8 percent complained about symptoms of genital discharge and 4.9 had suffered from genital ulcers/sores in the past year. Among them, 41.7 percent of them had been experiencing genital discharge and 75.4 percent had a genital ulcer/sore at the time of survey.

In total 68.4 percent were aware of the three major HIV prevention measures (abstinence - A, being faithful to single partner - B, and consistent condom use - C), while 71.2 percent had a comprehensive knowledge of HIV i.e. knowledge of B, C, and DEF (the three major misconceptions about HIV transmission). In addition, all IDUs knew that a person can contract HIV by using other people's previously used needles.

Almost all of the respondents (95.1%) knew that a confidential HIV testing facility was available in their community. However, only 65.9 percent of the IDUs had ever had an HIV test. In fact, 91 percent had been tested because it was required and the others had done so voluntarily. Most of the IDUs (94.3%) who had been tested for HIV had received their test results.

Overall, 82.2 percent of IDUs had met with PE/OEs in the past year, 71.1 percent had visited a DIC at least once, and 31.3 percent had visited a VCT center in the past year. However, very few IDUs (3.5%) had visited an STI clinic. About a third of the IDUs (31.2%) had participated in various HIV/AIDS awareness-raising programs.

10.2 Recommendations

1. The high number of new IDUs joining the IDU population annually is one of the contributions to the decrease in prevalence of HIV. The finding of no HIV cases among new IDUs suggests that new injectors have less exposure to HIV infection. Some new IDUs may be more aware of the associated risk for HIV; however, this awareness may not imply safer practices. This indicates the need for repeated prevention education and strengthened community and peer-based outreach activities, with a focus on new IDUs.

2. Injecting drug use is most likely to begin in adolescence and among young people under 20 years of age, leaving these youth vulnerable to the associated risks, including HIV transmission. HIV and STI prevention programs need to reach adolescents and youth who are at higher risk of entering the IDU sub population as new users.

3. Although there has been improvement in the injecting behavior of IDUs over the years, there are still some IDUs who inject with pre-used needles and/or share injecting equipment. Strategic behavioral change communication to promote safer injecting behavior should continue and be strengthened. Comprehensive prevention interventions must be promoted.

4. Although ever tested for HIV has increased among IDUs over time, only 66% of the IDUs in Pokhara had been tested for HIV and only 31% had visited a VCT center in the

past year. This indicates the importance of continued education to IDUs, through outreach and counseling, about the importance of regular VCT and knowing their HIV status.

5. The increasing trend in testing for HIV should be maintained by strengthening access to information for IDUs, particularly focusing on risk perception and increasing knowledge on the importance of VCT.

6. About one third of the IDUs are married and about one quarter of them are having sex with sex workers, which increases the risk of transmission between FSWs and IDUs and their sex partners. Programs on safer sex should be strengthened to reach IDUs and their sex partners.

7. Although there is a significant increase in the proportion of IDUs reached by a peer or outreach educator in Pokhara, IDUs visiting a Drop-in Center has decreased (87% in 2007 to 71% in 2011). Comprehensive services, along with IDU-friendly activities, should be made available to improve utilization.

8. Exposure to multiple risks is observed such as having unsafe sex with FSWs and frequent alcohol consumption. A national comprehensive package should be designed to include all components of risk reduction through prevention of sexual transmission and harm reduction.

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ANNEXES

ANNEX – 1: Indicators for Monitoring and Evaluation of HIV Prevention Intervention

Prevention 1: HIV related risk and transmission among IDUs	Results (%)	CI
Impact/Outcome indicators		
Percentage of IDUs who are HIV infected	4.6	2.6-7.0
Percentage of IDUs who had adopted behavior that reduce transmission of HIV i.e. who both avoided using non sterile injecting equipment and used condom in the last sex in last month	42.8	29.5-50.4
Percentage of IDUs reporting the use of sterile injecting equipment in the last time they injected	93.1	90.0-95.7
Percentage of IDUs who avoided sharing injecting equipment in the last month	17.3	13.2-22.6
Percentage of IDUs who used condom at last sex with female sex worker in the past year	88.4	73.1-95.4
Percentage of IDUs who say they consistently use a condom when they have sex with a female sex worker in the past year	70.2	47.8-83.1
Percentage of IDUs who both correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV transmission	71.2	66.2-76.3
Output/Coverage Indicators		
Percentage of IDUs reached with targeted HIV prevention service programs (BCC with OE/PE or DIC or STI Clinics or VCT or community events / trainings or drug treatment or rehabilitation)	86.6	82.7-91.2
Percentage of IDUs reached with HIV prevention programs (Knows where to receive HIV test and received condoms)	46.7	41.2-51.9
Percentage of IDUs who received an HIV test in the last 12 months and who know their results	30.7	25.6-35.8

ANNEX – 2: Sample Size Estimation

Basic equation in calculating the sample size:

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

n = required minimum sample size per survey round

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

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

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

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

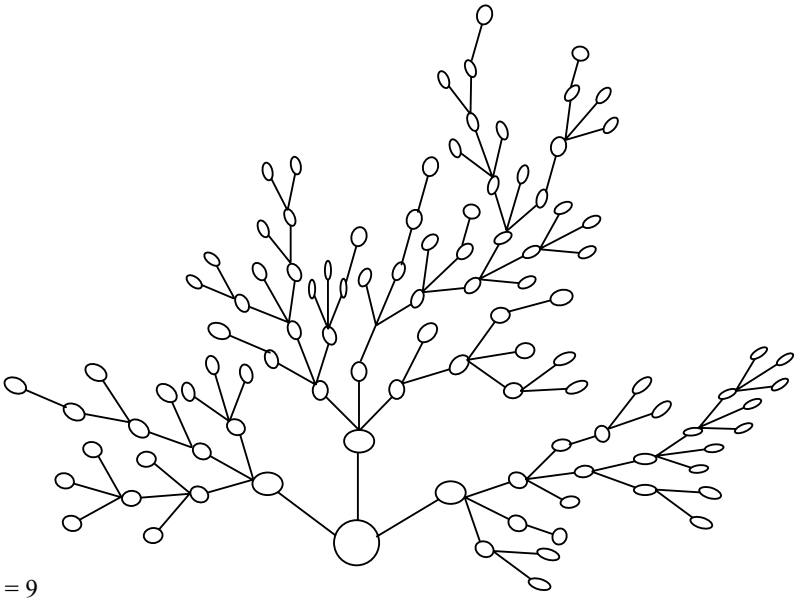
$Z_{1-\alpha}$ = the Z-score corresponding to the level of significance

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

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

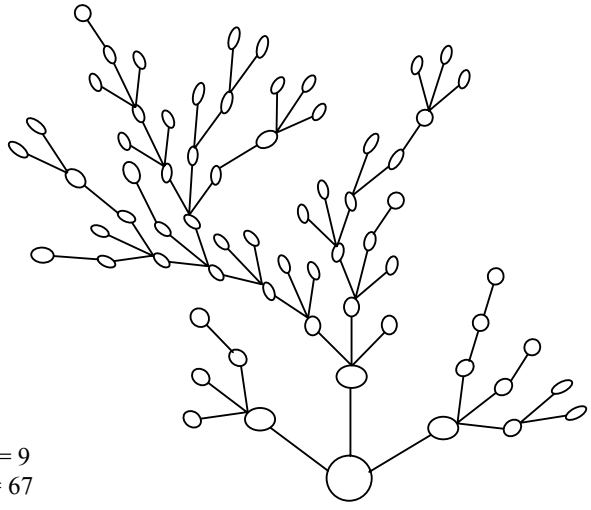
ANNEX – 3: Wave of Recruitment of IDUs by 'Seeds'

SEED No. 1: Nalamukh



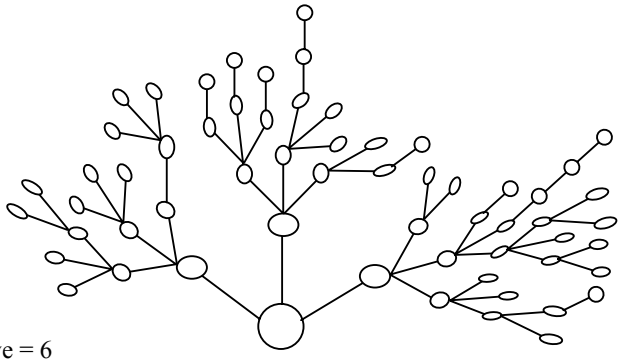
Largest wave = 9
Total clients = 104
(Including seed)

SEED No. 2: Bagar



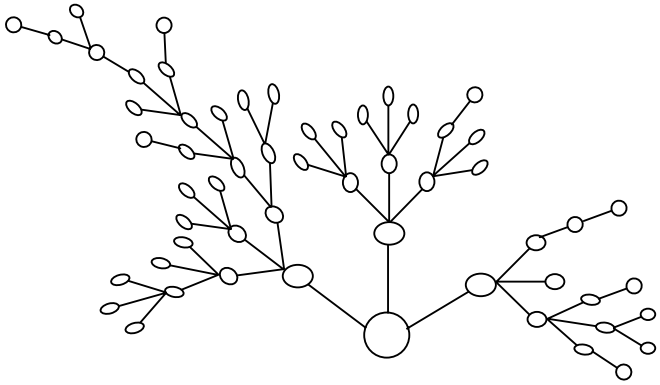
Largest wave = 9
Total clients = 67
(With seed)

SEED No. 3: Rambazar



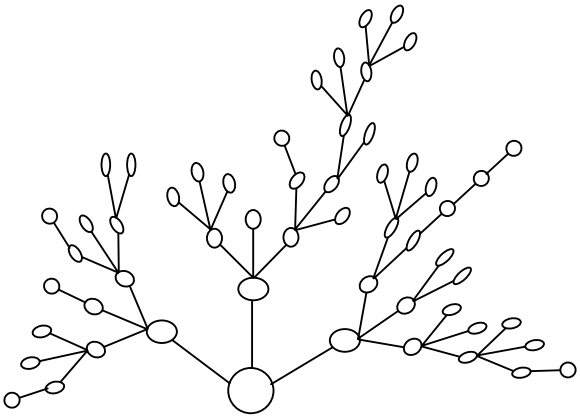
Largest wave = 6
Total clients = 61
(with Seed)

SEED No. 4: Damside



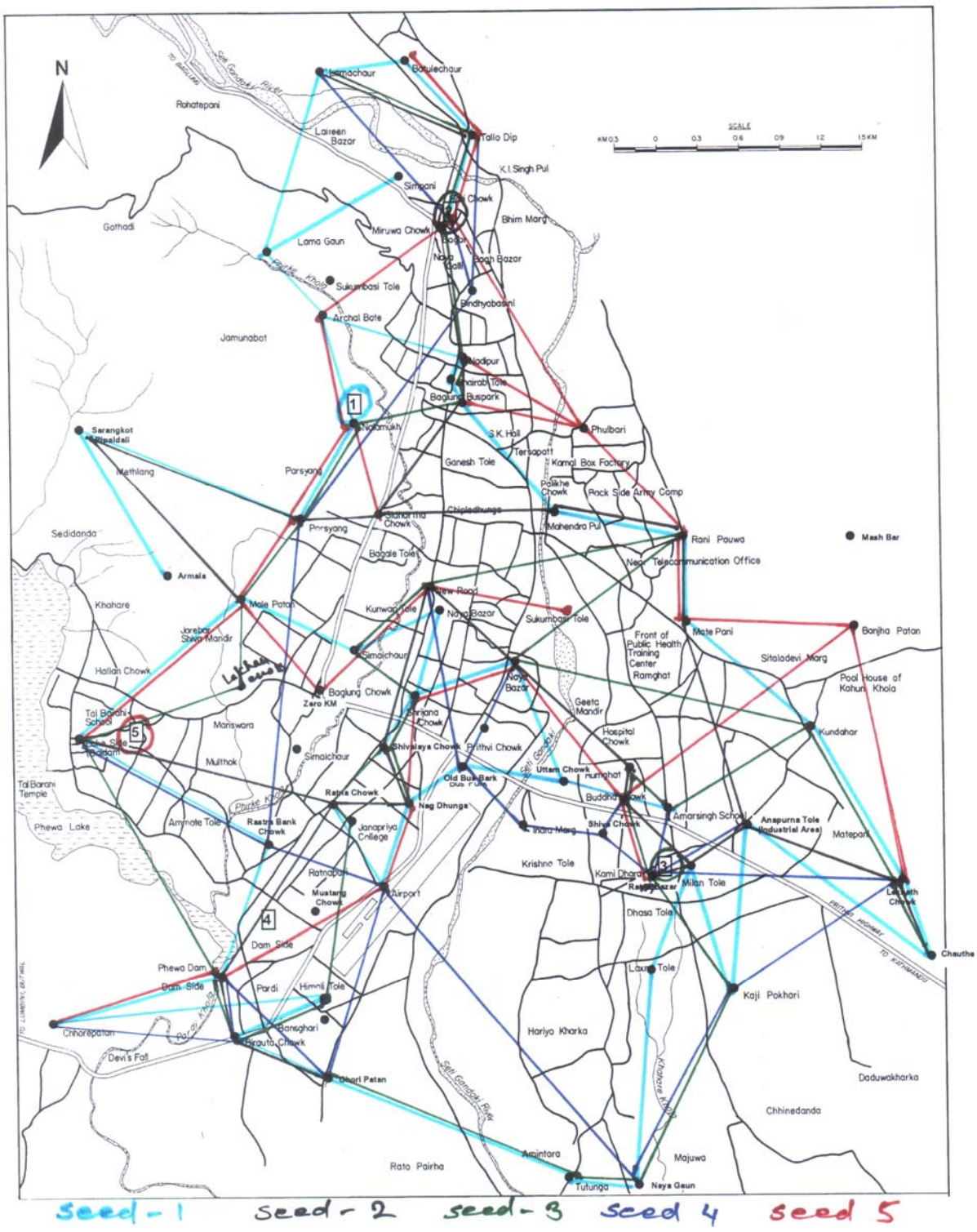
Largest wave – 7
Total clients = 57
(with Seed)

SEED No. 5:



Largest wave – 6
Total clients – 56
(with Seed)

ANNEX – 4: Recruitment Areas of IDUs in Pokhara Valley



ANNEX – 5: Questionnaire

National Centre for AIDS and STD Control
Ministry of Health and Population
Government of Nepal

Integrated Biological and Behavioral Surveillance Survey among Male Injecting Drug Users in Kathmandu and Pokhara Valley

Namaste! My name is ....., I am here from …….to collect data for a research study. This study is being conducted by National Centre for AIDS and STD Control (NCASC), Ministry of Health and Population with support from ……. and ……... FHI's ASHA Project and USAID are providing technical assistance for the study. 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 study purpose. This survey will take about an hour.

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

Would you be willing to participate?

1. Yes 2. No

Signature of the interviewer: _____ Date:_____/_____/2067

Operational definition of IDUs:

"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"

IDENTIFICATION NUMBER (Coupon Number): ☐☐☐☐☐ *(Write '0' for seed)*
Coupon number given:

1. ☐☐☐☐☐
2. ☐☐☐☐☐
3. ☐☐☐☐☐

Did the interviewee abandon the interview?
1. Yes (Precise the number of the last question completed: Q ____)
2. No

Interviewer Name: _____ Code Interviewer: _____

Date Interview: _____ / _____ / 2067
Checked by the supervisor: Signature: _____ Date: ____/ ____ / 2067

Data Entry # 1: Clerk's name: _____ Date _____/_____/2067
Data Entry # 2: Clerk's name: _____ Date _____/_____/2067

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)
_____

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

Q.N.	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_____	
101.1	How long have you been living continuously at this location? **(Write 995 if less than one month)**	Month ..... ☐☐☐ Always (since birth) ..... 0 Others (Specify)_____996	
102	In the last 12 months have you been away from your home for more than one-month altogether? **(Left home, village/district)**	Yes ..... 1 No ..... 2 Don't' know ..... 98 No response 99	
103	How old are you?	Age ..... ☐☐ **(write the completed years)**	
104	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..... 0 Literate..... 19 Grade ..... ☐☐ **(write the completed grade)**	
105	What is your caste? **(Specify Ethnic Group/Caste)**	Ethnicity/Caste _____ Code No..... ☐☐	
106	What is your current marital status?	Never married..... 1 Married ..... 2 Divorced/Permanently separated ..... 3 Widow ..... 4 Other (Specify)_____ 96	→ 108
107	How old were you when you first got married?	Age ..... ☐☐ **(write the completed years)**	
108	With whom you are living now?	Living with wife..... 1 Living with female sexual partner ..... 2 Living without sexual partner ..... 3 Others (Specify)_____96 No response 99	110
109	Do you think your wife/female sexual partner has any other sexual partners?	Yes ..... 1 No ..... 2 Don't' know ..... 98 No response 99	110
109.1	If yes, what is the sex of your partner?	Male..... 1 Female 2	
110	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. Lysergic Acid Dithylamide(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
19. Avil	1	2	98	99	1	2	98	99
96. Others (Specify) _____	1	2	98	99	1	2	98	99

204.1	In the last month, did you switch from one drug to another?	Yes.....1 No .....2 →	205
204.1.1	If yes, which drug?	From _____drug To _____drug	
204.1.2	What is the reason for switching?	_____ _____ _____	
205	How many times would you say you injected drugs yesterday?	Times .....☐ → Not injected 0	209

Q.N.	Questions	Coding Categories	Skip to
206	Would you like to tell me why you did not injected yesterday?	_____ _____	
207	How many days ago did you get injected?	Days ago ..... ☐☐	
208	How many times would you say you injected drugs on the last day?	Times ..... ☐	
209	During the past one-week how often would you say you injected drugs?	Once a week .....1 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	→ 301
210.1	In the past year, have you ever been imprisoned or detained for any reason?	Yes.....1 No .....2 No response.....99	→ 301
210.2	In the past year, have you ever been imprisoned for drug-related reason?	Yes.....1 No .....2 No response.....99	210.4
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	

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 did 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.....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	

Q.N.	Questions	Coding Categories	Skip to
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.....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	
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 95	
304	Now think about the time before (before Q. 303), 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.....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 Don't know .....98 No response.....99	→ 312.1
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	

Q.N.	Questions	Coding Categories				Skip to
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 .....98 No response 99				
308	In the past one-week, how often did you give a needle or syringe to someone else, after you had already used it?	Every times.....1 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 314					
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

Q.N.	Questions	Coding Categories	Skip to
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..... 6 Others (Specify)_____ .... 96 Don't know ..... 98 No response 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 worker ..... 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 ____ .... 11 **(write the name of Organization)** Steal from legitimate source (hospital./pharmacy) ..... 12 Buy on streets ..... 13 Other (Specify) _____ 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 some one 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

Q.N.	Questions	Coding Categories	Skip to
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	

Q.N.	Questions	Coding Categories	Skip to
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 403.1once 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 ..... ☐☐ Don't know ..... 98 No response 99	
501.2	The last time you had sex with a female regular partner did you and your partner use a condom?	Yes ..... 1 → 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 times.....1 Almost every-times .....2 Sometimes .....3 Never used.....4 Don't know .....98 No response 99	

Q. N.	Questions	Coding Categories	Skip to
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?	No.. ☐☐ 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?	No.. ☐☐ 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 Other (Specify) _____ .... 96 Don't Know ..... 98 No response 99	
502.2	Think about your most recent female sex worker. How many times did you have sexual intercourse with her in the past one-month?	Times ..... ☐☐ Don't know ..... 98 No response 99	
502.3	The last time you had sex with a female sex worker did you and your partner use a condom?	Yes ..... 1 →	502.5
		No ..... 2 Don't know 98	502.5
		No response 99	
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

Q. N.	Questions	Coding Categories	Skip to
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	

Q. N.	Questions	Coding Categories	Skip to
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 ..... 5 Didn't think it was necessary ..... 6 Didn't think of it ..... 7 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	

Q. N.	Questions	Coding Categories	Skip to
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 Don't Know ..... 98 No response 99	→ 601
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 ..... 1 Yes, by taking money ..... 2 No 3	
605	How long would it take **(from your house or the place where you work)** to obtain a condom?	Less than 30 minutes ..... 1 More than 30 minutes ..... 2 Don't know ..... 98 No response 99	
606	Do you usually carry condom with you?	Yes ..... 1 No 2	
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 ..... 98 No response 99	
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 ..... 98 No response 99	
706	Last time you had a genital discharge/ burning urination or a genital ulcer/sore blister, where did you go for treatment?	Did not seek treatment ..... 1 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 fried 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	

Q. N.	Questions	Coding Categories	Skip to
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 .....98 No response.....99	
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 98	
813.2	Can a person get HIV by shaking hand with an infected person?	Yes.....1 No .....2 Don't know 98	
813.3	Can blood transfusion from an infected person to the other transmit HIV?	Yes.....1 No .....2 Don't know 98	
814	Is it possible in your community for someone to have a confidential HIV test? **(By confidential, I mean that no one will know the result if you don't want him or her to know it.)**	Yes.....1 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

Q. N.	Questions	Coding Categories	Skip to
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			
817.1			
818	When did you have your most recent HIV test?	Within the past 12 months .....1 Between 13-24 months.....2 Between 25-48 months.....3 More than 48 months .....4 Don't know .....98 No response 99	
819	Please do not tell me the result, but did you find out the result of your HIV test?	Yes.....1 → 901 No .....2 No response .....9 → 901	
819.1	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) _____	1	2	
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) _____	1	2	

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) _____	1	2	
1002	Have you ever seen, heard or read following messages/characters during past one year? ***(Multiple answer possible)***			
	Message/characters	**Yes**	**No**	
	1. Jhilke Dai Chha Chhaina Condom	1	2	
	2. Condom Kina Ma Bhaya Hunna Ra	1	2	
	3. Youn Rog Ra AIDS Bata Bachnalai Rakhnu Parchha Sarbatra Paine Condom Lai	1	2	
	4 Ramro Sanga Prayog Gare Jokhim Huna Dinna Bharpardo Chhu Santosh Dinchhu Jhanjhat Manna Hunna	1	2	
	5. Condom Bata Surakchhya, Youn Swasthya Ko Rakchhya AIDS Ra Younrog Bata Bachna Sadhai Condom Ko Prayog Garau	1	2	
	6. HIV/AIDS Bare Aajai Dekhee Kura Garau	1	2	
	7. Ek Apas Ka Kura	1	2	
	8. Maya Garaun Sadbhav Badaun	1	2	
	9. Des Pardes	1	2	
	10. Manis Sanga Manis Mile hara Jeeta Kasko Hunchha	1	2	
	96. Others (Specify)_____	1	2	
1003	Have you ever heard/seen or read messages or materials other than mentioned above?	Yes.....1 No 2		▶1004
1003.1	What? Have you seen, read or heard of ?	_____		
1004	Generally, where do you gather to inject drug? **(Type of injecting site and location too)**	_____		
1005	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

Q. N.	Questions	Coding Categories	Skip to
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 → 1105 No response.....99	
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…….....2 Discussion on safe injecting behavior .....3 Regular/non-regular use of condom .....4 Demonstration on using condom correctly.....5 Others (Specify)_____ 96	

Q. N.	Questions	Coding Categories	Skip to
1103	Do you know which organization were they from? **(Multiple answers. DO NOT READ the possible answers)**	KCC.....1 HELP.....2 KYC.....3 PSK.....4 LALS.....5 Youth Vision.....6 Naulo Ghumti.....7 CSG.....8 INF (Nepalgunj).....9 SMF.....10 AHH.....11 RICHMOND.....12 Nav Kiran.....13 Jhapa Plus.....14 Namuna.....15 Others (Specify) _____ 96 Don't know.....98	
1104	How many times have these PE, OE, CM and/or CE met you in the last 12 months?	Once.....1 2-3 times.....2 4-6 times.....3 7-12 times.....4 More than 12 times.....5	
1105	Have you visited or been to any out reach center (DIC, IC or CC) in the last 12 months? 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.....2 Went to learn about the safe injecting behavior.....3 Went to watch film on HIV/AIDS..4 Participated in discussion on HIV transmission.....5 Went to have new syringe.....6 Other (Specify)_____ 96	
1107	Do you know which organizations run those out reach center (DIC, IC or CC)? **(Multiple answers. DO NOT READ the possible answers)**	KCC.....1 HELP.....2 KYC.....3 PSK.....4 LALS.....5 Youth Vision.....6 Naulo Ghumti.....7 CSG.....8 INF (Nepalgunj).....9 SMF.....10 AHH.....11 RICHMOND.....12 AMDA Nepal.....13 WHOMS.....14 Namuna.....15 Others (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

Q. N.	Questions	Coding Categories	Skip to
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.....3 Discussion on safe injecting behavior.....4 Regular/non-regular use of Condom.....5 Took a friend with me.....6 Other (Specify)_____96	
1111	Do you know which organizations run those STI clinics? **(Multiple answers. DO NOT READ the possible answers)**	AMDA.....1 SACTS.....2 NFCC.....3 CAC.....4 Paluwa.....5 Siddhartha Club.....6 NSARC.....7 NRCS.....8 FPAN.....9 Others (Specify)_____.96 Don't know.....98	
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 Voluntary Counseling and Testing (VCT) centers in the last 12 months?	Yes.....1 No.....2	→ 1117
1114	What did you do when you visited such VCT 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 Other (Specify)_____96	
1115	Do you know which organizations run those VCT centers? **(Multiple answers. DO NOT READ the possible answers)**	AMDA.....1 Youth Vision.....2 SACTS.....3 NFCC.....4 CAC.....5 Naulo Ghumti.....6 NSARC.....7 NRCS.....8 FPAN.....9 WATCH.....10 Namuna.....11 Others (Specify) _____ 96 Don't know.....98	

Q. N.	Questions	Coding Categories	Skip to
1116	For how many times have you visited VCT center in the last 12 months?	Once.....1 2-3 times.....2 4-6 times .....3 7-12 times .....4 More than 12 times.....5	
1117	Have you ever participated in HIV/AIDS awareness raising program or community events in the last 12 months?	Yes.....1 No 2	→1121
1118	If Yes, What activities did you participate in? **(Multiple answers. DO NOT READ the possible answers)**	Street drama.....1 AIDS Day .....2 Condom Day .....3 Video Shows .....4 Group discussions .....5 Talk programs .....6 HIV/AIDS related training .....7 HIV/AIDS related Workshops.....8 Condom use demonstrations.....9 Others (Specify) _____ 96	
1119	Do you know which organizations organized those activities? **(Multiple answers. DO NOT READ the possible answers given below)**	AMDA.....1 HELP .....2 KYC.....3 Youth Vision .....4 NFCC.....5 LALS .....6 Naulo Ghumti .....7 WATCH .....8 GWP .....9 NRCS .....10 NSARC .....11 AHH .....12 Recovery Nepal.....13 SAHARA .....14 CSG .....15 Others (Specify) _____ 96 Don't know 98	
1120	How many times have you participated in such activities in the last 12 months?	Not participated within last year.....0 Once.....1 2-3 times.....2 4-6 times .....3 7-12 times.....4 More than 12 times.....5	
1121	Have you heard of any Community Home Based Care (CHBC) services that are provided for HIV positive people?	Yes.....1 No 2	
1122	Have you heard of care and support programs that provide information regarding ART and ART services necessary for HIV infected people?	Yes.....1 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	

Q. N.	Questions	Coding Categories	Skip
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 Don't know.....98 No response.....99	
1205	Do you think a person with HIV should get the same, more or less health care than someone with any other chronic disease?	Same .....1 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	

ANNEX – 6: Clinical/Lab Checklist

CONFIDENTIAL

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

Clinical/Lab Checklist

Respondent ID Number: | | | | | | | Date: 2067/___/__

Name of Clinician: _____

Name of Lab Technician: _____

(A) Clinical TEST

Weight : _____Kg

B.P. : _____mm of Hg

Pulse : _____

Temperature : _____º F

(B) Specimen collection

	Yes	No
Pre-test counseled	1	2
Blood Collected for HIV & Syphilis	1	2
Date & place for post-test results given	1	2
Condom given	1	2
IEC materials given	1	2

1.0 Syndromic Treatment Information

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

1. Yes 2. No

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

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

1. Yes 2. No

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

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

1. Yes 2. No

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

ANNEX – 7: Oral Informed Consent From for Male Injecting Drugs Users

Title: Integrated Biological and Behavioral Surveillance Survey among Injecting Drug Users in Pokhara Valley

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

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Introduction

We are asking you to take part in a research study to collect information on knowledge of human immunodeficiency virus (HIV)/sexually transmitted infections (STIs), HIV/STI related risk behaviors, STI treatment practices and to track the trend in the prevalence of HIV and Syphilis among the populations like you. We want to be sure that you understand the purpose of the research and your responsibilities before you decide if you want to participate in the study. This discussion is important. You can listen and learn about the study, ask questions, and then decide if you want to participate. If you choose to participate, one person will explain the study to you and another person will witness and make sure you understand the study. Both people will sign the form. You will not be asked to sign the form. You can ask us to explain any words or information that you may not understand.

Information about the Research and Your Role

This study selects its study participants from the Pokhara valley who are injecting drug users using respondent driven sampling process (RDS). Study participants will be selected by a process in which individuals who have participated in the study invite others they know who meet the study criteria to participate. You are in the pool of possible candidates, but the final selection would be based on your choice. In total 345 men like you will be selected for this study from Pokhara valley. If you agree to participate in the study we will interview you using a structured questionnaire and then ask you to provide about 5-7 ml blood sample for HIV and Syphilis test. We will draw blood from vein. If you have any STI symptom, we will provide free treatment. You will be provided your confirmatory HIV test results and RPR titer test result on the same day if you want to receive it. Test results will be provided with counseling by a qualified counselor. If you are RPR reactive, a confirmatory test result for syphilis will be provided at the nearest VCT clinic in Kathmandu and you will be informed about the time and clinic where you need to obtain those results.

You will have to spend about 60 minutes with us if you decide to participate in this research. You will have to wait another 60 minutes if you want to collect the HIV test result on the same day. Further, if you decide to participate in the "on the spot treatment plan" for syphilis based on the RPR test you may then need to spend about 60 minutes more after you are given the Penicillin injection for observation by medical doctor for any adverse reactions. We would like to inform that this is a research study and not health care provision service.

Possible Risks

The risk of participating in this study is the minor discomfort during blood drawing. Providing blood sample does not put you at any other risk. Some of the questions we ask might make you feel awkward or uncomfortable to answer them. You are free not to answer such questions and also to stop participating in the research at any time you want to do so. You might feel some mental stress after getting your test results. But you will get counseling before and after the test for HIV through a qualified counselor. He/she will provide information and address for seeking assistance for any mental stress you may have.

There is a small risk of being socially discriminated if people know that you have participated in a HIV related study. But we will keep all the information confidential so that such risk would be minimal.

Possible Benefits

You will be provided with free treatment, if you currently have any STI symptoms. Furthermore, if you are tested positive for Syphilis and provide consent for treatment, we will provide you Penicillin injection in the presence of a medical doctor. You will be given lab test results and made aware of how STI/HIV is transmitted and how it can be prevented and controlled. We would refer you for treatment for HIV in case you are tested positive for HIV, but the study team will not provide this treatment for you. Follow up treatment costs will not be paid by the research team. You will be provided with information on safe sex. The information we obtain from this research will help to plan strategies to control and prevent further spread of HIV/AIDS and other sexually transmitted infections.

After the blood sample collection it will be tested for HIV and Syphilis infection. You can collect your test results of HIV on the same day. For syphilis test results confirmed by TPPA test you will be given time and venue to come back for collecting test results. A qualified counselor with pre and post test counseling will give test result. Study ID card will be issued to you before the interview. Test results can only be obtained by presenting the study ID card with your code number on it. If you do not have the ID card, we cannot give you the results because we will not have your name written anywhere.

If You Decide Not to Be in the Research

You are free to decide whether or not to take part in this research. Your decision will not affect the health services you are seeking now and you would normally receive from the study centre.

Confidentiality

We will protect information collected about you and your taking part in this study to the best of our ability. We will not use your name in any reports. A court of law could order medical records shown to other people, but that is unlikely. We will not ask you to put your name or sign on this form, but only ask you to agree verbally (with spoken words). We will be responsible and serious about confidentiality during interview, STI examination and treatment. We assure you that all the activities will be confidential.

Payment

We will not pay you for your participation but you will be given, condom and reading materials about STI/HIV/AIDS as compensation for your participation in the research. We will provide NRs 100.00 (USD 1.5) as a local transportation for coming to study centre for interview and test result collection. The study participants will also receive a maximum of up to NRs. 150 (USD 2) for recruiting up to

three friends through the coupons provided by the research team (NRs. 50 or USD 0.67 for recruiting one friend successfully).

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

If you have a questions about the study
If you have any questions about the research, call:
Dale Davis, ASHA project- FHI/Nepal, Baluwatar, Kathmandu, Phone: 01-4437173; **OR**
Laxmi Bilas Acharya, ASHA project- FHI/Nepal, Baluwatar, Kathmandu, Phone: 01-4437173
We will not be able to pay for/care for injuries that occur as a result of the study.

Your Rights as a Participant
This research has been reviewed and approved by the Institutional Review Board of Family Health International and Nepal Health Research Council (NHRC). If you have any questions about how you are being treated by the study or your rights as a participant you may contact : **Ethical Review Board**, **Nepal Health Research Council**, **Ram Shah Path, P.O. Box 7626** Phone: **977-1-4254220/4227460** Email: **nhrc@healthnet.org.np**

Or you may contact **Mahesh Shrestha**, FHI CO Nepal: GPO Box: 8803, Gopal Bhawan, Anamika Galli Ward No: 4, Baluwatar, Kathmandu Tel: 977-1-4437173. Email: mshrestha@fhi.org

VOLUNTEER AGREEMENT

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

_____ _____
Signature of witness Date

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

_____ _____
Signature of Person Who Obtained Consent Date

ANNEX – 8: Participation in Post Test Counseling

Post Test Counseling Date	Counseling Center	Expected Client	Client Counseled	
			N	%
16 January 2011 - 16 March 2011	Study Site	345	135	39.1

ANNEX – 9: Reasons for Not Injected Drugs on the Previous Day

Injecting Practice	Estimated Population Proportions (%)	95% CI
Reasons for not injecting yesterday#	**(n=139)**	
Not a regular user	22.6	11.9-40.2
Lack of money	22.2	9.3-33.5
Scarcity of drugs	15.1	6.1-23.8
Trying to get rid of drug	11.7	4.2-21.9
Taking other medicines	10.7	3.7-16.1
Due to drank alcohol	3.5	0.3-4.4
Busy in work/Out of home for work	3.2	1.8-9.9
Due to illness	3.9	0.0-7.5
Fear of being arrested by police	0.0	No Bound
Due to staying in the rehabilitation center	5.6	0.0-8.4

Note: #Because of multiple answers percentage may add up to more than 100.
No Bound – RDSAT conditions were not met

ANNEX – 10: Part of the Body for Injecting Drugs

Typical Injection Points	Estimated Population Proportions (%) (N=345)	95% CI
Joint of leg and hip	54.3	49.2-59.9
Wrist	34.7	29.4-39.7
Arm	4.8	2.8-7.1
Elbow	4.0	1.9-6.0
Armpit	0.9	0.0-2.3
Palm	0.9	0.0-2.1
Calf	0.4	0.0-0.1

ANNEX – 11: Gathering Place to Inject Drugs

Gathering Places of IDUs to Inject Drugs	Estimated Population Proportions (%) (N=345)	95% CI
Own/friends/Drug-user's room/House	39.0	32.8-43.5
Forest/Bushes/Lawn/Farmland/Chaur/Bansghari	36.1	31.7-42.5
River bank	14.0	10.3-18.4
Toilet	3.9	0.2-5.8
Hotel/Lodge/Restaurant	2.3	0.9-4.0
Newly building constructing sites	2.0	0.6-3.9
Bus/taxi garage	0.5	0.0-1.0
Bus park	0.2	0.0-0.5
Around school/Campus	0.7	0.0-1.5
Road	0.3	0.0-0.6
Gumba	0.2	0.0-0.4
Pension camp	0.3	0.0-0.7
Bhedi farm	0.6	0.0-1.5

ANNEX – 12: Combination of Different Drugs Injected

S.N.	Drugs Combination#	Fifth Round - 2011
		n=311
1	Norphin+Diazepam+Phenergan	68.17
2	Norphin+Diazepam+Stargun	14.47
3	Norphin+Diazepam	5.79
4	Norphin+Phenergan	1.29
5	Norphin+Avil+Diazepam+Phenergan	1.29
6	Norphin+Diazepam+Phenergan+Stargun	1.29
7	Diazepam+Phenergan	0.64
8	Norphin+Phenaromain+Diazepam+Phenergan	0.64
9	Diazepam+Phenergan+Lubrigesic	0.64
10	Norphin+Diazepam+Lubrigesic	0.64
11	Norphin+Phenaromain+Diazepam	0.32
12	Norphin+Diazepam+Elgic	0.32
13	Avil+Phenergan	0.32
14	Avil+Diazepam+Phenergan+Lubrigesic	0.32
15	Brown sugar+Vitamin 'C'	0.32
16	Diazepam+Lubrigesic+Stargun	0.32
17	Norphin+Avil+Phenergan+Lubrigesic	0.32
18	Avil+Phenergan+Stargun	0.32
19	Norphin+Avil+Diazepam+Phenergan+Stargun	0.32
20	Norphin+Diazepam+Phenergan+Lubrigesic	0.32
21	Norphin+Diazepam+Lubrigesic+Stargun	0.32
22	Norphin+Diazepam+Phenergan+LGT	0.32
23	Norphin+Phenergan+Saipam+Stargun	0.32
24	Norphin+Diazepam+Proxyvon+Stargun	0.32
25	Norphin+Avil+Elgic+Phenergan+Stargun	0.32
26	Norphin+Diazepam+Talgesic	0.32

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

ANNEX – 13: Drugs Switching Practice and Its' Reasons

Drug Switching Behavior of IDUs	Estimated Population Proportions (%)	95% CI
Switched from one drugs to another drugs in past month	**(N=345)**	
Yes	2.2	0.8-3.9
No	97.8	96.1-99.2
Switched from	**(n=8)**	
Avil to Phenergan	12.5*	-
Phenergan to Codeine	12.5*	-
Norphin+Diazepam+ Phenergan to Codeine	12.5*	-
Norphin+Diazepam+ Phenergan to Methadone	12.5*	-
Norphin+Diazepam+ Phenergan to Norphin+Diazepam	12.5*	-
Norphin+Diazepam+ Phenergan to Diazepam+ Phenergan+Lubrigesic	12.5*	-
Norphin+Diazepam+ Phenergan to Norphin+Diazepam+Stargun	12.5*	-
Diazepam+ Phenergan+Lubrigesic to Codeine	12.5*	-
Reasons for switching one drug to another #	**(n=8)**	-
Having nerve problem	25.0*	-
Trying to avoid drug through injection	25.0*	-
Trying to avoid taking drug	25.0*	-
Scarcity of Drug	12.5*	-
Due to skin allergy	12.5*	-

Note: Estimated population Proportion (%) of the variables with asterisk (*) did not meet the required numerator to be calculated with RDSAT. The proportion represented is therefore unadjusted and no value is mentioned under CI.

ANNEX – 14: Types of Treatment and Institutions from Where Treatment Received

Types of Institutions	Types of Treatments (n=179)							
	Residential rehabilitation %	Out patient counseling %	Helped for cold turkey %	Forced for cold turkey %	Maintenance with methadone %	Detoxification With other drug %	Detoxification with methadone %	Detoxification with no drug %
Richmond Fellowship	16.7*							
Naulo Ghumti	11.2*	2.8*						
Gateway Foundation	10.6*							
Bright Future (Rehab center)	7.3*							
Magic Circle	5.0*							
Aashra Sudhar Kendra	3.3*							
Seren Foundation	2.8*	0.5*						
Support and Care Center	2.8*							
Nawa Jeevan Punarsthpan Kendra	2.2*							
Narconan	2.2*							
Youth Vision	1.7*							
Save the Life Pokhara	1.7*							
Nawa Kiran Ashram/Rehabilitation Center/Nawa Kiran Sanstha	1.1*							
New Vision	1.1*							
Mother Deetax Ealians	1.1*							
Punarjeevan Kendra	0.5*							
Freedom Rehabilitation Center	0.5*							
Jeevan Punarsthpan	0.5*							
Manish Care Foundation	0.5*				5.0*		3.9*	
Care Foundation	0.5*							
Sparsha Nepal	0.5*							
Halan Chowk Jajher	0.5*							
First Step	0.5*							
Samarpan Nepal	0.5*							
Herbal Deetax	0.5*					0.5*		
Care od Sector/Vision	0.5*							
Paluwa		0.5*						
Model hospital Pokhara+Parokar medical						0.5*		
Model hospital						2.8*		
Arjun medical hall						0.5*		
Medical shop						0.5*		
Self treatment by using medicine						2.8*		
Upkar rehabilitation center						0.5*		
Manipal Medical college								0.5*
Shikha VDC								0.5*
Own home			1.1*	1.1*				

Note: Estimated population Proportion (%) of the variables with asterisk (*) did not meet the required numerator to be calculated with RDSAT. The proportion represented is therefore unadjusted and no value is mentioned under CI.

ANNEX – 15: Reasons for Not Using Condom in the Last Sex with Different Sex Partners

Reasons of Not Using Condom	Estimated Population Proportions (%)	95% CI
Reasons of not using condom with regular partner in the last sex	**(n=74)**	
Did not think it was necessary	29.5	16.7-65.7
Do not like it	39.1	7.0-67.7
Used other contraceptive	30.9	12.7-59.9
Trust on partner	30.0	5.6-61.8
Sexual dissatisfaction	0.0	0.0-0.0
Wife is pregnant	11.5	No Bound
Did not think of it	0.0	No Bound
Partner objected	0.0	No Bound
Others	0.0	No Bound
Reasons of not using condom with sex worker in the last sex	**(n=14)**	
Don't like them	64.3*	-
Others	28.6*	-
Not available	21.4*	-
Didn't think of it	14.3*	-
Sexual dissatisfaction	7.1*	-
Used other contraceptive	7.1*	-
Reasons of not using condom with non- regular partner in the last sex	**(n=96)**	
Don't like them	38.7	21.0-47.6
Didn't think it was necessary	32.6	10.9-47.0
Trust on partner	36.5	17.5-56.7
Not available	23.4	9.5-42.1
Didn't think of it	4.4	1.9-12.4
Partner objected	0.0	No Bound
Used other contraceptive	5.3	0.0-14.2
Sexual dissatisfaction	6.9	1.0-21.8
Others	0.0	0.0-0.0

Note: Because of multiple answers percentage may add up to more than 100.
Estimated population Proportion (%) of the variables with asterisk (*) did not meet the required numerator to be calculated with RDSAT. The proportion represented is therefore unadjusted and no value is mentioned under CI.
No Bound – RDSAT conditions were not met

ANNEX – 16: Had Sex in Exchange for Money or Drugs

Had Sex	Estimated Population Proportions (%) (N=340)	95% CI
Ever had sex for money or goods		
Yes	1.8	0.7-2.8
No	98.2	97.2-99.3
Had sex for money or goods before started injecting drugs	**(n=13)**	
Yes	20.3	No Bound
No	79.7	No Bound
Had sex for money or goods after started injecting drugs		
Yes	92.3*	-
No	7.7*	-
Had sex for money or goods in the past one year		
Yes	46.3	No Bound
No	53.7	No Bound
Frequency of sex with such partners in the past one year	(n=2)	
2 times	100*	-
Number of such sex partners in the past one year		
One	50.0*	-
Two	50.0*	-

Note: Estimated population Proportion (%) of the variables with asterisk (*) did not meet the required numerator to be calculated with RDSAT. The proportion represented is therefore unadjusted and no value is mentioned under CI.
No Bound – RDSAT conditions were not met

ANNEX – 17: Distribution of Respondents Reached by OE/PE by Use of Other Services

Respondents Reached by Services in Past Year	Estimated Population Proportions (%)	95% CI
DIC visit	N=295	
Yes	70.1	64.9-75.6
No	29.9	24.4-35.2
VCT visit		
Yes	31.1	26.3-36.0
No	68.9	64.0-73.7
Participated in HIV/AIDS awareness program activities		
Yes	16.2	12.2-20.8
No	83.8	79.2-87.8
STI clinic visit		
Yes	3.0	1.3-5.1
No	97.0	95.0-98.7
Total	**100.0**	