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

Round IV - 2009

ASHA Project
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July 2009

USAID | NEPAL
FROM THE AMERICAN PEOPLE

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

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Family Health International/Nepal
USAID Cooperative Agreement #367-A-00-06-00067-00
Strategic Objective No. 9 & 11

ACKNOWLEDGEMENTS

We would like to express our sincere gratitude to Family Health International/Nepal (FHI/Nepal) for entrusting us the responsibility to conduct the survey. Our deep appreciation goes to Ms. Jacqueline McPherson, Country Director, FHI/Nepal and Mr. Satish Raj Pandey, Deputy Director, FHI/Nepal. Their inputs proved invaluable throughout the course of this study. Special thanks go to Dr. Laxmi Bilas Acharya, Team Leader - Strategic Information (SI) Unit, FHI/Nepal for his technical inputs and guidance throughout the whole process of the study.

Furthermore, the study team would like to thank Naulo Ghumti/Pokhara for their entire support in the study including post test counseling service and test result dissemination to the study participants.

We are also indebted to various organizations such as Community Support Group, Richmond Nepal, Gateway Foundation and Recovering Nepal for their valuable suggestions and contributions throughout the study period. We would like to gratefully acknowledge Nepal Police, National Center for AIDS and STD Control (NCASC) and District Public Health Office and Chief District Officer in the study district for providing necessary administrative support during the study period.

Special appreciation goes to our respondents, who spend their time for the interview and shared their personal experiences to bring the study to this shape.

This study is the outcome of the dedicated efforts of the entire survey team. We would like to thank all the members of the study for their extreme hard work and significant contribution to the successful completion of this study.

~ Study Team New ERA ~

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ABBREVIATIONS

AIDS	-	Acquired Immuno-Deficiency Syndrome
ASHA	-	Advancing Surveillance, Policies, Prevention, Care & Support to Fight HIV/AIDS
CI	-	Confidence Interval
DIC	-	Drop-in-Centre
EPP	-	Estimated Population Proportions
FHI	-	Family Health International
FSW	-	Female Sex Worker
HIV	-	Human Immuno-Deficiency Virus
IBBS	-	Integrated Biological and Behavioral Surveillance Survey
ID	-	Identification Number
IDUs	-	Injecting Drug Users
IEC	-	Information, Education and Communication
LALS	-	Life Giving and Life Saving Society
MARPs	-	Most At Risk Populations
MSM	-	Men who have Sex with Men
NCASC	-	National Centre for AIDS and STD Control
NGO	-	Non-Governmental Organization
NHRC	-	Nepal Health Research Council
NRL	-	National Reference Laboratory
OEs	-	Outreach Educators
PCR	-	Polymer Chain Reaction
PEs	-	Peer Educators
PHSC	-	Protection of Human Subjects Committee
RDS	-	Respondent Driven Sampling
RDSAT	-	Respondent Driven Sampling Analysis Tools
RPR	-	Rapid Plasma Reagin
SACTS	-	STD/AIDS Counseling and Training Services
SLC	-	School Leaving Certificate
SMF	-	Siddhi Memorial Foundation
SPSS	-	Statistical Package for the Social Sciences
STI	-	Sexually Transmitted Infection
TPPA	-	Treponema Pallidum Particle Agglutination
VCT	-	Voluntary Counseling and Testing
WHO	-	World Health Organization

EXECUTIVE SUMMARY

As part of the national response to the HIV epidemic, National Centre for AIDS and STD Control (NCASC) conducts surveillance to monitor HIV prevalence rates and risk behaviors. This surveillance among injecting drug users (IDUs), female sex workers (FSWs), male labor migrants (MLM), wives of labor migrants and men having sex with men (MSM) is done on a regular basis conducting Integrated Biological and Behavioral Surveillance Surveys (IBBS). This study is the fourth round of IBBS conducted among 300 male IDUs in the Pokhara Valley. The study was undertaken to measure the prevalence of HIV and syphilis, and associated risk behaviors among IDUs. Demographic, injecting behavior and sexual behavior data were collected through structured questionnaire while the prevalence of HIV and syphilis were measured by testing blood samples using Determine HIV 1/2 test to detect antibodies against HIV, Uni-Gold test as a second test and SD Bioline HIV 1/2 test as a tie breaker test. The Rapid Plasma Reagin (RPR) analysis with quantification was used to diagnosis syphilis and the diagnosis was confirmed by means of *Treponema Pallidum Particle Agglutination (TPPA)* test.

Key Findings

Prevalence of HIV and STIs

Out of 300 IDUs participating in the study, 3.4 percent were HIV-positive. A history of syphilis was found among 1.1 percent of IDUs, while 0.5 percent was currently infected with syphilis.

HIV prevalence differed significantly according to marital status and literacy status. The prevalence of HIV was higher among IDUs who are or were married (6.6%) than among those who had never been married (1.7%) before. HIV prevalence among literate IDUs was 2.3 percent and among illiterate IDUs it was 50.8 percent.

The IDUs who were older than 20 years were more likely to be HIV-positive (3.7%) than younger IDUs (1.9%). Likewise, HIV prevalence was higher among those who had been injecting drugs for more than five years (5%) than those who had been injecting drugs for less than five years (3.1%).

More markedly, HIV prevalence was significantly higher among those IDUs who had ever injected with a previously-used syringe in the past week (13.6%) than those who had never injected with such a needle/syringe (3%).

HIV prevalence among the IDUs has gradually decreased since the first round of IBBS conducted in the Pokhar valley. The first and the second round of the IBBS showed almost the same HIV prevalence rate among IDUs in Pokhara (22% in 2003 and 21.7% in 2005). The prevalence rate, however, decreased to 6.8 percent in 2007 and to 3.4 percent in 2009; this is a significant change since the first round.

Socio-Demographic Characteristics

The IDUs were mostly young, including 88 percent below 30 years of age and 61 percent younger than 25 years.

Many IDUs (65%) were unmarried. Around seven in ten IDUs (71.2%) were living without a sexual partner.

The IDUs in Pokhara Valley represented diverse caste/ethnic groups residing in the valley. The Tibeto-Burman communities (Tamang, Lama, Magar, Gurung, Rai, Newar) made up the largest proportion of the respondents (58.5%) followed by the Brahmin, Chhetri/Thakuri community (27.1%).

Alcohol Intake, Oral Drugs Use and Injecting Behavior

The majority of the IDUs (67.3%) had been using drugs for more than five years. Twenty- nine percent had been using drugs for the past two to five years, while three percent had been injecting for less than two years.

Overall 27 percent of the respondents consumed alcohol everyday and 23 percent were consuming alcohol more than once a week.

Use of oral/inhaled drugs was common practice among IDUs. Ganja was the most popular drug taken by 71 percent of IDUs in the week preceding the survey followed by Nitrovate (26.4%), Brown Sugar (23.2%), *charas* (17.3%) and so on.

The majority of respondents were 20 or younger (57.4%) when they injected for the first time. Around ninety seven percent of IDUs injected combination of different drugs.

Nearly all respondents (99.7%) knew about the sources for getting new syringes. Ninety-six percent of IDUs mentioned that they could get a new syringe whenever necessary from a drugstore. Similarly, a large proportion of IDUs (90.9%) said that the needle exchange program conducted by Naulo Ghumti made new syringes available whenever they needed one.

Among those IDUs who had been mobile in the past year seven percent had injected with a pre-used needle/syringe and four percent had given a needle/syringe to someone else after use at the place/s of their visit.

The proportion of IDUs who had avoided unsafe injecting practice in the week preceding the survey has been steadily increasing since the first round. High-risk behavior such as injecting with previously used needle/syringe decreased significantly from 21 percent in 2003 to 15 percent in 2005 to 8 percent in 2007 and finally to 5 percent in 2009. Additionally, the proportion of IDUs who had not shared their needle/syringe with anyone in the past week increased from 68 percent in the first round, to 81 percent in second round, to 92 percent in third round and to 95 percent in the fourth round.

Sexual Behavior

Overall, 96 percent IDUs in Pokhara had had sexual intercourse before the survey. Among them, 78 percent had been sexually active even in the past year. The sex partners of IDUs in Pokhara included regular female parents, non-regular female partners as well as female sex workers.

Thirty-three percent of sexually active IDUs had had sex with a regular partner in the past year. Most of them (90.1%) had sexual contact with their regular partners in the month preceding the survey.

Twenty-nine percent of IDUs who ever had sex had non-regular female sex partners in the past year. Thirty-five percent of them had sex with their non-regular partners in the previous month.

A total of 37 percent of sexually active IDUs had had sexual contact with female sex workers in the past 12 months. Among them, 48 percent had sex with FSWs in the last month.

Condom use in last sex with FSWs was reported by 89 percent of IDUs. The proportion of those who used condoms the last time they had sex with a regular partner (26.8%) and with a non-regular partner (56.4%) were comparatively less. A similar pattern was observed in the IDUs' last year's sexual contacts.

Knowledge and Awareness of HIV/AIDS and STIs

All the IDUs had heard about HIV/AIDS while 17 percent of them had not heard about STIs.

Four percent of IDUs had genital discharge and 11 percent had genital ulcers/sores in the past year. Among those who had STIs before, 19 percent and 60 percent reported having genital discharge and genital ulcer/sore respectively during the survey.

Over two-fifths (44.4%) of those IDUs who had experienced at least one STI symptom in the past year had not sought any treatment.

The majority of the respondents (67.8%) knew someone who had been living with HIV/AIDS or had died because of it.

Overall 41 percent of IDUs were aware of the 'ABC' (A- abstinence from sex, B- being faithful to one partner and C- condom use during each sexual contact) as HIV preventive measures while 62 percent had comprehensive knowledge on HIV i.e. "BCDEF' (D- a healthy looking person can be infected with HIV, E- a person can not get the HIV virus from mosquito bite and F- sharing meal with an HIV infected person do not transmit HIV virus). Furthermore, almost all IDUs (97.7%) knew that a person can get HIV by using previously used needles/syringes.

The majority of respondents (95%) knew that a confidential HIV testing facility was available in their communities. A total of 67 percent had been tested before for HIV of which only 16 percent had done so voluntarily while others had done so as it was

a requirement. Most of the IDUs (91.4%) who had been tested for HIV had received their test result.

Exposure to the HIV/AIDS Prevention Programs

During the preceding year more than nine in ten IDUs (90.8%) had visited a drop-in-centre and 43 percent had visited a VCT centre at least once. Very few IDUs (6.7%) had visited an STI clinic.

Ninety-four percent had participated in different HIV/AIDS awareness raising programs in the preceding year while almost eight in ten (78.7%) had interacted with a peer educators/outreach educators (PEs/OEs).

CHAPTER - 1.0: INTRODUCTION

1.1 Background

The spread of HIV/AIDS has become a global threat to humankind affecting individuals, families, communities, nations and the world. As of May 2009, the National Centre for AIDS and STD Control (NCASC) reported 2,384 confirmed AIDS cases and 13,885 confirmed HIV positive people in Nepal (NCASC, May 2009). In 2007 NCASC has estimated around 70,000 people were living with the HIV virus in Nepal. At this point in time, the HIV epidemic in Nepal is still concentrated among high-risk groups. As part of the national response to the HIV epidemic, NCASC conducts surveillance on a regular basis to monitor HIV prevalence rates and risk behaviors through the Integrated Biological and Behavioral Surveys (IBBS) with groups of people who have very high risk behaviors including injecting illicit drug users (IDUs), female sex workers (FSWs), male labor migrants (MLMs), wives of labor migrants and men having sex with men (MSM).

The HIV/AIDS epidemic in Nepal has largely been the result of transmission through the injection of illicit drugs and unprotected sexual contact. 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.

The results of the IBBS conducted so far among IDUs indicate that HIV prevalence varies by study area in Nepal. The first, second and third rounds of the IBBS conducted among IDUs in Kathmandu Valley indicated a staggering HIV prevalence rate of 68 percent in 2002 (New ERA/SACTS/FHI 2002); 52 percent in 2005 (New ERA/SACTS/FHI 2005); and 34.8 percent in 2008 (New ERA/SACTS/FHI 2007). The IBBS study conducted in the Pokhara Valley revealed a prevalence rate of 22 percent in the first round (New ERA/SACTS/FHI 2003); 21.7 percent in second round (New ERA/SACTS/FHI 2005); and 6.8 percent in the third round (New ERA/SACTS/FHI 2007).

Likewise, the study conducted in the Eastern Terai (Morang, Sunsari, and Jhapa) revealed that the prevalence rate of HIV among IDUs was 35 percent in 2003 (New ERA/SACTS/FHI 2003); 32 percent in 2005 (New ERA/SACTS/FHI 2005); and 17 percent in 2007 (New ERA/SACTS/FHI 2007). The study conducted in Western to Far-Western Terai showed an HIV prevalence of 11.7 percent in 2005 (New ERA/SACTS/FHI 2005) and 11 percent in the 2007 study (New ERA/SACTS/FHI 2007).

IDUs in the Kathmandu Valley had a higher HIV prevalence compared to IDUs from other places. The latest 2007 IBBS showed a decline in HIV prevalence among IDUs in Kathmandu, Pokhara and the Eastern Terai, whereas the HIV prevalence among IDUs in the West to Far-West Terai region has remained stable. These studies further showed that IDUs also had 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 2007 had dropped compared to the previous rounds of the study, it was still alarmingly high.

The fourth round of the IBBS among IDUs was conducted in the Kathmandu Valley, the Pokhara Valley and the Eastern Terai. The survey carried out in West to Far West Terai was of third round. This report deals with the findings of the Pokhara Valley and presents a socio-demographic profile, the prevalence of HIV and syphilis and the associated risk and prevention behaviors among 300 IDUs of the Pokhara Valley.

CHAPTER - 2.0: DESIGN AND METHODOLOGY

2.1 Objectives of the Study

The overall objectives of the study were to measure the prevalence of HIV and syphilis among IDUs of the Pokhara Valley; to assess their HIV/STI-related risk and prevention behaviors; to access the impact of intervention programs for IDUs; and to analyze trends through the comparison of selected variables of data obtained from the first, second and third rounds of the IBBS conducted in 2003, 2005 and 2007 with the current fourth round of the IBBS among IDUs in the Pokhara Valley.

The specific objective of the study was to collect information related to socio-demographic characteristics; drug use 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/STI services in Pokhara.

2.2 Study Population

The cross-sectional IBBS study was conducted among IDUs who are considered to be one of the high-risk sub-populations. The eligibility criterion used in the study was "current injectors of Pokhara Valley aged 16 years or above who had been injecting drugs for at least three months prior to the date of the survey."

2.2.1 Sample Size and Sampling Design

The sample size used in the previous rounds of IBBS in this site was used in this round also. Initially the sample size was determined by using basic statistical formula (Annex 2). As in the first, second and third rounds of the survey, a sample of 300 IDUs were drawn for this round of IBBS also.

It is a challenge to collect information from high-risk population groups as they are greatly stigmatized and potential respondents may be reluctant to participate in the study. Innovative sampling methods are needed to reach these populations. Respondent Driven Sampling (RDS) is a relatively new adaptation of chain-referral sampling, where subsequent respondents are recruited by the previous respondents through their network of acquaintances. It is one of the most effective methods used to sample hidden type of population. The sampling process begins with the selection of a set of people in the target population who serve as 'seeds'. After participating in the study, each seed is provided with three recruitment coupons, which they use to recruit other people they know in the target population from their networks. After participating in the study, each participant of the study is also provided with three recruitment coupons, which they use to recruit others. The recruitment continues in this way, with the subjects recruiting more subjects, until the desired sample size is reached.

RDS has the potential to reach individuals who are not easily accessible such as intravenous drug users, men who have sex with men, male sex workers, female sex workers (FSWs) and the homeless. These populations lack a sampling frame, and

sampling is further complicated by privacy concerns based on the stigma associated with membership in the population. RDS relies on social networks and attempts to overcome biases such as masking, volunteerism and over-sampling of groups with large networks, therefore giving unbiased estimates of population parameters and providing more representative samples (Heckathorn, 1997). In RDS, the sampling frame is created based on information collected from the participants during the sampling process itself. This information includes (i) who recruited whom, (ii) the relationship of the participants to the recruiter and the fact that the participants know each other, (iii) the participant's personal network sizes: network size is used to estimate the average network size by different sample characteristics such as age, race, ethnicity and gender.

In this study, the preliminary information on IDUs net works and locations where network leaders are found was collected with the help of local NGO partners, IDU networks and community people before the start of the actual field study. This information helped the study team recruit a total of five known IDUs as 'seeds' who met study eligibility criteria from different sites and different injecting groups. In some cases the local key informants helped in seed recruitment process.

2.2.2 Seeds and Recruitment

Following the RDS theory, research staff recruited the seeds (e.g., initial participants), who then began the chain referral by recruiting their peers into the study. It was decided that the seeds selected to initiate the recruitment process needed to be as diverse as possible (heterogeneous in age, ethnicity and duration of injecting habits).

The recruitment process in this study started with five seeds. Each seed was given three coupons to pass on to three peers they recruited for the study. These peers who successfully participated in the study were given another three coupons. In this way the recruitment process continued until 300 IDUs were recruited. At the end, the 'seed' and 'recruiter' generated up to 22 waves of recruitment. Of the five total seeds, two could not complete any waves, however, among the remaining three seeds, one completed 8 waves, the other generated 2 waves, and another seed completed 22 waves (Annex 6). By the RDS theory, if at least six waves of recruitment can be generated there will be equilibrium, which means that the recruited IDUs will sufficiently represent the population being sampled.

Since RDS is a dual incentive system to induce recruitment, each participant received Rs. 100 (equivalent to $ 1.3) for participation in the study and another Rs. 50 (equivalent to $ 0.6) for each individual they recruited to the study. A participant could have received up to Rs. 250 for successfully participating and recruiting three peers into the study.

Refusals

Those who did not meet the study criteria and those who were not willing to participate in the study because of personal reasons were not recruited. In total, there were 38 refusals. Seventeen did not have the coupon with them. Three IDUs reported that they had already tested for HIV and were not interested in participating

in the study despite the attempt to convince them that prior testing for HIV does not exclude them from participation in the study. Nine of them were not interested, mentioning that the incentive was very low and nine were afraid of drawing blood for the test.

2.3 Study Process

A field office (study site) was set up at Prithivi Chowk in Pokhara. This centrally-located site was purposively selected considering the convenience in meeting the study population and in bringing them to the site. The field office had separate rooms for each activity, including the administration of the questionnaire, the STI examination with general physical check-up, blood drawing and centrifuging the blood for separation of sera, and counseling.

A quantitative research approach was adopted in the study. Before starting the actual interview, all those coming with referral cards were informally asked certain question in order to ensure that they met the inclusive criteria set for the study. Injecting marks were also observed to confirm their injecting behavior. The structured questionnaire that was used in the previous rounds of IBBS and pre-tested by study team during the training of the field staff was used in this round also. The questionnaire includes questions on socio-demographic characteristics; drug injection behavior; syringe/needle sharing practices; and sexual behaviors (sexual history, use of condoms, risk perception); as well as exposure of the IDUs to the ongoing HIV/AIDS awareness programs and their participation in such activities (Annex 3).

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 5). The study participants were provided syndromic treatment for STI problems and a lab technician collected blood samples for HIV and syphilis testing.

Strict confidentiality was maintained throughout the study process. The names and full addresses of the study participants were not recorded anywhere. Instead, they were provided with a unique ID number written on a plastic-coated card. The same number was marked on the questionnaire, the medical records, and on the blood specimen of each respondent. This card was also used for the distribution of the test results. Only those participants who produced the card were provided the HIV and syphilis test results with pre and post-test counseling.

The fieldwork started on 19 January and was completed on 16 March 2009.

2.3.1 Ethical Review

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

The participants of the surveys were fully informed about the nature of the study. 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 withdrawal would not affect the services they would normally receive from the study site. A consent format describing the objectives of the study, the nature of the participant's involvement, the benefits, and confidentiality issues was clearly read out to them (Annex 4). Those who preferred to read it by themselves were provided the consent form written in Nepali. ID cards identified the IDUs who had been interviewed since their names and addresses were not recorded elsewhere. HIV test results were provided to the individual participants in strict confidence.

The study team maintained the confidentiality of the data collected through out the survey. The interviewer regularly submitted the completed questionnaires to the field supervisor on the day of each interview. The supervisor kept these questionnaires in separate locked cabinets where no one except the supervisor had access to the information collected. The supervisor then transported the questionnaires to New ERA every week. In New ERA office, the questionnaires were kept in a locked coding room. Authorized data coding and data entry staff had access to individual questionnaire.

2.3.2 Clinical and Laboratory Procedure

Clinical Procedures

All the participants were offered a clinical examination as an incentive to participate in the study. The clinical examination included a simple health check-up (measuring blood pressure, body temperature, weight and pulse) and symptomatic examination for STI with syndromic treatment. The participants were asked whether they had current STI symptoms of genital discharge, genital ulcers, or pain in the groin, and those presenting with these symptoms were treated syndromically according to national guidelines. Other medicines such as paracetamol, alkalysing agents, and vitamins were given as necessary. An external genital examination was complemented with a speculum examination as per the need.

Laboratory Methods

Screening for syphilis:-

Syphilis was tested using BD..Micro-Vue RPR test card. All the samples negative for RPR were recorded as negative. All the positive samples for RPR were tested with serial dilution up to 64 times and the test record was recorded with dilution factor. All the RPR positive serums were also tested by *Treponema Pallidum Particle Agglutination (TPPA)* test using Serodia TPPA as a confirmatory test. On the basis of titre of RPR, all the specimens with RPR/TPPA-positive results were divided into two categories.

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

Polymer Chain Reaction (PCR) was performed for the detection of Neisseria Gonorrhea and Chlamydia Trachomatis among the study population. The urine specimen was collected and test was conducted in the laboratory of NRL in Kathmandu.

Screening for HIV antibodies:-

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

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

2.3.3 Collection, Storage and Transportation of Samples

After pre-test counseling, the lab technician briefed the respondents about the HIV testing process and sought his consent for drawing the blood. Blood samples from each of the study participants for HIV/syphilis testing were drawn from a vein using a 5ml disposable syringe and stored in a sterile glass tube with the respondent's ID number. Serum was separated and put in a sterile serum vial and labeled with the ID no. The samples were kept in a refrigerator at the field site and were transported to the SACTS laboratory in Kathmandu twice a week in a cold box. The serum samples were stored at the SACTS laboratory at a temperature of minus 12^0C to minus 20^0C. Urine samples were handed over to National Reference Laboratory (NRL) in Kathmandu twice a week where it was stored at a room temperature. Two separate cold boxes were used for blood and urine sample transportation from the field to Kathmandu.

2.3.4 Quality Control of Laboratory Tests

Quality control was strictly maintained throughout the process of the collection of the specimen, as well as in 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 assessment, a 10 percent sample of the total serum collected was submitted to National Public Health Laboratory (NPHL) to test HIV and syphilis. In case the prevalence of HIV or syphilis is less than 5 percent, the total 10 percent sample sent to NPHL was selected as follows: (a) all positive samples and (b) remaining number of samples to reach 10 percent in total selecting randomly from the negative samples. In case the prevalence is more than 10 percent, the sample sent to quality assurance was selected as follows: (a) Ten percent of all positive samples selecting randomly and (b) Ten percent of all negative samples selecting randomly.

The same test kit and testing principles were used in NPHL for quality assurance. The quality control samples were given a separate code number to ensure that the person who performed the quality control had access to the test results.

2.3.5 Control of Duplication

Each successful participant was informed before issuing the recruitment coupons that same person cannot take part more than once in the study. Therefore, they can not recruit the same person who has already received coupon from others and or has participated in this study. In order to avoid repeated interviews with the same IDUs, the participants were asked several questions to make sure this was the first time they had participated in the study. Such questions included queries relating to their experience of having undergone any blood test, the part of the body from where the blood was taken, their experience of HIV testing or testing for other diseases, meeting with New ERA staff and peer educators, and possession of an ID card with the study number.

2.4 Study Management

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

The study was conducted by a team made up of one study director, one research coordinator, one research officer, one assistant research officer, two research assistants and a field team. The field team formed for the survey included a research assistant, four supervisors/interviewers, a health assistant, a lab technician and a runner. When selecting field researchers for the study, priority was given to researchers who had been involved in IBSS or a sero survey among IDUs in the past.

A one-week intensive training was provided for all the field researchers by trainers from FHI, SACTS and NEW ERA. Training was conducted on 4-11 January, 2009 at New ERA's Kathmandu office. The training was focused on an introduction to the study, the sampling process, administration of the questionnaire (including characteristics of the target groups), methods of approaching the target group, and

rapport building techniques. In addition, the training session also involved mock interviews, role-plays, class lectures, and sharing of previous experiences (problems and solutions). Role-play practice was carried out assuming the actual field situation. The study team was also made familiar with the general behavior of IDUs and the skills required dealing with them. The training also focused on providing a clear concept of informed consent, pre-test counseling, and basic knowledge of HIV/AIDS and STIs to the research team.

2.4.1 Coordination and Monitoring

New ERA carried out the overall coordination of the study. SACTS was responsible for setting up the field clinic and performing the laboratory and clinical part of the study, including collecting, storing and testing of blood samples.

The key research team members conducted the monitoring and supervision of the field activities. The research assistant was responsible on a day-to-day basis for ensuring that the study was implemented according to the protocol in the field. Team meetings were held frequently to plan ahead and solve any field-level problems. The research assistant in the field reported to the senior research assistants or to the project coordinator whenever necessary. Officers of FHI also supervised the ongoing study to deal with any problems reported from the field as and when necessary. In addition, the key research team member made periodic site visits throughout the fieldwork.

2.4.2 Constraints in the Field Work

The ongoing political instability in the country created challenges in conducting the field work. Likewise the 16 hours of load shedding in a day created difficulty in separating the serum from the sample in the lab. Besides, the low incentive for the IDUs was another fact for the intricacy for recruiting the sample. To overcome the problem arising from the load shedding, both auto and manual centrifuge machine were provided for the purpose of separating the serum. Likewise, bulks of icepacks were kept in fridge in the field as well as in the SACTS laboratory to store the serum during power cut-off.

2.5 Post-Test Counseling and Test Result Distribution

All the study participants who went to receive their test results with their ID cards were provided HIV and syphilis test results with post-test counseling by a trained counselor at VCT center of Naulo Ghumti. The study participants were informed about the location and operating hours of the VCT site straight after the collection of their blood sample for the test. Participants had a choice to collect both HIV and Syphilis test results or any one of these two test results.

Post-test counseling and individual report dissemination was completed between 9 February to 6 April 2009 at the VCT Centre of Naulo Ghumti/Pokhara. Out of the 300 IDUs tested for HIV, only 17 turned up for the test results (Annex 7). This might have been because there was no provision for reimbursement of transportation cost which would have otherwise prompted the IDUs to visit the VCT center and collect the report. Secondly the gap between the actual interview and test result dissemination

might have also diminished their concern for the test result. Trained counselors from Naulo Ghumti/Pokhara gave the test results to the participants in a private setting only after seeing their ID cards. The counseling session was focused on high-risk behavior and other aspects of STIs and HIV.

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 sample. This software is designed to control three types of potential biases in chain-referral sampling namely (1) affiliation bias, (2) homophily and (3) network size bias (Heckathorn 1998).

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.

To eliminate extremely small and large network sizes, the network size was set to the value of the nearest lower or upper bound. For this, several network sizes were calculated and tested. Finally, a value of minimum 6 and maximum of 50 was setup. When the program encountered an individual whose network size was outside the specified bounds, it was changed manually to the set limits. For those whose network was lower than 6 the minimum value was changed to 6 and for those whose network was more than 50 the maximum 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 in order to define a modest network size.

There were certain limitations to using RDSAT for all the data in the report. Some data obtained from the study did not meet the required numerator to be calculated with RDSAT. Such data has been calculated using SPSS and has been marked with an asterisk in the tables in this report.

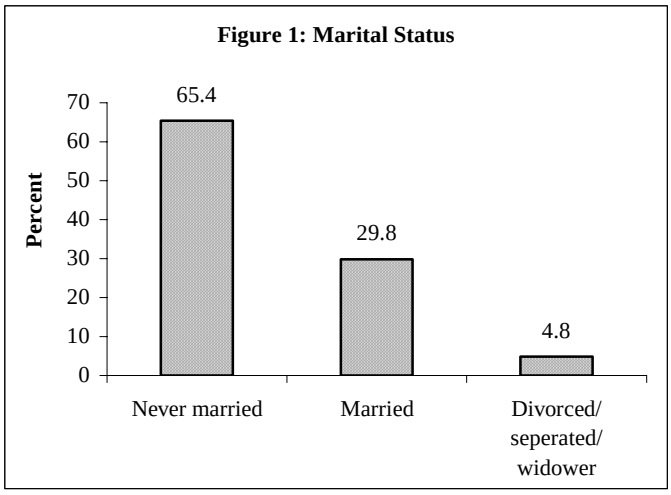
CHAPTER - 3.0: SOCIO-DEMOGRAPHIC CHARACTERISTICS

This chapter describes the socio-demographic characteristics of a total of 300 sample IDUs in Pokhara valley.

3.1 Demographic Characteristics

Table 3.1 shows the demographic characteristics of the IDUs recruited in the study. The age of the participants ranged from 17 to 46 years with a median age of 24 years. The IDUs were primarily young, including 88 percent below 30 years of age, with 61 percent younger than 25 years.

The majority (65%) of IDUs were unmarried. Around one third (29.8%) were married and a small proportion was divorced/widower/separated (Figure 1).



Eighty-seven percent of IDUs were married before they turned 25 years. The median age at which IDUs were married for the first time was 21 years. Among the married, nearly all (92%) lived with their spouses, whereas the rest lived without sexual partner.

Table 3.1: Demographic Characteristics

Demographic Characteristics	Estimated Population Proportions (%) (N=300)	95% CI
Age	**(N=300)**	
≤19 Yrs	20.5	14.1 – 26.3
20-24	41.3	34.7 – 47.5
25-29	25.8	20.8 – 32.3
30-34	8.5	5.1 – 13.0
35-46	3.9	1.6 – 6.3
Median Age	**24 yrs**	
Age at first marriage	**(n=110)**	
≤19	36.7	25.6 – 49.8
20-24	50.6	34.0 – 57.7
25 and above	12.7	8.6 – 25.4
Median Age	**21 yrs**	
Currently living with	**(N=300)**	
Spouse	27.4	22.1 – 32.6
Living with female sexual partner	1.4	0.4 – 3.3
Living without sexual partner/alone	71.2	65.5 – 76.4
Married IDUs living with	**(n=110)**	
Wife	92	84.2 – 97.5
Without sexual partner	8	2.5 – 15.8

3.2 Social Characteristics

Nearly half (44.7%) of the IDUs had completed the secondary level of education and one third (33.3%) had passed SLC or had attended higher level education. About 22

percent had no or little education, having attended school only up to primary level (Table 3.2).

IDUs from all major caste/ethnic groups in Pokhara were represented in the study. Tibeto- Burman communities (Tamang, Lama, Magar, Gurung, Rai, Newar) made up the largest part of the respondents at 59 percent, followed by the Brahmin, Chhetri/Thakuri community (27.1%). A few of the respondents (10.7%) were from occupational caste groups. A detailed ethnic composition of the respondents is shown in Table 3.2.

The majority of the respondents (64.2%) had lived in the Pokhara Valley since birth, whereas a quarter of them (25.8%) had migrated there over five years before. Ten percent were relatively new, having moved to the Valley less than five years ago (Table 3.2)

Table 3.2: Social Characteristics

Social Characteristics	Estimated Population Proportions (%) (N=300)	95% CI
Education		
Illiterate	2.3	0.9 – 4.0
Literate, no schooling	2.8	1.1 – 4.7
Primary	16.9	12.4 – 21.9
Secondary	44.7	38.1 – 51.5
SLC and above	33.3	27.5 – 39.1
Ethnicity		
Brahmin	6.5	3.8 – 9.2
Chhetri/Thakuri	20.6	15.6 – 25.9
Newar	13.4	9.4 – 19.1
Tamang/Lama/Magar	13.5	9.3 – 17.2
Gurung/Rai	31.6	25.8 – 36.7
Occupational caste	10.7	7.3 – 14.8
Others (Tharu, Musalman, Sanyashi and Thakali)	3.7	1.9 – 5.8
Duration of stay in Pokhara Valley		
Since birth	64.2	58.2 – 70.1
≤5 yrs.	10.0	6.3 – 13.9
More than 5 years	25.8	20.4 – 31.5

CHAPTER - 4.0: PREVALENCE OF HIV AND STI

4.1 HIV/STI Prevalence

Out of 300 IDUs who participated in the study, 3.4 percent were estimated to be HIV-positive. Only two of the participants had active syphilis, whereas four had a history of syphilis. This indicates that sexually transmitted infections are a relatively minor problem among IDUs in the valley.

Table 4.1: HIV and STI Prevalence

HIV and STI Prevalence	Estimated Population Proportions (%) (N=300)	95% CI
HIV and STI Prevalence		
HIV	3.4	1.8 – 5.2
Active Syphilis	0.5	0.2 – 1.3
Syphilis History	1.1	0.2 – 2.5

4.2 Relationship between Socio-Demographic Characteristics and HIV Infection

HIV prevalence was higher among respondents aged 20 years and above compared to younger IDUs. The infection rate was 3.7 percent among IDUs aged 20 years or more and 1.9 percent among those young IDUs aged 20 or less.

HIV prevalence differed significantly according to marital status. The prevalence rate was higher among married respondents (6.6%) than among single IDUs (1.7%). A statistically significant relationship was noted between literacy and HIV infection: illiterate IDUs (50.8%) were twenty-two times more likely to be HIV positive than literate IDUs (2.3%).

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

Socio-Demographic Characteristics	Estimated HIV Prevalence (%) (N=300)	95% CI
Age		
< 20 years	1.9	0.0 – 4.7
20 years and above	3.7	1.8 – 5.6
Marital status		
Ever married	6.6	3.2 – 11.1
Never married	1.7	0.5 – 3.2
Literacy		
Illiterate	50.8	18.0 – 81.1
Literate/formal School	2.3	1.2 – 3.6
Total	**3.4**	**1.9 – 5.1**

4.3 Relationship between Drug Injection Behavior and HIV

Unsafe injecting practices often put IDUs at greater risk of HIV infection. This section examines the relationship between HIV prevalence and IDUs' drug injecting practices.

As Table 4.3 indicates, participants who have been injecting drugs for longer periods of time were at greater risk of HIV. HIV prevalence was higher among those who

injected drugs for more than five years (5%) than those who had been injecting drugs for less than five years (3.1%).

Furthermore, the rate of HIV infection was slightly higher among IDUs who had been injecting drugs twice or more a day (4.9%) than those who injected six or less times a week (4.2%).

Table 4.3: Relation between Drug Injecting Behavior and HIV Infection

Drug Injecting Behavior	Estimated HIV Prevalence (%) (N=300)	95% CI
Injecting drugs since		
Less than 2 years	0.0	0.0 – 0.0
2-5 years	3.1	0.8 – 6.0
More than 5 years	5.0	2.3 – 8.2
Frequency of injected drugs in the past week		
Up to 6 times a week	4.2	1.7 – 6.8
Everyday	0.6	0.0 – 1.6
2 or more times a day	4.9	1.2 – 8.4
Used other's previously used needle/syringe during the past week		
Not injected/Never Used	3.0	1.5 – 4.7
Used	13.6	5.3 – 28.7
Used a needle/syringe kept in public place during the past week		
Not injected/Never Used	4.0	1.9 – 5.9
Used	2.9	0.0 – 5.1
Total	**3.4**	**1.9 – 5.1**

The HIV infection rate was higher (13.6%) among those IDUs who had used someone else's syringe in the past week compared to those who had either not injected in the past week or who had never injected with a used needle/syringe (3%) and this association is statistically significant. The prevalence of HIV among those who had used needles/syringes kept in a public place in the past week was 2.9 percent and was not significantly different from the prevalence among IDUs who did not inject using syringe from public places.

4.4 Relationship between Sexual Behavior and HIV

This section examines sexual behavior and its relationship to HIV among IDUs in the Pokhara Valley. It is important to interpret the findings with caution in this section as some IDUs may have changed their past sexual behavior after being diagnosed with HIV.

Almost all (285) IDUs in this survey had had a sexual relationship. The data indicates those who had sex in the last 12 months, either with a regular partner (4.1%), with a non-regular partner (1%) or with a sex worker (1.9%) were less likely to be HIV-positive than those who did not have sex with either of these type of partners (2.1%, 3.8% and 3.6% respectively). Since HIV is a sexually transmitted disease, this finding comes across as counterintuitive and hence requires careful interpretation. One of the possible explanation as to why not having sex is associated with higher HIV prevalence is that IDUs who have been diagnosed with HIV may be more likely to restrain from having sex at all, with either type of partners; regular, one-time, or paid. However, there is no significant relation with HIV and sexual behavior of IDUs.

Table 4.4: Relation between Sexual Behavior and HIV Infection

Sex with Different Partners in the Past 12 Months	Estimated HIV Prevalence (%) (N=300)	95% CI
Sex with regular female sex partner		
Yes	4.1	1.8 – 7.3
No	2.1	0.5 – 3.5
Never had sexual experience	9.8	2.6 – 25.9
Sex with Non-regular female sex partner		
Yes	1.0	0.4 – 2.4
No	3.8	1.8 – 6.2
Never had sexual experience	10.4	2.9 – 27.5
Sex with female sex worker		
Yes	1.9	0.4 – 4.3
No	3.6	2.0 – 5.8
Never had sexual experience	9.3	2.7 – 25.3
Number of regular female sex partner in the past 12 months		
None	2.8	0.9 – 4.3
One partner	3.9	1.3 – 6.7
Two or more partners (1 positive out of 1)	63.9	50.0 – 100.0
Number of non-regular female sex partner in the past 12 months		
None	4.3	2.2 – 6.6
One partner	0.0	0.0 – 0.0
Two or more partners	2.3	0.0 – 5.6
Number of female sex workers in the past 12 months		
None	4.0	2.2 – 6.1
One sex worker	1.2	0.0 – 3.5
Two or more sex workers	2.7	0.0 – 6.0
Total	**3.4**	**1.9 – 5.1**

Note: Estimated population Proportion (%) of the variables with asterisk (*) was calculated with SPSS as they did not meet the required numerator to be calculated with RDSAT. The proportion represented is therefore unadjusted and no value is mentioned under CI. NC; Not calculate as RDSAT conditions were not met.

CHAPTER - 5.0: DRUG USE, NEEDLE SHARING AND TREATMENT

IDUs are considered one of the core groups for HIV transmission primarily because of their unsafe drug using and needle sharing habits. An understanding of current drug using practices among IDUs helps in designing effective intervention strategies. This chapter deals with the drug use practices of the IDUs who took part in the survey. The information in this chapter relates specifically to alcohol intake, drug using and needle sharing habits, as well as addiction treatment among IDUs in the Pokhara Valley.

5.1 Alcohol Consumption and Oral Drug Use

The majority of IDUs (67.3%) had been using drugs for more than five years. Twenty-nine percent had been using drug for two to five years, while a small proportion (3.4%) had been taking illicit drugs for less than two years (Figure 2).

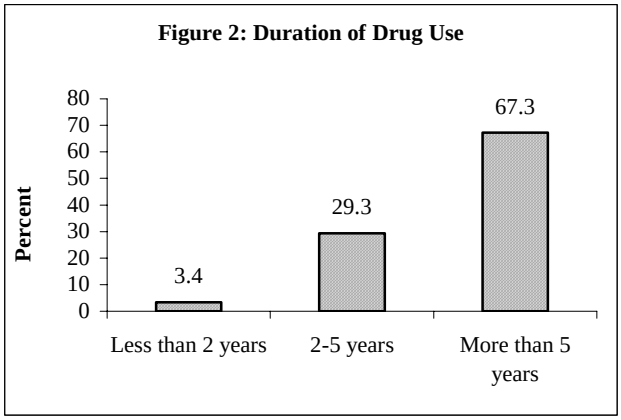


Table 5.1 shows that overall, 27 percent of the respondents were consuming alcohol everyday, 23 percent were having it more than once a week, while 29 percent had consumed alcohol at least once or were consuming it less frequently in the month preceding the survey. Around one-fifth (20.4%) had not consumed alcohol at all in the past month.

Table 5.1: Alcohol Intake and Oral Drug Use

Alcohol Consumption and Oral Drug Use	Estimated Population Proportions (%) (N=300)	95% CI
Alcohol used during the past month		
Everyday	27.4	22.3 – 32.7
More than once a week	23.0	17.8 – 28.5
Once/Less than once a week	29.2	23.0 – 35.8
Never	20.4	15.4 – 25.5
Types of Orally Used Drugs		
Ganja	71.3	65.8 – 76.9
Nitrovate	26.4	20.7 – 32.0
Brown sugar	23.2	17.9 – 28.5
Chares	17.3	13.1 – 22.0
Nitrosun	15.5	11.6 – 19.9
Proxygin	9.2	5.6 – 13.3
Codeine	8.8	5.1 – 12.6
Others	16.0	11.0 – 21.3

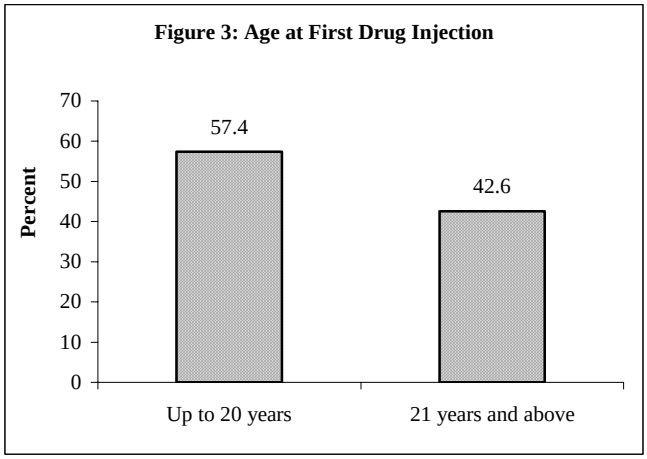
Note: Because of multiple answers percentages may add up to more than 100.

The use of oral/inhaled drugs was a common practice among the IDUs in Pokhara. Table 5.1 further shows that they had used a variety of oral/inhaled drugs in the week preceding the survey. Marijuana, locally known as *ganja* was the most popula r drug, and was taken by 71 percent of IDUs in the past week. This was followed by Nitrovate (26.4%), brown sugar (23.2%), *charas* (17.3%), Nitrosun (15.5%), Proxygin (9.2 %), and Codein (8.8%).

5.2 Drug Injecting Practice

One-third of respondents (34.1%) started injecting drug less than two years prior to the survey. A similar proportion (34.5%) had been injecting drugs for the past 2 to 5 years while 31 percent had been injecting drugs for more than five years (Table 5.2).

The majority of respondents had started injecting drugs when they were relatively young. Around 57 percent of them were 20 years or less when they had injected their first drug while 43 percent were 21 or above (Figure 3).



As for the frequency of injections in the past week, only a small proportion (2.6%) had not injected in the week preceding this survey. Thirty-one percent of respondents had injected more than once a day, around one-third (33.6%) had injected once everyday, 17 percent had injected 4 to 6 times a week while 16 percent had it done 2 to3 times a week in the week preceding the interview (Table 5.2) .

IDUs were also asked about the number of shots they had taken on the last day they injected drugs (Table 5.2). More than half (53.6%) had injected only once, while 32 percent had injected twice. Around 15 percent had more than three shots during last day they had injected.

Table 5.2: Drug Injecting Practice

Drug Injecting Practice	Estimated Population Proportions (%) (N=300)	95% CI
Duration of drug injection		
Less than 2 years	34.1	28.3 – 39.9
2 – 5 years	34.5	29.7 – 40.8
More than 5 years	31.4	24.8 – 36.9
Frequency of drug injections within the past week		
Not injected	2.6	0.9 – 4.2
Once a week	0.7	0.1 – 1.4
2-3 times a week	15.5	11.2 – 20.6
4-6 times a week	17.0	12.6 – 22.0
Once a day	33.6	27.4 – 39.4
More than once a day	30.6	25.1 – 37.3
Frequency of Drug Injection in the Last Day		
Once	53.6	46.8 – 58.3
Twice	31.8	27.2 – 38.7
3 or more times	14.6	10.6 – 18.6

Overall, 30 percent of IDUs reported not having injected drugs on the day before the interview (not shown in the table). Annex 8 shows the reasons for not injecting the drugs the preceding day. The main reasons were stated as shortage of money (71%), not injecting regularly (27%), trying to quit the habit slowly (20.8%), taking other medicines (5.7%) and being in custody (2.8%).

IDUs injected into different parts of the body according to the ease of locating the vein. The majority of the respondents (42%) injected into the joint of the leg and hip,

followed by the arm (21.3%), or the wrist (17.2%). Details of typical injection sites on the body as given by the respondents are shown in Annex 9.

The places IDUs gather to inject drugs is shown in Annex 10. The majority of the respondents (43.2%) reported gathering and injecting near the forest/bush or some woodland. Others reported meeting at the road (16.5%), in their own room or that of a friend (15.9%), or at a riverbank (13.9%). Other places reported were the toilet, around a school/campus, at a pool house, garage, in a hotel/lodge/restaurant, at the bus park and around the temple area.

The IDUs in Pokhara predominantly injected a combination of different drugs (96.5%).The types of drugs injected are listed in Table 5.3 (for types of combinations see Annex 11).

Table 5.3: Types of Drugs Injected

Types of Drugs Injected	Estimated Population Proportions (%) (N=300)	95% CI
Combination	96.5	93.9 – 98.6
Tidigesic	3.7	1.6 – 6.3
Phenergan	3.5	1.2 – 6.0
Calmpose	2.4	0.5 – 5.2
Brown sugar	2.1	0.6 – 4.0
Diazepam	2.0	0.5 – 4.0
Others	3.0	0.0 – 3.4

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

In the past month, two of the IDUs (0.4%) had switched from one drug to another. One had done so because of the lack of money and the other wanted to quit the injecting habit slowly (Annex 12).

5.3 Syringe Use and Needle Sharing Habits

The syringe use and needle sharing habits of the IDUs were assessed in terms of their last three injections. Respondents were specifically asked about the sources of the needles/syringes used in the last three injections. The answers provided by the IDUs have been categorized as ‘low risk’ or ‘high risk’ injecting behavior and can be found in Table 5.4. ‘Low risk’ behavior was the use of new needles and syringes, while ‘high risk’ behavior was injecting with the previously used syringe, the use of needles and syringes given by friends or relatives, or the use of needles and syringes kept in public places.

Table 5.4: 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=300)	95% CI	Estimated Population Proportions (%) (N=300)	95% CI	Estimated Population Proportions (%) (N=300)	95% CI
Needle/syringe used:						
Low risk behavior	98.5	96.6 – 99.8	96.9	94.7 – 98.8	97.9	95.8 – 99.4
High risk behavior	1.5	0.2 – 3.5	3.1	1.2 – 5.3	2.1	0.6 – 4.3
Persons in the group using the same needle/syringe						
Among two people	0.7	0.1 – 1.9	1.2	0.4 – 2.1	1.4	0.5 – 2.6
Alone	99.3	98.1 – 99.9	98.8	97.9 – 99.6	98.6	97.4 – 99.5

As reflected in Table 5.4, most of the IDUs had consciously avoided high-risk behaviors, such as the use of pre-used needles and syringes in their last three injections. More than 95 percent of the respondents had used a new needle, either self-purchased or given by a friend or by an NGO. Likewise more than 98 percent of the IDUs had not share the needle with others in their last three injections.

Data on needle/syringe using behavior in the week preceding the survey also points towards increasing consciousness among current IDUs regarding the risks associated with sharing needles/syringes. A significant proportion of IDUs (95.1%) had never used a needle/syringe that had been used by others while 95 percent had never given any needles/syringes to anyone else after using them. Almost 75 percent had avoided needles/syringes kept in a public place and 95 percent had never shared a needle or a syringe (Table 5.5)

Table 5.5: Past Week's Syringe Use and Sharing Behavior

Needle/Syringe Use Throughout the Past Week	Estimated Population Proportions (%) (N=300)	95% CI
Used a needle/syringe that had been used by other		
Never used/Not injected	95.1	92.4 – 97.4
Used	4.9	2.6 – 7.6
Used a needle/syringe that had been kept in public place		
Never used/Not injected	74.9	69.9 – 79.6
Used	25.1	20.4 – 30.1
Gave a needle/syringe to some one		
Yes	2.1	0.9 – 3.6
No	97.9	96.4 – 99.1
Number of needle/syringe shared partners		
None	95.4	93.1 – 97.5
Two or more partners	4.6	2.5 – 6.9
Shared needle/syringe with		
Friends	4.6	2.5 – 7.1
Not shared	95.4	92.9 – 97.5

5.4 Drug-Sharing Behavior

Table 5.6 reflects that although the majority of the respondents had abstain from unsafe drug sharing practices, some put themselves at risk by using a pre-filled syringe (12.4%) or a syringe that was filled by another syringe (6.5%). Moreover, 28 percent had drawn drugs from a common container and 27 percent had shared other injecting equipment such as bottles, spoons, cookers, vials/containers, cotton/filters, or water at least once in the week before the survey.

Table 5.6: Past Week's Drug-Sharing Behavior

Drug Sharing Practice during Past Week	Estimated Population Proportions (%) (N=300)	95% CI
Injected with a pre-filled syringe		
Yes	12.4	9.0 – 16.1
No	87.6	83.9 – 91.0
Injected with a syringe after drugs were transferred into it from another's syringe		
Injected with such syringe	6.5	3.5 – 10.0
Never injected with such syringe	93.5	90.0 – 96.5
Shared a bottle, spoon, cooker, vial/container, cotton/filter and rinse water		
Shared	26.6	20.5 – 32.5
Never shared	73.4	67.6 – 79.5
Drew drug solution from a common container used by others		
Drew at least once	27.5	21.1 – 33.4
Never	72.5	66.6 – 78.9

Similarly data on using non-sterile needle/syringe in the month preceding the survey also indicate that a large proportion of IDUs had avoided such behavior. Ninety four percent of respondent replied that they had not used previously used non-sterile needle/syringe in the month preceding the survey. Likewise, seven in ten (71.1%) IDUs told that they had not used non-sterile injecting equipment at any time in the last month (Table 5.7).

Table 5.7: Past Month's Needle/Syringe and Injecting Equipment Using Behavior

Needle/Syringe Use in the Past Month	Estimated Population Proportions (%) (N=300)	95% CI
Used previously used non-sterile needle/syringe in the past month		
Yes	6.0	3.4 – 9.4
No	94.0	90.7 – 96.6
Used non-sterile injecting equipments at any time in the last month		
Yes	28.9	22.1 – 35.0
No	71.1	65.1 – 77.2

Information on the movement of the IDUs both inside and outside the country and their injecting practices in the places they visited was also collected during this survey (Table 5.8). Of the total 300 sample IDUs in Pokhara, 31 percent had injected drugs at the places they visited in the past year. The majority of respondents who had injected drugs at the places of their visit had neither used others' needle/syringe (92.7%) nor had given their used needles/syringes to anyone else (96%).

Table 5.8: Injecting Behavior in Other Parts of the Country and Out of Country

Injecting Practice In Other Parts of the Country and Out of the Country	Estimated Population Proportions (%)	95% CI
Injected in other parts of country as well as out of country	**(N=300)**	
Yes	31.3	25.9 – 37.1
No	68.7	62.9 – 74.2
Used a needle/syringe that had been used by other	**(n=106)**	
Yes	7.3	1.2 – 27.7
No	92.7	73.6 – 98.8
Gave a needle/syringe to someone after use	**(n=106)**	
Sometimes – always	4.0	2.2 – 14.7
Never	96.0	85.3 – 97.8

5.5 Needle/Syringe Cleaning Practice

IDUs follow different practices of cleaning a used needle/syringe before reuse. Improper methods of cleaning not only reflect a lack of awareness but also put IDUs at a greater risk of HIV transmission. Table 5.9 shows that about 9 percent of IDUs had cleaned a pre-used needle/syringe in the past week. Among them, only 17 percent had cleaned it with bleach before re-using it. Others had used saliva, water, distilled water or paper/cotton to clean their needle/syringe.

Table 5.9: Needle/Syringe Cleaning Practice

Needle/Syringe Cleaning Behavior	Estimated Population Proportions (%)	95% CI
Cleaned previously used needle/syringe in the past week	**(N=300)**	
Yes	8.7	5.2 – 12.5
No	4.2	2.1 – 7.0
Never used/Not injected	87.1	82.6 – 91.1
Ways of cleaning needle/syringe	**(n=24)**	
Bleach	16.7 *	NC
Without bleach	83.3 *	NC

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.
NC – Not calculated (RDSAT conditions were not met)

5.6 Accessibility of Syringe

The majority of respondents (99.7%) knew where they could get a new needle or syringe from. Ninety-six percent of IDUs mentioned that they could get a new syringe whenever necessary from a drugstore. Similarly a large proportion of IDUs (90.9%) said that needle exchange program conducted by Naulo Ghumti made new syringes available whenever they needed them. Additionally 42 percent stated that they could get a new syringe from Richmond, a local NGO in Pokhara. Others replied that they could obtain a new syringe from hospitals, friends, drug sellers and others (Table 5.10).

Table 5.10: Knowledge of Sources of New Syringe

Descriptions (N=300)	Estimated Population Proportions (%)	95% CI
Could obtain new syringe	**(N=300)**	
Yes	99.7	99.6 – 100.0
No	0.3	0.0 – 0.4
Could obtain syringe from	**(n=299)**	
Drugstore	96.4	93.3 – 98.8
Needle exchange program (Naulo Ghumti)	90.9	86.3 – 94.7
Richmond	42.1	35.1 – 48.7
Hospital	31.1	24.5 – 37.3
Friends	15.3	11.1 – 20.2
Drug seller	0.6	0.2 – 1.2
Others	18.3	13.1 – 23.8
Given a new needle/syringe by OE/PE or obtain it from needle exchange program in the last 12 months	(n=300)	
Yes	82.0	75.8 – 87.1
No	18.0	11.5 – 22.1

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

5.7 Treatment Status

Table 5.11 shows the status of treatment received by the IDUs in Pokhara. Sixty-four percent had not received any kind of treatment so far. Out of those who have ever been treated, 19 percent had been treated less than six months before the survey, and 27 percent had received treatment 6-11 months prior to the survey. Others had been treated more than a year previously. Types of treatment received by the IDUs mostly included out patient counseling and residential rehabilitation. Detoxification treatment with the help of other drugs has been received by almost two-thirds (66.6%) of the respondents. Details on the types of treatment and organizations/institutions from where the IDUs received treatment are shown in Annex 13.

Table 5.11: Treatment Received

Treatment for De-Addiction	Estimated Population Proportions (%)	95% CI
Treatment status	**(N=300)**	
Ever treated	36.1	30.6 – 42.2
Never treated	63.9	57.8 – 69.4
Last treatment received	**(n=120)**	
Less than 6 months	18.6	7.6 – 27.8
6-11 months before	26.6	11.9 – 36.4
12-23 months before	38.4	22.3 – 50.6
24-35 months before	8.5	2.2 – 22.3
36-47 months before	7.0	1.1 – 25.6

48 or more months before	0.9	0.0 – 2.8
Types of treatment received#	**(n=120)**	
Out patient counseling	92.5 *	NC
Residential rehabilitation	93.0	90.7 – 97.5
Detoxification w/other drugs	66.6	52.9 – 78.5
Detoxification w/no drugs	1.2	0.9 – 3.6
Other treatment	15.8	8.7 – 37.8

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.
NC – Not calculated (RDSAT conditions were not met)

CHAPTER - 6.0: SEXUAL BEHAVIOR AND CONDOM USE

HIV transmission among drug users is most often correlated with their needle/syringe-sharing behavior. This combined with the risky sexual behavior of the study population, often associated with drug use, 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 has been reviewed. This chapter also deals with the sexual history of the IDUs, as well as condom use.

6.1 Sexual Behavior

The majority of IDUs in Pokhara were sexually active; 96 percent had ever experienced sexual intercourse before and 78 percent had had sex in the past 12 months. Among those who ever had sex before, a high proportion (88.5%) were less than 20 at the time of their first sexual encounter. Almost half (49.8%) of those who had sex in the last 12 months had more than one partner. Around 20 percent had more than three sex partners in the past year (Table 6.1).

Table 6.1: Sexual History

Sexual Behavior	Estimated Population Proportions (%)	95% CI
Sexual experience	**(N=300)**	
Had sexual intercourse in the past	96.0	93.9 – 97.7
Never had sexual intercourse	4.0	2.3 – 6.1
Age at first sexual intercourse	**(n=285)**	
<20 years	88.5	85.0 – 92.1
20 years & above	11.5	7.9 – 15.0
Sexual intercourse in the past 12 months	**(n=285)**	
Yes	77.7	72.1 – 82.3
No	22.3	17.7 – 27.9
Numbers of different sexual partners in the past 12 months	**(n=224)**	
1 partner	50.2	42.7 – 57.2
2 –3 partners	30.2	23.5 – 38.4
More than three partners	19.6	13.9 – 24.8

Among those respondents who had at least one sexual contact in the past 12 months, 33 percent had had sex with regular female partner in the past year. The majority of them (97.8%) had one regular female sex partner. Nine in ten (90.1%) of IDUs who reported having regular partners mentioned that they had sexual contact with their regular partners in the month preceding the survey. Seventy-seven percent of them had more than four sexual encounters with their regular partners during the month preceding the survey (Table 6.2).

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=285)**	
Yes	33.2	27.4 – 39.1
No	66.8	60.9 – 72.6
Number of regular partner	**(n=96)**	
1 partner	97.8	96.3 – 100.0
2 partners	2.2	0.0 – 3.7
Sex with a regular female sex partner during last month	**(n=96)**	
Yes	90.1	82.6 – 96.6
No	9.9	3.4 – 17.5

Frequency of sex with last regular female sex partner during last month	**(n=85)**	
1- 4 times	23.4	4.4 – 40.1
More than four times	76.6	60.3 – 95.7

The respondents were also asked whether they ever had sex with non-regular female partners in the past year. The definition of 'non-regular partner' was those sex partners who were neither respondents' spouses nor their live-in partners and who did not exchange money or drugs for sex.

Table 6.3 shows that 29 percent of IDUs had sex with non-regular female partners in the past year. Of them, little over a half (55.5%) had only one partner, whereas 45 percent had two or more non-regular partners. Thirty-five percent of IDUs with non-regular female partners had sexual contact with them in the preceding month and among them 22 percent had more than four sexual contacts in the past month.

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

Sexual Practice	Estimated Population Proportions (%)	95% CI
Sex with non-regular female sex partner in the past 12 months	**(n=285)**	
Yes	29.0	23.4 – 34.7
No	71.0	65.3 – 76.6
No. of Non-Regular female sex partner in the past 12 months	**(n=91)**	
1 partner	55.5	36.7 – 79.4
More than one partner	44.5	20.6 – 63.4
Sex with non-regular female sex partner during last one month	**(n=91)**	
Yes	35.4	10.3 – 45.5
No	64.6	54.7 – 89.8
Frequency of sex during last one month with last non-regular female sex partners	**(n=47)**	
1- 4 times	78.5	59.1 – 91.6
More than four times	21.5	8.4 – 41.6

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

Thirty-seven percent of sexually active IDUs had sex with female sex workers (FSWs) during the past year and 48 percent in the month preceding the survey. The majority of those (67.1%) who had sex with FSW in the last year had done so with more than one partner. A considerable proportion (76.5%) of those who had sex with FSWs in the last month had done so less than five times (Table 6.4).

Table 6.4: Sexual Behavior with Female Sex Worker

Sexual Practice	Estimated Population Proportions (%)	95% CI
Sex with female sex worker in the past 12 months	**(n=285)**	
Yes	37.1	30.9 – 42.7
No	62.9	57.3 – 69.1
Number of female sex workers in the past 12 months	**(n=105)**	
1 partner	32.9	20.2 – 46.1
More than one partner	67.1	54.0 – 79.8
Sex with female sex worker during last one month	**(n=105)**	
Yes	48.3	33.7 – 70.3
No	51.7	29.7 – 66.3
Frequency of sex with last female sex worker during the last month	**(n=48)**	
1- 4	76.5	35.1 – 100.0
More than four	23.5	5.8 – 79.4

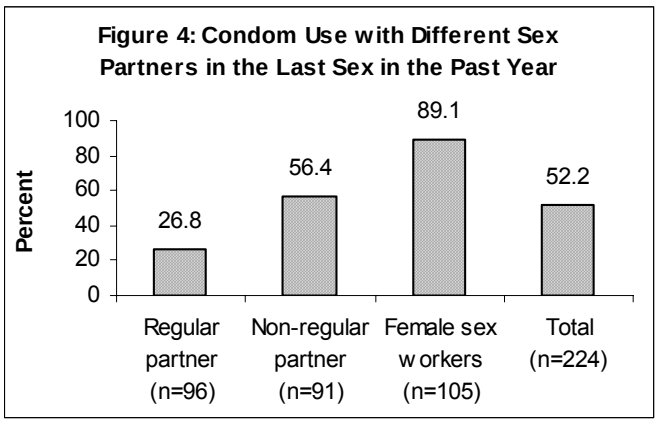
The IDUs were further asked about their most recent sexual partner whom they had the sexual contact in the preceding year. Twenty two percent of the IDUs reported not having sexual contact within the past year. Higher proportion of IDUs (32.6%) mentioned having the last sexual contact with their regular female partner. Twenty-four percent told that they had last sexual contact with female sex workers while almost a similar proportion of IDUS (21.3%) retain the last sex with non-regular female partner (Table 6.5).

Table 6.5: Types of Sex Partner in the Last Sex within the Past Year

Sexual Partner in the Last Sex	Estimated Population Proportions (%) (n=285)	95% CI
Regular female partner	32.6	27.0 – 38.8
Non-regular female partner	21.3	16.5 – 26.5
Female sex worker	23.7	18.1 – 28.8
No sexual contact within one year	29.2	24.0 – 35.1

6.2 Knowledge and Use of Condom

Condom promotion is one of the important components of HIV/AIDS awareness campaign. All the IDUs had heard of condoms before. However, the high level of awareness about condoms was not reflected in the IDUs' condom using habits.



Half of the respondents (52.2%) had used condom in the last sex act. Respondents were asked about condom use during their last instance of sexual contact with their regular partner, non-regular partner and FSW. Overall, only 27 percent of IDUs had used a condom the last time they had sex with their regular partner. The use of condom with non regular sex partner was only 56 percent and with female sex workers was 89 percent. The use of condom in the last sex was highest with female sex worker and lowest with regular partner (Figure 4).

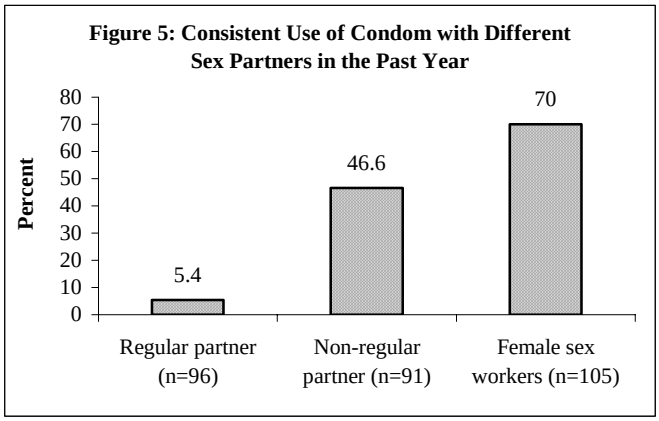
Those IDUs who did not use a condom in their last sexual contact with different partners were asked about the reasons for not doing so (Annex 14). Data obtained from the IDUs in Pokhara show that more than half (54.8%) said they were using other contraceptive with their regular partners; while a considerable proportion of IDUs (40.9%) replied that they did not think a condom was necessary with their regular or non-regular female partners. Moreover, 40 percent simply did not like using them with their regular and non-regular female partners.

In contrast, IDUs were more conscious about using a condom with female sex workers and only a small proportion of IDUs (5.6%) said that they did not consider it necessary to use a condom with a FSW. The main reasons for not using a condom in the last sex with the FSW were that they did not think of using them (55.6%), that

condoms were unavailable (33.3%), and that they did not like using them (33.3%). The responses that IDUs gave for not using condoms during the last time they had sex are shown in Annex 14.

HIV/AIDS prevention campaigns focus on educating their target groups on the need to use a condom every time they had sex to avoid HIV/STI transmission. The IDUs were also asked about their record of consistent use of condoms with their sex partners in the past year. The results showed a similar pattern to the IDUs' use of condoms the last time they had sex in the year preceding the survey. IDUs used condoms more consistently with female sex workers than with regular and non-regular sex partners.

Overall, 70 percent of the IDUs had used a condom every time with a female sex worker. Forty-seven percent used a condom consistently with a non-regular female sex partners in the past year. On the contrary, only five percent of IDUs had been consistently using condoms with regular female sex partners in the past year (Figure 5).



The findings indicate that the regular female partners of IDUs were at higher risk of HIV than non-regular or paid partners as they are more likely to have sex and to have sex more often with their IDU partners who were reluctant to use condoms consistently with them.

6.3 Sources of Condoms

The IDUs were also asked if they knew about the places from where they could obtain condoms (Table 6.5). The pharmacy was cited as the most common place to get condoms by the majority (96%) of IDUs. Naulo Ghumti, a local NGO was also mentioned as source of condoms by 57 percent of the respondents. Other major sources of condoms were shops (55.5%), hospitals (46.5%), peer/outreach educators (41.4%) and Richmond, a local NGO (25.4%).

The majority of the IDUs (99.5%) said that they could get condoms in less than 30 minutes when necessary and the rest said that it takes them more than 30 minutes to get condoms (Table 6.6).

Table 6.6: Sources of Condom and Time Needed to Obtain It

Sources of Condom and Time to Obtain It	Estimated Population Proportions (%) (N=300)	95% CI
Place/person from where condom can be obtained#		
Pharmacy	95.9	93.5 – 98.0
Naulo Ghumti	56.5	49.4 – 63.6
Shop	55.5	49.8 – 61.6
Hospital	46.5	40.3 – 52.8
Peer educator/outreach worker	41.4	35.4 – 47.6
Richmond	25.4	19.8 – 31.3
Pan shop	17.7	12.8 – 23.0
Clinic	16.4	12.2 – 21.1

Bar/Guest house/hotel	10.6	6.8 – 14.9
Friends	7.3	4.3 – 10.7
Family planning center	3.5	1.1 – 6.4
Health worker/health post	1.6	0.2 – 3.6
Others	9.6	5.7 – 13.3
Time taken to obtain condom		
Less than 30 minutes	99.5	99.3 – 100.0
More than 30 minutes	0.5	0.0 – 0.7

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

6.4 Sources of Information about Condom

The IDUs had heard about condoms from different sources. The most common sources of information as cited by more than nine in ten were bill boards/sign boards, television and radio. Newspapers/posters, NGO workers, pharmacies, friends/neighbors and hospitals were other good source of information about condoms as reported by more than 80 percent of the respondents. Other sources of information about condoms mentioned by the respondents are listed in Table 6.7.

Table 6.7: Sources of Information about Condoms

Sources of Knowledge of Condom	Estimated Population Proportions (%) (N=300)	95% CI
Bill board/sign board	96.5	94.0 – 98.4
Television	94.0	91.3 – 96.5
Radio	92.8	88.8 – 96.2
Newspapers/posters	87.1	82.7 – 91.2
NGO workers	84.9	77.9 – 90.0
Pharmacy	84.8	79.9 – 89.5
Friends/neighbors	83.4	78.4 – 87.9
Hospital	82.7	78.0 – 87.2
Health Centre/Health Post	49.0	42.7 – 54.7
Health workers/volunteers	40.6	34.5 – 46.9
Street drama	28.5	23.7 – 33.9
Cinema hall	28.1	23.0 – 33.4
Community event/training	14.8	10.7 – 18.9
Community worker	13.3	9.0 – 17.7
Comic books	13.1	8.4 – 18.1
Video van	12.2	8.2 – 16.7

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

In order to analyze the exposure of the IDUs to the ongoing initiatives to educate the target groups about condoms and HIV/AIDS prevention in the Pokhara Valley, respondents were also asked if they were aware of any of the messages being publicized with the help of IEC materials such as posters, pamphlets, billboards or those aired on radio/television. The survey focused on certain specific messages about condoms and HIV/STI prevention. A good proportion of the respondents were aware of messages such as, *Jhilke dai chha chhaina condom* (82.9%); *Condom kinna ma bhaya hunna ra* (81.8%); *Condom bata surakchhya youn swastha ko rakchhya* (79.1%;, *HIV/AIDS bare aajai dekhi kura garau* (72.5%); *Ramro sanga prayog gare jokhim huna dinna* (72.3%); *Yaun rog ra AIDS bata bachnalai rakhnu parchha sarbatra paine condom lai* (71.9%). Table 6.8 shows the specific condom messages in which the IDUs had the exposure in the past year.

Table 6.8: Exposure to Specific Condom Messages in the Past Year

Heard/Seen/Read the Following Messages/Characters in Past One Year	Estimated Population Proportions (%) (N=300)	95% CI
Jhilke Dai Chha Chhaina Condom	82.9	77.6 – 87.7
Condom Kina Ma Bhaya Hunna Ra	81.8	76.9 – 86.4
Condom Bata Surakchhya Youn Swastha ko Rakchhya	79.1	73.9 – 84.2

HIV/AIDS Bare Aaji Dekhi Kura Garaun	72.5	66.9 – 78.3
Ramro Sanga Prayog Gare Jokhim Huna Dinna Bharpardo Chhu Santosh Dinchhu Jhanjhat Manna Hunna	72.3	66.3 – 78.5
Youn Rog Ra AIDS Bata Bachnalai Rakhnu Parchha Sarbatra Paine Condom Lai	71.9	66.2 – 77.6
Maya Garaun Sadbhav Badaun	30.7	26.1 – 36.1
Ek Apas ka kura	25.4	2.1 – 29.9
Manis Sanga Manis Mile Hara Jeeta Kasko Hunchha	13.6	10.3 – 17.3
Des Pardes	8.0	4.9 – 11.4
Others	0.8	0.2 – 1.6

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

CHAPTER - 7.0: KNOWLEDGE OF STIs AND HIV/AIDS

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

7.1 Knowledge of STIs, Experienced Symptoms and Treatment

Around eight in ten IDUs in Pokhara (83.1%) had heard of STIs. There were, however, a considerable number of IDUs (16.9%) who had never heard of STIs before.

Table 7.1: STI Awareness

Ever Heard of STIs	Estimated Population Proportions (%) (N=300)	95% CI
Yes	83.1	79.0 – 87.0
No	16.9	13.0 – 21.0

Those who had heard of STIs before had a general understanding of male and female symptoms. They mentioned genital ulcers/sores blisters (62.2% in female and 75.9% in male) and genital discharge (49.9% in female and 55.5% in male) as important STI symptom. Symptoms such as foul-smelling discharge (40%) and genital itching (32.4%), were specifically mentioned as female STI symptoms by the respondents. Other symptoms as mentioned by the respondents are shown in Table 7.2.

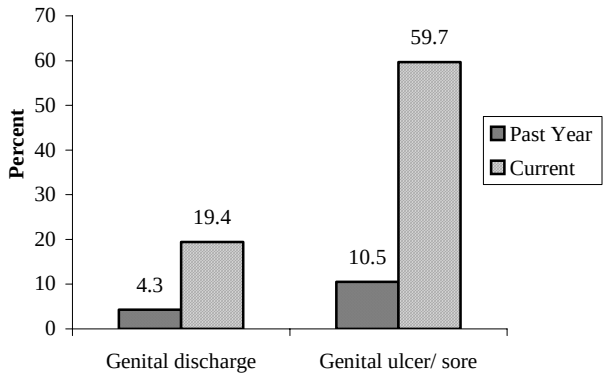
Table 7.2: Knowledge of STI Symptom

Knowledge of Symptoms of STIs	Female STI Symptoms (n=246)		Male STI Symptoms (n=246)	
	Estimated Population Proportions (%)	95% CI	Estimated Population Proportions (%)	95% CI
Genital ulcer/sore blisters	62.2	54.0 – 68.2	75.9	68.5 – 80.4
Genital discharge	49.9	41.7 – 55.9	55.5	46.5 – 62.9
Foul-smelling discharge	40.0	31.2 – 47.1		
Itching	32.4	24.8 – 38.6	20.2	15.1 – 27.3
Burning/pain during urination	21.1	15.0 – 27.6	33.4	26.6 – 41.0
Abdominal pain	5.8	2.4 – 7.7		
Swelling in groin area	4.4	1.7 – 8.9	13.9	9.6 – 19.8
Others	2.9	0.5 – 4.0	2.2	0.3 – 2.5
Don't know	17.9	12.1 – 25.0	8.8	5.3 – 12.8

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

IDUs in Pokhara were asked if they ever had experienced symptoms such as genital discharge, genital ulcers/sores in the past year or at the time of the survey. In response, four percent reported having genital discharge and around 11 percent said that they had genital ulcers/sores/ blisters in the past year. Likewise, out of those who had STI symptoms in the past year, 19 percent and 60 percent had genital

Figure 6: STI Symptoms Experienced



discharge and genital ulcers/sores respectively during the survey (Figure 6).

Among those IDUs who ever had experienced at least one STI symptom in the past year, more than half (55.6%) had sought treatment and 44 percent of those with STI symptoms mentioned that they had not received any treatment to date. Around 17 percent had been to a private doctor and 14 percent had been treated at a hospital/health post (Table7.3).

Table 7.3: STI Treatment Sought in the Past Year

Treatment of STI	Estimated Population Proportions (%)	95% CI
Treatment sought	**(n=36)**	
Yes	55.6*	NC
No	44.4*	NC
Source of treatment	**(n=36)**	
Private Doctor	16.7 *	NC
Hospital/Health Post	13.9 *	NC
Others	25.0 *	NC
Did not seek treatment	44.4*	

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.
NC – Not calculated (RDSAT conditions were not met)

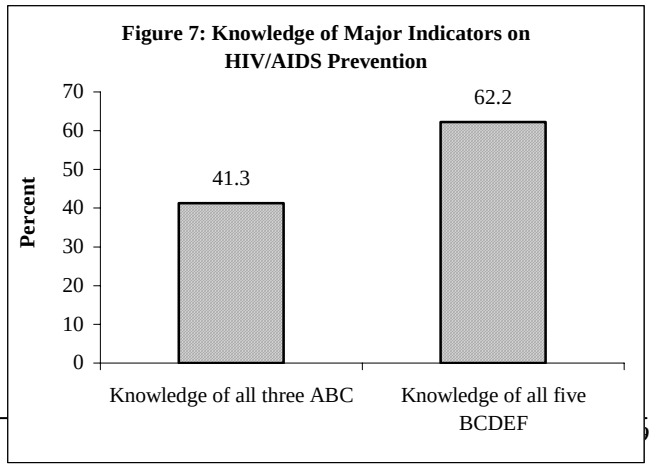
7.2 Knowledge of HIV/AIDS

All the IDUs had heard about HIV/AIDS. The majority of them (67.8%) knew of people who had HIV/AIDS or had died of the disease. When asked about the kind of relation that the respondents shared with these people, 53 percent said that they were close friends and seven percent reported that they were their relatives. The rest of the IDUs (40.7%) did not have any formal relationship with the people they knew had HIV/AIDS or had died of AIDS (Table 7.4).

Table 7.4: Awareness of HIV/AIDS

Knowledge about HIV/AIDS	Estimated Population Proportions (%) (N=300)	95% CI
Know anyone who has HIV/AIDS/died due to AIDS		
Yes	67.8	61.7 –
No	32.2	26.0 –
Nature of relationship with the person living with HIV/AIDS /died due to AIDS		
Close friend	52.6	43.7 – 61.7
No relation	40.7	31.8 – 50.9
Close relative	6.7	3.7 – 8.6

The IDUs' knowledge about 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 including: abstinence from sex (A), being faithful to one sex partner (B), and regular condom use (C) was assessed. The majority of respondents (98.4%) said that 'C'



was a way of avoiding HIV/AIDS, while eighty-five percent said 'B' and only 50 percent stated that 'A' was a way of preventing transmission of the virus (Table 7.5). In total, only 41 percent of IDUs were aware of all three 'ABC' means of HIV/AIDS prevention (Figure 7).

Additionally, 90 percent were aware that a healthy looking person can be infected with HIV (D) and a similar proportion (96%) also knew that sharing meal with an HIV-infected person did not put them at risk of HIV (F). However, a relatively low proportion of IDUs (78.5%) agreed that a person cannot get HIV virus from mosquito bite (E) (Table 7.5). In total, 62 percent of IDUs were aware of all the five major indicators ('BCDEF') which helped to assess the level of awareness regarding measures that prevent the transmission of HIV (Figure 7).

Table 7.5: Knowledge of Major Ways of Avoiding HIV/AIDS

Knowledge of Six Major Indicators on HIV/AIDS	Estimated Population Proportions (%) (N=300)	95% CI
HIV transmission can be avoided through		
A Abstinence from sexual contact	49.5	43.6 – 56.0
B Being faithful to one partner	84.6	79.3 – 89.8
C Condom use during each sexual contact	98.4	96.3 – 99.8
Perception on HIV/AIDS transmission		
D A healthy-looking person can be infected with HIV	90.1	86.6 – 93.8
E A person can not get the HIV virus from mosquito bite	78.5	72.9 – 83.3
F Sharing a meal with an HIV infected person do not transmit HIV	95.7	92.9 – 97.9
Knowledge of all the three **(ABC**)	41.3	35.4 – 47.4
Knowledge of all five major indicators – **BCDEF** of HIV/AIDS	62.2	56.0 – 68.2

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

The IDUs' understanding of HIV/AIDS and its different modes of transmission were further tested with the help of certain probing questions. Nearly all respondents said that a person cannot get HIV by holding an HIV-infected person's hand (98.5%), that a person can get HIV by using previously used needles/syringes (97.7%), that HIV can be transmitted through the transfusion of blood from an infected person to another (98.6%), that a pregnant woman infected with HIV/AIDS can transmit the virus to her unborn child (89.4%) and that a person can protect themselves from HIV by switching to non-injecting drugs (78.6%). A relatively lower percentage of respondents (56.5%) believed that women with HIV could transmit the virus to their newborn child through breastfeeding (Table 7.6).

Those IDUs who said that that an HIV-infected pregnant woman can transmit the virus to her unborn child were asked if they were aware of any measure that could reduce such risk of HIV transmission. Among them, around 33 percent of the respondents suggested that the expectant mother should take medicine or antiretroviral treatment (Table 7.6). Others suggested different measures such as consulting with a doctor or performing cesarean delivery.

Table 7.6: Knowledge about HIV/AIDS Transmission

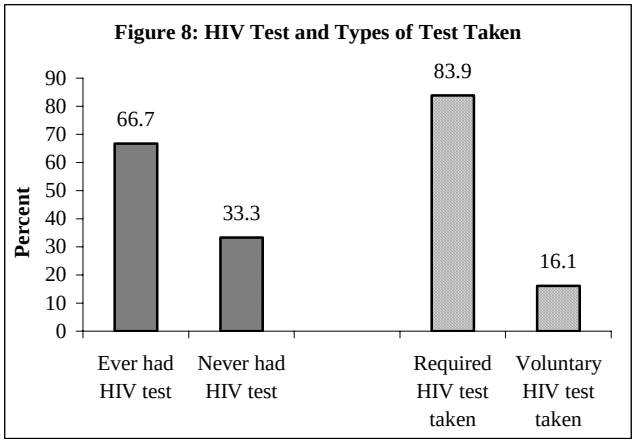
Statements Related to HIV/AIDS	Estimated Population Proportions (%) (N=300)	95% CI
A person can get HIV by using previously used needle by others	97.7	95.5 – 99.3
An IDU can protect themselves from HIV/AIDS by switching to non-injecting drugs	78.6	73.1 – 83.3
A woman with HIV/AIDS can transmit the virus to her new-born child through breast feeding	56.5	50.6 – 63.0
Blood transfusion from an infected person to the other transmit HIV	98.6	98.4 – 100.0
A person can not get HIV by holding an HIV infected person's hand	98.5	97.8 – 99.7

A pregnant woman infected with HIV/AIDS can transmit the virus to her unborn child	89.4	85.6 – 92.6
Ways by which a pregnant woman can reduce the risk of transmission of HIV to her unborn child (n=266)		
Take medicine (Anti retro viral)	32.7	26.1 – 39.6
Others	67.3	60.4 – 73.9

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

7.3 Knowledge about HIV Testing Facilities

The availability of a confidential HIV testing facility and awareness of such provision allow people to take up HIV test promptly and without the fear of being exposed. Although 95 percent of IDUs were aware of the existence of HIV testing facilities, only two-thirds (66.7%) had been tested for HIV before. Among those respondents who had taken up the test, only 16 percent had done so voluntarily, while the remaining 84 percent had been required to test for HIV (Figure 8).



Nine in ten IDUs (91.4%) who had the test had received the test result. Over two-thirds of these IDUs (64.6%) had tested for HIV within the last year, while 35 percent had been tested more than a year before the survey (Table 7.7).

Table 7.7: Knowledge about HIV Testing Facilities and History of HIV Test

Description of HIV Testing	Estimated Population Proportions (%)	95% CI
A confidential HIV testing facility available in the community	**(N=300)**	
Yes	95.0	91.2 – 97.8
No	4.7	1.7 – 8.3
Don't know	0.3	0.3 – 0.9
Test result received	**(n=213)**	
Yes	91.4	86.0 – 96.1
No	8.6	3.9 – 14.0
Timing of last HIV test	**(n=213)**	
Within the past 12 months	64.6	57.8 – 74.0
Between 13-24 months	24.7	17.0 – 30.8
More than 24 months	10.7	5.9 – 15.6

7.4 Source of Knowledge about HIV/AIDS

Billboards/signboards, posters/pamphlets and television were the most commonly cited sources of information on HIV/AIDS among the IDUs. These sources were mentioned by more than 90 percent of the IDUs. A considerably high proportion of respondents had also been aware of HIV/AIDS through friends/relatives (87.9%), NGO workers (85.8%), radio (85.7%) and newspaper/magazines (85%). Other sources of information mentioned by the IDUs have been listed in Table 7.8.

Table 7.8: Sources of Knowledge Regarding HIV/AIDS

Sources of Knowledge of HIV/AIDS	Estimated Population Proportions (%) (N=300)	95% CI
Billboard/signboard	95.3	92.8 – 97.6
Pamphlets/Posters	93.6	90.3 – 96.4
Television	90.4	86.6 – 94.1
Friends/Relatives	87.9	83.8 – 92.0
NGO workers	85.8	79.5 – 91.0
Radio	85.7	81.1 – 90.0
Newspapers/Magazines	85.0	79.6 – 89.7
Health workers/Volunteers	42.3	36.1 – 48.7
School/Teachers	41.9	36.2 – 48.0
Workplace	38.3	32.9 – 43.4
Street drama	34.6	29.3 – 40.3
Cinema halls	26.8	21.5 – 32.2
Comic books	17.8	13.2 – 22.7
Video van	15.4	11.1 – 20.1
Community workers	14.5	10.3 – 19.2
Community events or training	14.3	10.4 – 18.6
Others	0.1	0.0 – 0.4

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

In the past year, 90 percent of IDUs in the Pokhara Valley had received HIV/AIDS-related information from different sources. When asked about the kind of information or material received, 78 percent said that they had received condoms/information on condoms, while 73 percent said that they received brochures/booklets/pamphlets on HIV/AIDS (Table 7.9).

Table 7.9: Information/Materials Received During the Past Year

Informative Materials Received	Estimated Population Proportions (%) (N=300)	95% CI
Received information on condom/Condom		
Yes	**77.6**	72.1 – 83.3
No	22.4	16.7 – 28.0
Received brochures/booklets/pamphlets on HIV/AIDS		
Yes	73.2	67.2 – 79.2
No	26.8	20.8 – 32.8
Received information on HIV/AIDS		
Yes	**89.5**	84.9 – 93.3
No	10.5	6.7 – 15.1
Received other IEC materials		
Yes	**0.3 ***	NC
No	99.7 *	NC

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.
NC – Not calculated (RDSAT conditions were not met)

7.5 Perception about HIV/AIDS

The stigma associated with HIV/AIDS increases the impact of HIV on the patient as well as on the most at-risk population. The IDUs' perceptions of HIV-positive persons and the stigma associated with the disease were examined in this survey. The majority of respondents said that they would willingly take care of a HIV-positive male relative (94%) or a HIV-positive female relative (92.8%) in their home if such needed. More than one half of the sample population (53.4%), 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 respondents (93%) said that they would readily buy food from a HIV infected vendor. A significant proportion (94.4%) agreed that unless very sick, people

with HIV/AIDS should be allowed to continue in their jobs. When asked about the health care needs of HIV-infected persons, 52 percent IDUs maintained that they should be provided the same care and treatment as are being provided for other patients with chronic disease, while 44 percent believed that the health care needs of a HIV-infected person were more than people suffering from other chronic diseases.

Table 7.10: Attitude towards HIV/AIDS

Stigma and Discrimination	Estimated Population Proportions (%) (N=300)	95% CI
Willing to take care of HIV positive male relative in the household		
Yes	94.0	91.0 – 96.8
No	6.0	3.3 – 9.0
Willing to take care of HIV positive female relative in the household		
Yes	92.8	89.4 – 95.9
No	7.2	4.1 – 10.6
Willing to maintain confidentiality of a HIV positive family member		
Yes	53.4	47.2 – 59.3
No	46.6	40.7 – 52.8
Willing to buy food from HIV infected shopkeeper		
Yes	93.0	89.5 – 96.2
No	7.0	3.8 – 10.5
HIV infected person should get the same, more or less health care than someone with any other chronic disease		
Same	51.6	45.3 – 57.5
More	43.8	37.6 – 50.1
Less	4.6	2.0 – 7.7
HIV infected person should be allowed to continue working together		
Yes	94.4	91.0 – 97.1
No	5.6	2.9 – 9.0

CHAPTER - 8.0: EXPOSURE TO HIV/AIDS AWARENESS PROGRAMS

The exposure of the IDUs to the ongoing HIV/AIDS awareness programs and their participation in these activities was examined in the survey. Respondents were asked several questions relating to some of the most important components of current HIV/AIDS-related programs run by various 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) to organize awareness-raising activities at different sites in the community. They meet the target groups and hold discussions with them regarding HIV/AIDS, safe injecting practices, safe sex and other related topics. They 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.

Around eight in ten (78.7%) IDUs in Pokhara had ever met or interacted with PEs/OEs representing various organizations. The majority had discussed safe injecting behavior (83%) and HIV/AIDS transmission methods (82.8%) with PEs/OEs. The IDUs were also demonstrated the correct way of using condoms and were provided with syringes PE/OEs. Details on the activities carried out by IDUs with PEs/OEs are given in Table 8.1.

The majority of IDUs who had met with PEs/OEs had done so with Naulo Ghumti workers (95.6%). It is further evident from the table that one-third (33.5%) of the IDUs met with PEs/OEs more than twelve times in the past year (Table 8.1).

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

Meeting with Peer Educators (PE) or Outreach Educators (OE) in the Last 12 Month	Estimated Population Proportions (%)	95% CI
Met or discussed or interacted with PE or OE in the last 12 months	**(N=300)**	
Yes	78.7	72.8 – 84.3
No	21.3	15.7 – 27.2
Activities carried out with OE/PE#	**(n=257)**	
Discussion on safe injecting behavior	83.0	77.9 – 87.4
Discussion on how HIV/AIDS is/isn't transmitted	82.8	77.5 – 87.9
Demonstration on using condom correctly	43.0	33.7 – 48.8
Given syringe	35.5	26.3 – 43.5
Discussion on Regular/non-regular use of condom	19.8	11.8 – 23.4
Discussion on how STI is/isn't transmitted	11.1	6.5 – 17.1
Discussion of giving up drugs	9.4	4.8 – 15.8
Others	10.5	6.4 – 14.8
Organizations represented by OE/PE#	**(n=257)**	
Naulo Ghumti	95.6	92.6 – 97.8
RICHMOND	34.3	28.3 – 42.4
Magic Circle	3.4	1.1 – 6.7
Others (CSG, Serene Foundation, Getway foundation, BDS)	7.9	3.9 – 12.5
Number of meeting with PE or OE	**(n=257)**	
Once	0.3	No Bound
2-3 times	26.4	21.0 – 33.7
4-6 times	23.5	17.3 – 30.1
7-12 times	16.3	11.1 – 21.5
More than 12 times	33.5	26.0 – 38.9

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 a site for educational and counseling activities. The DICs offer a number of services to the target group, including counseling, group classes and discussions, individual counseling, and video shows on STIs/HIV/AIDS. Certain NGOs also run needle exchange program through their DICs. The IDUs are also provided IEC materials and condoms at DICs.

A large proportion (90.8%) of IDUs in Pokhara had visited a DIC in the last year (Table 8.2). Most of these (99.3 %) had been to a DIC to get a new syringe. Some had also visited the centre to collect condoms (39.1%) and to learn about safe injecting behavior (29.7%). DICs run by Naulo Ghumti were the most popular ones, being visited by high proportion of IDUs (97.2%). One percent of the IDUs had been to a DIC just once; others had visited these centers quite frequently. Among them, 73 percent had visited a DIC more than 12 times in the past year.

Table 8.2: DIC Visiting Practices

DIC Visiting Practices	Estimated Population Proportions (%)	95% CI
Visited DIC in the last 12 months	**(N=300)**	
Yes	90.8	86.8 – 94.6
No	9.2	5.4 – 13.2
Participated activities at DIC#	**(n=281)**	
Got new syringe	99.3	99.1 – 99.9
Collected condoms	39.1	33.6 – 46.1
Learnt about safe injecting behavior	29.7	24.1 – 36.1
Learnt the correct way of using condom	18.8	13.7 – 24.4
Participated in discussion on HIV transmission	14.3	9.6 – 19.1
Collect alcohol pad/swab	10.0	5.6 – 15.0
Had wound dressing	3.2	1.2 – 6.4
Others (Watch film on HIV/AIDS, To have medicine, etc)	12.4	8.5 – 16.9
Name of organizations that run DIC visited by them#	**(n=281)**	
Naulo Ghumti	97.2	95.0 – 98.8
RICHMOND	38.4	31.8 – 45.0
Others (Youth Vision, Getway foundation)	3.5	1.0 – 6.3
Number of visits to the DICs	**(n=281)**	
Once	1.1	0.3 – 2.4
2-3 times	7.5	3.7 – 11.5
4-6 times	6.5	3.0 – 10.7
7-12 times	11.9	7.7 – 16.9
More than 12 times	73.0	66.7 – 78.9

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

8.3 STI Clinic

The IDUs who engage in unsafe sexual encounters are at risk of contracting certain STIs. Timely detection of STIs may prevent them from serious health problems. There are several clinics being run by government as well as non-government organizations to providing STI testing and treatment facilities.

Despite the availability of testing and treatment facilities, the majority of IDUs (93.3%) had not visited an STI clinic in the last year. Among those (6.7%) who had been to a clinic in the past year, most (63.7%) had given a blood sample for STI testing, and had received a physical examination at the clinic (51.3%). Additionally, IDUs had participated in discussions on STI transmission methods (32.2%) and on

safe injecting practices (31.1%) in these STI clinics. Ninety-seven percent of IDUs who had visited STI clinics had done so more than once. The STI clinics run by Naulo Ghumti were the most popular ones (Table 8.3).

Table 8.3: STI Clinic Visiting Practices

STI Clinic Visiting Practices	Estimated Population Proportions (%)	95% CI
Visited any STI clinic in the last 12 months	**(N=300)**	
Yes	6.7	3.5 – 9.9
No	93.3	90.1 – 96.5
Participated activities at STI clinic#	**(n=24)**	
Blood tested for STI detection	63.7	25.1 – 92.4
Underwent Physical examination for STI identification	51.3	35.1 – 100.0
Participated in discussion STI transmission modes	32.2	6.8 - Nan
Participated in discussion on safe injecting behavior	31.1	0.0 – 63.4
Participated in discussion on regular/non-regular use of condom	22.6	0.0 – 24.5
Others (Took a friend with me)	42.8	No Bound
Name of organizations that run STI clinic visited#	**(n=24)**	
Naulo Ghumti	50.0 *	NC
Others (Paluwa, N-SARC, Private clinic)	45.8 *	NC
Don' t know	4.2 *	NC
Number of visits to STI clinics	**(n=24)**	
Once	2.9	No Bound
2-3 times	97.1	No Bound

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.
NC – Not calculated (RDSAT conditions were not met)

8.4 VCT Centers

VCT centers not only provide HIV/AIDS/STI testing facilities but also offer pre- and post- test counseling and treatment services. Besides information related to safe injecting practices, and HIV/AIDS/STI transmission methods are also given to the people who visit the centre. VCT centers form an integral part of the HIV/AIDS prevention program.

Fifty-seven percent of IDUs in Pokhara had not visited any of the VCT centers in the last year. Ninety-six percent of those who had gone to a VCT center had given their blood for HIV testing. Nine in ten (94.1%) had received pre-HIV test counseling while fewer had post-HIV test counseling (62.7%). Over half (61.8%) had received their HIV test result at a VCT center. A few of them said that they had received counseling on using condom correctly and had received information on the window period of HIV. Among the IDUs who had visited the VCT centre, 49 percent had visited the center just once, while the rest had been there more than once. The VCT center run by Naulo Ghumti was most popular among the IDUs and was reported as the place they had visited by 90 percent (Table 8.4).

Table 8.4: VCT Center Visiting Practices

VCT Center Visiting Practices	Estimated Population Proportions (%)	95% CI
Visited VCT center in the last 12 months	**(N=300)**	
Yes	42.9	36.5 – 49.2
No	57.1	50.8 – 63.5
Participated activities at VCT center #	**(n=148)**	
Gave blood sample for HIV test	95.6	92.1 – 98.4
Received pre-HIV test counseling	94.1	88.4 – 97.4
Received post HIV test counseling	62.7	50.5 – 74.2
Received HIV test result	61.8	48.6 – 74.5
Received counseling on using condom correctly in each sexual intercourse	16.2	8.8 – 24.9
Got information on HIV/AIDS window period	13.9	6.7 – 23.7
Received information on safe injecting behavior	12.6	6.7 – 25.7
Others (Took a friend with me, STI test, Hepatitis 'B' test)	3.7	0.5 – 6.9
Name of the organization that run the VCT centers visited#	**(n=148)**	
Naulo Ghumti	**90.0**	84.2 – 96.2
Others (CAC and Bheri, Seti, Koshi & Teku hospital)	10.2	3.8 – 17.3
Number of visits to VCT centers	**(n=148)**	
Once	49.3	34.4 – 56.1
2-3 times	45.6	35.9 – 60.3
More than three times	5.2	1.3 – 13.3

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

8.5 Participation in HIV/AIDS Awareness Program

Various governments as well as non-government 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 drama. Some of these programs specifically target the most at-risk populations while some include the general population as well.

Around half of the respondents (48.8%) had never participated in any HIV/AIDS awareness programs or community events while half (51.2%) had participated at least once in these kinds of activities. In the past year 94 percent had done so. The events they had participated in were street drama (56.4%), condom use demonstrations (48.7%), Condom Day celebrations (37.1%), AIDS Day celebrations (27.1%), and video shows (16.8%). A few had also participated in HIV/AIDS-related training programs and workshops (Table 8.5). Thirty-five percent had participated once in the awareness raising activities in the past year. The IDUs had mostly participated in programs conducted by Naulo Ghumti (72.4%).

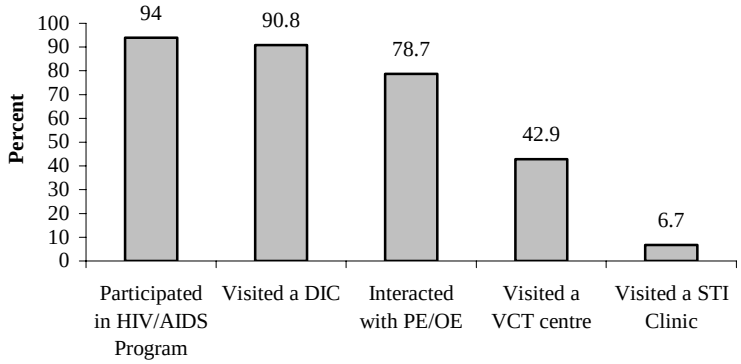
Table 8.5: Participation in HIV/AIDS Awareness Programs

Participations in HIV/AIDS Awareness Programs	Estimated Population Proportions (%)	95% CI
Ever participated in HIV/AIDS awareness raising program or community events	**(N=300)**	
Yes	51.2	44.4 – 57.0
No	48.8	4.03 – 55.6
Participated in HIV/AIDS awareness raising program or community events in the Past Year	**(N=155)**	
Yes	94.0	82.6 – 98.2
No	6.0	1.8 – 17.4
Activities participated in#	**(n=155)**	
Street drama	56.4	46.7 – 67.4
Condom use demonstrations	48.7	34.6 – 63.1
Condom Day celebration	37.1	22.9 – 48.5
AIDS Day celebration	27.1	18.4 – 42.0
Video Shows	16.8	9.6 – 27.8
HIV/AIDS related Workshops	8.2	3.7 – 18.8
HIV/AIDS related training	8.0	3.0 – 20.8
Group discussions	7.8	3.3 – 15.2
Talk program	6.8	0.5 – 16.9
Name of the organizations that organized such activities#	**(n=155)**	
Naulo Ghumti	72.4	58.7 – 83.3
NRCS	9.2	3.6 – 14.8
RICHMOND	5.9	0.6 – 7.3
Community Support Group	1.9	No Bound
Recovery Nepal	1.3 *	NC
Others (BDS, Samudayeek, Seren foundation)	9.0	3.5 – 20.0
Don't Know	11.3	4.9 – 14.9
Frequency of such participation in past 12 months	**(n=155)**	
Once	34.7	19.0 – 38.6
2-3 times	53.5	43.5 – 68.5
More than three times	6.0	2.6 – 15.0
Not Participated During the Past Year	5.8	1.7 – 5.7

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.
NC – Not calculated (RDSAT conditions were not met)

As seen in Figure 9, a higher proportion of IDUs had participated in HIV/AIDS-related programs and had visited a DIC in the past year. A considerable number of IDUs interacted with PEs/OEs while visiting a VCT centre was not so common. The practice of visiting an STI clinic was the lowest among the IDUs.

Figure 9: Exposure to HIV/AIDS Related Programs/Activities in the Past Year



CHAPTER - 9.0: COMPARATIVE ANALYSIS OF SELECTED CHARACTERISTICS

This chapter analyzes the trend in the selected indicators in the last four rounds of IBBS among IDUs conducted in Pokhara Valley. Specifically trends on indicators for the socio-demographic characteristics, drug injecting habits, needle/ syringe using practices, and condom use among IDUs are compared.

9.1 Socio-Demographic Characteristic

The socio-demographic characteristics of IDUs in Pokhara presented a similar pattern in all of four rounds. This is to a certain extent, a consequence of having adopted the same sampling methodology for all rounds.

The majority of respondents in these surveys were young, with over half of them aged 25 or less (68.7% in 2003, 62.3% in 2005, 58.2% in 2007 and 60.7% in 2009). The median age of the respondents slightly increased over the years (22 years in 2003, 23 years in 2005 and 24 years in 2007 and 2009).

The majority of respondents in all four rounds had completed secondary level education (63% in 2003, 56% in 2005, 48.3% in 2007 and 44.7% in 2009). The surveillance survey shows that the trend of higher educated people (literate to SLC and above) being IDUs has increased almost three times from the first round of the survey (Table 9.1).

Table 9.1: Socio-Demographic Characteristics

Socio-Demographic Characteristics	First Round - 2003 (N=300)	Second Round – 2005 (N=300)	Third Round – 2007 (N=300)	Fourth Round – 2009 (N=300)
	SPSS %	SPSS %	RDS Estimated Population Proportion (EPP) %	RDS Estimated Population Proportion (EPP) %
Age				
< 25 Years	68.7	62.3	58.2	60.7
≥25 Years	31.3	37.7	41.8	39.3
≤19 Years	23.0	16.7	**15.6**	20.5
20-24	45.7	45.7	43.0	41.3
25-29	15.7	22.0	28.7	25.8
30-34	10.3	10.7	7.5	8.5
35 and above	5.3	5.0	5.3	3.9
Median age	**22**	**23**	**24**	**24**
Education				
Illiterate	6.3	5.3	5.1	2.3
Literate only	1.0	1.7	0.5	2.8
Primary	17.0	21.0	20.4	16.9
Secondary	63.0	56.0	48.3	44.7
SLC & above	12.7	16.0	25.7	33.3
Ethnicity				
Brahmin	4.7	3.3	5.3	6.5
Chhetri/Thakuri	16.7	20.0	19.1	20.6
Newar	7.0	9.7	8.5	13.4
Tamang/Lama/Magar	21.7	15.0	17.1	13.5
Gurung/Rai/Sherpa	33.7	30.0	34.3	31.6
Occupational caste	11.3	16.3	13.9	10.7
Others (Musalman, Sanyashi, Terai caste, Tharu, Thakali etc.)	5.0	5.7	1.9	3.7

The ethnic/caste composition of IDUs has remained unchanged since the first round in 2003. Around one-third of IDUs in the first and third rounds (33.7% and 34.3% respectively) were from the Gurung/Rai/Thakali/Sherpa ethnic groups; similarly 30 percent IDUs represented this group in the second round and fourth round. The proportion of IDUs belonging to the Chhetri/Thakuri cast in the fourth round was 21 percent; in the third round was 19 percent, 17 percent in the first and 20 percent in the second round. Other caste/ethnic group representation was similar in all three waves of the survey (Table 9.1).

9.2 Drug Injecting Practices

The average duration that the IDUs had been injecting drugs was 3.7 years in 2003, 4.8 years in 2005, 4.7 years in 2007 and 4.5 years in 2009. More than eight in ten respondents had been injecting drugs for more than a year (88% in 2003, 91.6% in 2005, 82.3% in 2007 and 77.9% in 2009). On the other hand, the proportion of IDUs who had had been injecting drugs for less than a year was 12 percent, 8 percent, 15 percent and 22 percent in 2003, 2005, 2007 and 2009 respectively (Table 9.2).

The median age of the respondents when they had injected drugs for the first time was 19 years in 2003 and 2007 while it was 18 years in 2005. In 2009 it has increased to 20 years. Most respondents had started injecting drugs when they were young: approximately 60 percent had injected drugs by the time they were 20 in all the rounds (64% in 2003, 68.3% in 2005, 60.8% in 2007 and 57.4% in 2009).

Table 9.2: Drug Injecting Practice

Drug Injecting Practice	First Round – 2003 (N=300)	Second Round – 2005 (N=300)	Third Round – 2007 (N=300)	Fourth Round – 2009 (N=300)
	SPSS %	SPSS %	RDS EPP %	RDS EPP %
Duration of drug injecting habit				
Up to 11 months	12.0	8.3	14.8	22.1
12 – 23 months	14.0	9.3	17.5	12.7
24 – 59 months	43.3	41.0	32.2	34.2
60 months and above	30.7	41.3	35.6	31.0
Average duration years	**3.7**	**4.8**	**4.7**	**4.5**
Age at first drug injection				
Up to 20 years	64.0	68.3	60.8	57.4
21 years and above	36.0	31.7	39.2	42.6
Median age	**19**	**18**	**19**	**20**

9.3 Needle/Syringe Use in the Past Week

Data in 2009 showed that a considerable proportion of IDUs had avoided unsafe injecting behavior in the past week. The proportion of IDUs who had avoided unsafe injecting practice in the week preceding the survey has increased steadily since the first round. High-risk behavior such as injecting with previously-used needles/syringes significantly decreased from 21 percent in 2003 to 15 percent in 2005 to 8 percent in 2007 and finally to 5 percent in 2009. In addition, since the first round, a significantly higher proportion of IDUs in Pokhara have been injecting alone. The proportion of IDUs who had not shared their needle/syringe with anyone in the past week increased from 68 percent in the first round to 81 percent in the second round to 92 percent in the third round and to 95 percent in the fourth round. This

behavior of not sharing needles/syringes with anyone else has shown a significant increase.

A similar improvement was observed with regard to using syringes left in public places up to the third round. In the week preceding the survey in 2003, 20 percent of IDUs had injected with syringes left in a public place. The figure went down to seven percent in 2005, while only three percent reported using syringes kept in public places in 2007. However, in the 2009 survey, the behavior of using needles/syringes kept in a public place increased sharply to 25 percent.

Table 9.3: Past Week's Syringe Use and Sharing Behavior

Needle/Syringe use throughout the Past Week	First Round – 2003 (N=300)	Second Round – 2005 (N=300)	Third Round – 2007 (N=300)	Fourth Round – 2009 (N=300)
	SPSS %	SPSS %	RDS EPP %	RDS EPP %
Used a needle/syringe that had been used by another				
Never Used	79.0	85.3	92.4	95.1
Ever Used	21.0	14.7	7.6	4.9
Used a needle/syringe kept in public place				
Never Used	79.7	93.3	96.6	74.9
Ever Used	20.3	6.7	3.4	25.1
Number of partners sharing needle/syringe				
None	68.0	81.0	91.5	95.4
Two or more partners	32.0	19.0	8.5	4.6

9.4 Consistent Use of Condom with Different Partners

Responses regarding condom use with different partners indicate that the consistent use of condoms with the sexual partners increased sharply up to the third round of the survey before decreasing in the current fourth round of the survey.

There is no statistical significance with the consistent use of condoms with regular partners although it has increased from 9 percent in the first round, to 12 percent in the second round, to 22 percent in the third round of the survey. Consistent condom use with regular partner of IDUs has decreased to five percent in the 2009 study. As for condom use with non-regular partners in the year preceding the survey, a significantly higher proportion of IDUs in the third round than in the first and the second rounds reported using condoms consistently with such partners (29.9% IDUs 2003, 39.6% in 2005 and 52.9% in 2007). Again this rate has decreased to 47 percent in the current study. Likewise, while in the first round, 59.6 percent of IDUs had used a condom every time they had sex with FSWs in the past year; a relatively lower proportion of them (49.6%) reported doing so in the second round.

Table 9.4: Consistent Use of Condom with Different Female Sex Partners during the Past Year

Consistent Use of Condom	First Round – 2003 (N=300)	Second Round – 2005 (N=300)	Third Round – 2007 (N=300)	Fourth Round – 2009 (N=300)
	SPSS %	SPSS %	RDS EPP (%)	RDS EPP (%)
Use of condom with regular female sex partners during past 12 months				
Every time	9.3	12.4	21.7	5.4
Some time or Never	90.7	87.6	78.3	94.6
Total (n)	**(86)**	**(89)**	**(99)**	**(96)**
Use of condom with non-regular female sex partners during past 12 months				
Every time	29.9	39.6	**52.9**	46.6
Some time or Never	70.1	60.4	47.1	53.4

Total (n)	**(77)**	**(96)**	**(135)**	**(91)**
Use of condom with female sex workers during past 12 months				
Every time	59.6	49.6	**80.5**	**70.0**
Some time or Never	40.4	50.4	19.5	30.0
Total (n)	**(89)**	**(121)**	**(139)**	**(105)**

In the third round the proportion of IDUs reporting doing so increased to 80.5 percent; and in 2009 the rate of consistent condom use with FSWs was clogged to 70 percent; a statistically significant increase from 49.6 percent.

9.5 HIV Prevalence

HIV prevalence among the IDUs has gradually decreased since the first round. As seen in Table 9.5, the first and the second round of the IBBS showed almost the same rate of HIV prevalence among IDUs in Pokhara (22% in 2003 and 21.7% in 2005). The prevalence rate, however, decreased to 6.8 percent in 2007 and to 3.4 percent in 2009: this is a significant change since the first round.

From the other findings of the study, it is evident that the IDUs in Pokhara have been becoming increasingly conscious of HIV/AIDS risk factors. Their behavioral trend also point towards a considerable improvement with regards to injecting habits and sexual behavior. Seventy-nine percent of IDUs had avoided injecting with a previously-used needle in the first round, and the figure reached to 95 percent in 2009. Likewise, the practice of sharing needles/syringes has decreased from 32 percent in 2003 to five percent in 2009. At the same time, a considerable proportion of IDUs have been practicing safe sex with their sex partners such as FSWs. While in 2003, 60 percent if IDUs had used condom consistently in sexual relations with FSWs in the year preceding the survey, 70 percent reported doing so in 2009.

Table 9.5: HIV Prevalence

HIV Prevalence	First Round – 2003 (N=300)	Second Round – 2005 (N=300)	Third Round – 2007 (N=300)		Fourth Round – 2009 (N=300)	
	SPSS %	SPSS %	RDS EPP (%)	95% CI	RDS EPP (%)	95% CI
HIV	22.0	21.7	6.8	4.2 – 9.8	3.4	1.8 – 5.2

CHAPTER - 10.0: SUMMARY OF MAJOR FINDINGS AND RECOMMENDATIONS

10.1 Summary of Major Findings

Out of 300 IDUs participating in the study, 3.4 percent were HIV-positive. A history of syphilis was found among 1.1 percent of IDUs while 0.5 percent was currently infected with syphilis.

HIV prevalence differed significantly according to age, marital status and literacy status. Those IDUs who were older than 20 years were more likely to be HIV-positive (3.7%) than younger IDUs (1.9%). The prevalence of HIV was higher among IDUs who are or were married (6.6%) than among those who had never been married (1.7%) before. HIV prevalence among literate IDUs was 2.3 percent and among illiterate IDUs it was 50.8 percent.

Moreover, HIV prevalence was higher among those who had been injecting drugs for more than five years (5%) than those who had been injecting drugs for less than five years (3.1%). HIV prevalence was significantly higher among those IDUs who had ever injected with a previously-used syringe in the past week (13.6%) than those who had never injected with such a needle/syringe (3%).

HIV prevalence among the IDUs has gradually decreased since the first round. The first and the second round of the IBBS showed almost the same HIV prevalence rate among IDUs in Pokhara (22% in 2003 and 21.7% in 2005). The prevalence rate, however, decreased to 6.8 percent in 2007 and to 3.4 percent in 2009; this is a significant change since the first round.

The IDUs were mostly young including 88 percent below 30 years of age and 61 percent younger than 25 years. Many IDUs (65%) were unmarried.

The IDUs in Pokhara Valley represented diverse caste/ethnic groups residing in the valley. The Tibeto-Burman communities (Tamang, Lama, Magar, Gurung, Rai, Newar) made up the largest proportion of the respondents (58.5%) followed by the Brahmin, Chhetri/Thakuri community (27.1%).

The majority of the IDUs (67.3%) had been using drugs for more than five years. Twenty-nine percent had been using drugs for the past two to five years while three percent had been injecting for less than two years.

Overall, 27 percent of the respondents consumed alcohol everyday and 23 percent were consuming alcohol more than once a week. Use of oral/inhaled drugs was common practice among IDUs. Ganja was the most popular drug taken by 71 percent of IDUs in the week preceding the survey followed by Nitrovate (26.4%), Brown Sugar (23.2%), *charas* (17.3%) and so on.

Nearly all respondents (99.7%) knew about sources for getting new syringes. Ninety-six percent of IDUs mentioned that they could get a new syringe whenever necessary from a drugstore. Similarly, a large proportion of IDUs (90.9%) said that

the needle exchange program conducted by Naulo Ghumti made new syringes available whenever they needed one.

The proportion of IDUs who had avoided unsafe injecting practice in the week preceding the survey has been steadily increasing since the first round. High-risk behavior such as injecting with a previously used needle/syringe decreased significantly from 21 percent in 2003, to 15 percent in 2005, to 8 percent in 2007 and finally to 5 percent in 2009. Additionally, the proportion of IDUs who had not shared their needle/syringe with anyone in the past week increased from 68 percent in the first round, to 81 percent in second round, to 92 percent in third round and to 95 percent in the fourth round.

Overall, 96 percent IDUs in Pokhara had sexual intercourse before. Thirty-three percent of sexually active IDUs had had sex with a regular partner in the past year. Twenty-nine percent of IDUs who ever had sex had non-regular female sex partners in the past year, with a total of 37 percent of sexually active IDUs having had sex with FSWs in the past 12 months.

Condom use in last sex with FSW was reported by 89 percent of IDUs. The proportions of those who used condoms the last time they had sex with a regular partner (26.8%) and with a non-regular partner (56.4%) were comparatively less. A similar pattern was observed in the IDUs' last year's sexual contacts.

Four percent of IDUs had genital discharge and 11 percent had genital ulcers/sores in the past year. Among those who had STIs before, 19 percent and 60 percent reported having genital discharge and genital ulcer/sore respectively during the survey. Over two-fifths (44.4%) of those IDUs who had experienced at least one STI symptom in the past year had not sought any treatment.

Overall 41 percent of IDUs were aware of the 'ABC' HIV prevention measures while 62 percent had comprehensive knowledge on HIV i.e. 'BCDEF'. Furthermore, almost all IDUs (97.7%) knew that a person can get HIV by using previously used needles/syringes.

The majority of respondents (95%) knew that a confidential HIV testing facility was available in their communities. A total of 67 percent had been tested before for HIV of which only 16 percent had done so voluntarily while others had done so it was a requirement. Most of the IDUs (91.4%) who had been tested for HIV had received their test result.

During the preceding year ninety-four percent had participated in different HIV/AIDS awareness raising programs, 91 percent had visited a drop-in-centre, almost eight in ten (78.7%) had interacted with a peer educators/outreach educators (PEs/OEs). and 43 percent had visited a VCT centre at least once. Very few IDUs (6.7%) had visited an STI clinic.

10.2 Recommendations

Based on the findings of this study, a few specific recommendations have been made. They are as follows:

- Data from the study indicate that it is largely youth and adolescents who become intravenous drug users. Specific program activities that target school children, college students, youths, and adolescents should be designed to impart HIV/AIDS awareness and sex education.

- HIV prevalence was significantly related with drug injecting behavior. Ongoing HIV/AIDS awareness activities should continue and be expanded geographically to cover more IDUs –especially illiterate ones. Advocacy, behavioral change activities and health promotion interventions should be further scaled up.

- The injecting practices of the respondents revealed that a considerable percentage of IDUs still engaged in high-risk injecting behavior including injecting with a previously-used syringe, with a syringe left in a public place, using a pre-filled syringe, injecting with a syringe after drugs were transferred into it from another syringe and sharing injecting equipment. Therefore, comprehensive drug prevention and treatment interventions should be promoted. Harm reduction initiatives such as wider dissemination of information on safe injecting behavior, and needle exchange programs should be continued and expanded further.

- The majority of the IDUs had never received any de-addiction treatment. Rehabilitation and detoxification centers should be supported for providing necessary services to the IDUs especially to those belonging to economically deprived families. Rehabilitation programs should also incorporate family counseling services.

- Very few IDUs had used condom consistently with their regular and non-regular partners as well as with FSWs. Barriers to inconsistent condom use should be explored and intervention targeting not just IDUs, but also to FSWs, spouses and other sex partners of IDUs should be initiated and expanded.

- Seventeen percent of the IDUs had never heard of STIs. Over two-fifths (44.4%) of those IDUs who had ever experienced one or more STI symptoms had never sought any treatment. HIV/AIDS awareness campaigns should also focus on STI education. Client-friendly STI testing and treatment facilities, and VCT centers should be made available to encourage more IDUs to come forward voluntarily for such services. Moreover IDUs with STI symptoms should be motivated to use the available STI services.

- The study shows that a high number of IDUs had interacted/discussed with PEs/OEs and thus can be considered good contact points to disseminate the necessary information and IEC materials to the target population. One-to-one education in behavioral change and safe injecting and sexual practices through wider mobilization of PEs/OEs could yield positive results.

- Outreach and other intervention efforts should be expanded further to include comprehensive, complimentary programs and to increase coverage to all

high-risk populations. The quality of these programs should be evaluated, and where necessary, should be strengthened.

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ANNEXES

ANNEX – 1: Indicators for Monitoring and Evaluation of HIV

Prevention 1: HIV related risk and transmission among IDUs	Results (%)	CI	
Impact/Outcome indicators			
Percentage of IDUs who are HIV infected	3.4	1.8-5.2	PMP/ASHA/ National/UNGASS
Percentage of IDUs who had adopted behavior that reduce transmission of HIV i.e. who both avoided using non sterile injecting equipment and used condom in the last sex in last month	32.3	22.9-49.2	National
Percentage of IDUs reporting the use of sterile injecting equipment in the last time they injected	98.5	96.6-99.8	UNGASS
Percentage of IDUs who avoided sharing injecting equipment in the last month	71.1	65.2-77.6	ASHA
Percentage of IDUs who used condom at last sex with female sex worker in the last 12 months	89.1	84.2-97.1	PMP/ASHA
Percentage of IDUs who say they consistently use a condom when they have sex with a female sex worker in the last 12 months	70.0	47.0-85.4	PMP/ASHA
Percentage of IDUs who both correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV transmission	62.2	56.0-68.2	PMP/ASHA/National/ UNGASS
Output/Coverage Indicators			
Percentage of IDUs reached with targeted HIV prevention service programs (BCC with OE/PE or DIC or STI Clinics or VCT or community events / trainings or drug treatment or rehabilitation)	95.2	92.3-97.8	ASHA/National
Percentage of IDUs reached with HIV prevention programs (Knows where to receive HIV test and received condoms)	65.1	59.2-71.3	UNGASS
Percentage of IDUs who received an HIV test in the last 12 months and who know their results	39.9	33.2-46.3	UNGASS

ANNEX – 2: Sample Size Estimation

Basic Equation in calculating the sample size

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

n = required minimum sample size per survey round

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

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

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

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

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

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

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

ANNEX – 3: Questionnaire

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

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

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

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

Would you be willing to participate?

1. Yes 2. No

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

Operational definition of respondent:

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

Male IDUs under the age of 16 will be excluded.

Code Respondents: (Kathmandu and Pokhara Sites only)

Seed: 1. Yes 2. No

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

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

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

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

1. Yes 2. No (continue interview)

↓

When?
_____Days ago (make sure that it was interviewed by New ERA and close the interview)

002. Respondent's ID #: ☐☐☐☐☐☐

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

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

002.3 Did you share needle/syringe with the friend who brought you here? (Don't ask with seed, only for Kathmandu and Pokhara IBBS study)
1. Yes 2. No

002.4 How long you have been injecting drugs?

Years ☐☐ Months ☐☐

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

003. Interview Location
(to be filled by interviewer)
003.1 Name of location _____
003.2 Ward No. ☐☐
003.3 VDC/Municipality: _____
003.4 District: _____

1.0 BACKGROUND OF RESPONDENT

Q.N.	Questions	Coding Categories	Skip
101	Where are you living now? (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?	Month .....☐☐☐ Always (since birth)..... 0 Others (Specify)_____ 96	
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?	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)_____	

Q.N.	Questions	Coding Categories	Skip
		..... 96 No response..... 99	

2.0 DRUG USE

Q.N.	Questions	Coding Categories	Skip
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
Tidigesic	1	2	98	99	1	2	98	99
Brown Sugar	1	2	98	99	1	2	98	99
Nitrosun	1	2	98	99	1	2	98	99
Ganja	1	2	98	99	1	2	98	99
Chares	1	2	98	99	1	2	98	99
White Sugar	1	2	98	99	1	2	98	99
Phensydyl	1	2	98	99	1	2	98	99
Calmpose	1	2	98	99	1	2	98	99
Diazepam	1	2	98	99	1	2	98	99
Codeine	1	2	98	99	1	2	98	99
Phenergan	1	2	98	99	1	2	98	99
Cocaine	1	2	98	99	1	2	98	99
Proxygin	1	2	98	99	1	2	98	99
Effidin	1	2	98	99	1	2	98	99
Velium 10	1	2	98	99	1	2	98	99
Lysergic Acid Dithylamide(LSD)	1	2	98	99	1	2	98	99
Nitrovate	1	2	98	99	1	2	98	99
Combination (Specify) ___	1	2	98	99	1	2	98	99
96. Others (Specify)_____	1	2	98	99	1	2	98	99

204.1	In the last month, did you switch from one drug to another?	Yes .....1 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
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	

3.0 NEEDLE SHARING BEHAVIORS

Q.N.	Questions	Coding Categories	Skip
301	Think about the times, you have injected drugs yesterday/last day. How many times did you inject drugs on that day? **(Fill the number from answer to Q. 205 or 208 and verify by asking the respondent)**	Times ..... ☐☐	
302	The lat time you injected, how did you get that syringe/needle? **(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/syringe7 My friend gave new needle/syringe.....8 Others (Specify) _____ 96 Don't know ..... 98 No response..... 99	
302.1	If you were in a group the last time that you injected, how many different people in the group do you think used the same needle?	Nos. ..... ☐☐ Injected alone..... 95	

Q.N.	Questions	Coding Categories	Skip
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/syringe7 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/syringe7 My friend gave new needle/ syringe..... ..... 8 Others (Specify) _____.. 96 Don't know ..... 98 No response..... 99	
304.1	That time If you were in a group, how many different people in the group do you think had used the same needle?	Nos. .....☐☐ Injected alone..... 95	
305	Think about the times, you have injected drugs during the past one-week. How often was it with a needle or syringe that had previously been used by someone else?	Every times ..... 1 Almost every-times ..... 2 Sometimes ..... 3 Never used..... 4 Not injected in the last week 5	→ 314
		Don't know ..... 98 No response..... 99	

Q.N.	Questions	Coding Categories				Skip
305.1	When you injected drug during the past week, how often did you use a syringe/needle that had been left in public place? (Public place means places other than the IDU's home that are used to hide syringe/needle)	Every times .....1 Almost every-times .....2 Sometimes .....3 Never .....4 Don't know .....98 No response.....99				
306	In the past one-week, did you ever share needles and syringes with any of the following?					
	Read out list. Multiple answers possible	Yes	No	DK	NR	
	Your usual sexual partner	1	2	98	99	
	A sexual partner who you did not know	1	2	98	99	
	A friend	1	2	98	99	
	A drugs seller	1	2	98	99	
	Unknown Person	1	2	98	99	
	96. Other (Specify) _____	1	2	98	99	
307	With how many different injecting partners did you share needles or syringes in the past one-week? (Count everyone who injected from the same syringe)	Number of partners.....☐☐ 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				

Q.N.	Questions	Coding Categories	Skip
313	In the past one-week, when you injected with needles or syringes that had previously been used, how often did you clean them first?	Every time ..... 1 Almost every-times ..... 2 Sometimes ..... 3 Never ..... 4 Never reused ..... 5 Others (Specify)_____ 96 Don't know ..... 98 No response..... 99	314
313.1	If cleaned, how did you usually clean them?	With water ..... 1 With urine ..... 2 With saliva..... 3 Boil the syringe in water..... 4 With bleach ..... 5 Burning the needle with matchstick ..... 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 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	

Q.N.	Questions	Coding Categories	Skip
316.3	When you injected drugs in another city, how often did you give a syringe/needle to some one else?	Every times ..... 1 Almost every-times ..... 2 Sometimes ..... 3 Never ..... 4 Don't know ..... 98 No response..... 99	
316.4	In the last 12 months, have any of an outreach worker, a peer educator or a staff from a needle exchange program given you a new needle/syringe?	Yes ..... 1 No..... 2 Don't' remember ..... 98 No response..... 99	
317	Are you currently under treatment (or receiving help) or have you ever received treatment (or help) because of your drug use?	Currently under treatment ....1 Was in treatment but not now ... 2 Have never received treatment…....3 No response..... 99	401
318	How many months ago did you last receive treatment or help for your drug use?	Months ..... ☐☐ Don't know ..... 98 No response..... 99	
319	What kind of treatment or help you received? (Do not read out the responses, probe asking, "Are there any other kinds of treatment that you've received?" Multiple Answers Possi		
	Types of Treatments	**Name of Institutions**	
	1. Outpatient counseling		
	2. Self-help groups		
	3. Detoxification w/methadone		
	4. Maintenance w/methadone		
	5. Detoxification w/other drugs		
	6. Detoxification with no drug		
	7. Residential rehabilitation		
	8. Helped for *cold turkey* without medicine		
	9. Forced for *cold turkey* by others without treatment		
	96. Other (Specify) _____		
	99. No response		

4.0 SEXUAL HISTORY

Q.N.	Questions	Coding Categories	Skip
401	How old were you at your first sexual intercourse?	Years old ..... ☐☐ *(Write completed years)* Never had sexual intercourse..... ..... 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"?	Number ..... ☐☐ Don't know 98	

Q.N.	Questions	Coding Categories	Skip
	(Your wife or live-in sexual partners)	No response..... 99	
403.2	How many were female "sex worker"? (Partners to whom you bought or sold sex in exchange for money or drug)	Number ..... ☐☐ Don't know ..... 98 No response..... 99	
403.3	How many were female "non-regular partners"? (Sexual partners, you are not married to and have never lived with and did not have sex in exchange for money)	Number ..... ☐☐ Don't know ..... 98 No response..... 99	
404	We have just talked about your female sexual partners? Have you ever had any male sexual partners also?	Yes ..... 1 No ..... 2 No response..... 99	501
404.1	If yes, have you had anal sex with any of your male partners in the last 12 months?	Yes ..... 1 No ..... 2 No response..... 99	501
404.2	With how many different male partners have you had anal sex in the last 12 months?	Number ..... ☐☐ Don't know ..... 98 No response..... 99	
404.3	The last time you had anal sex with a male sex partner did you and your partner use a condom?	Yes ..... 1 No..... 2 Don't Know ..... 98 No response 99	
404.4	How often have you used a condom in an anal sex with male sex partner in the past 12 months	Every Times ..... 1 Almost Every Times ..... 2 Some Times ..... 3 Never Used ..... 4 Don't Know..... 98 No response 99	

5.0 NUMBERS AND TYPES OF PARTNERS

(Check Q. 403.1 and circle the response of Q.501)

Q. N.	Questions	Coding Categories	Skip
501.	Did you have sex with female regular partner (wife or live-in partner) during last 12 months?	Yes ..... 1 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	

Q. N.	Questions	Coding Categories	Skip
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	
502	Did you have a sexual intercourse with a female sex worker in last 12 months? *(Check 403.2 and circle the response of Q. 502)*	Yes .....1 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	
502.2	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 No.....2 Don't know.....98 No response.....99	→ 502.5 502.5
502.4	Why did not you and your partner use a condom that time? **(Do not read the possible answers, multiple answer possible)**	Not available.....1 Too expensive.....2 Partner objected.....3 Don't like them.....4 Used other contraceptive .....5 Didn't think it was necessary… .6 Didn't think of it.....7 Other (Specify) _____ 96 Don't know.....98 No response.....99	
502.5	How often have you used a condom with female sex workers in the past year?	Every times.....1 Almost every-times.....2 Sometimes .....3 Never used.....4	

Q. N.	Questions	Coding Categories	Skip
		Don't know.....98 No response.....99	
502.6	Do you know whether female sex worker with whom you had sex also injected drugs?	Yes .....1 No.....2 Don't know.....98 No response.....99	
502.7	Have you ever had anal sex with your female sex workers?	Yes .....1 No.....2 Don't know.....98 No response.....99	503
502.8	The last time you had anal-sex with a female sex worker did you use a condom?	Yes .....1 No.....2 Don't know.....98 No response.....99	
502.9	How often have you used a condom in an anal sex with female sex workers in the past 12 months?	Every times.....1 Almost every-times.....2 Sometimes .....3 Never used.....4 Don't know.....98 No response.....99	
503	Did you have a sexual intercourse with a female non-regular sex partner during last 12 months? **(Check 403.3 and circle the response of Q. 503)**	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	504

Q. N.	Questions	Coding Categories	Skip
		No response 99	
503.7	The last time you had anal sex with a female non-regular partner, did you and your partner use a condom?	Yes ..... 1 No ..... 2 Don't know ..... 98 No response 99	
503.8	How often have you used a condom in an anal-sex with female non-regular partners in the past year?	Every times ..... 1 Almost every-times ..... 2 Sometimes ..... 3 Never used ..... 4 Don't know ..... 98 No response 99	
504	Have you had anal sex with a male partner in the past one year? **(See the response in Q. 404.1 and circle Q. 504 response)**	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?	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?	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	
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	

Q. N.	Questions	Coding Categories	Skip
506	In the last month, how often did you or your partner use a condom when you had sex?	Every times..... 1 Almost every-times..... 2 Sometimes ..... 3 Never used..... 4 Don't know..... 98 No response..... 99	
507	With whom did you have the last sexual intercourse?	FSW ..... 1 Regular partner ..... 2 **(Wife or live in sexual partner)** Other female friend ..... 3 Male friend..... 4 Did not have sexual contact in the past year..... 5 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 & 602)

Q. N.	Questions	Coding Categories	Skip
601	Have you ever heard of a condom? **(Show picture or sample of condom)**	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	

7.0 KNOWLEDGE AND TREATMENT OF STIs

Q. N.	Questions	Coding Categories	Skip
701	Have you ever heard of diseases that can be transmitted through sexual intercourse?	Yes ..... 1 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	

Q. N.	Questions	Coding Categories	Skip
		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
801	Have you ever heard of HIV or the disease called AIDS?	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	
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	

Q. N.	Questions	Coding Categories	Skip
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
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 No 2	→ 901

Q. N.	Questions	Coding Categories	Skip
		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
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**	
	Radio	1	2	
	Television	1	2	
	Newspapers/Magazines	1	2	
	Pamphlets/Posters	1	2	
	School/Teachers	1	2	
	Health Worker/Volunteer	1	2	
	Friends/Relatives	1	2	
	Work Place	1	2	
	People from NGO	1	2	
	Video Van	1	2	
	Street Drama	1	2	
	Cinema Hall	1	2	
	Community Event/Training	1	2	
	Bill Board/Sign Board	1	2	
	Comic Book	1	2	
	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**	
	Condom	1	2	
	Brochure/Booklets/Pamphlets about HIV/AIDS	1	2	
	Information about HIV/AIDS	1	2	
	96. Others (Specify) _____	1	2	

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

Q. N.	Questions	Coding Categories		Skip
1001	In the past one-year have you seen, read or heard any advertisements about condoms from the following sources? ***(Read the following list, multiple answer possible)***			
	Sources	**Yes**	**No**	
	1. Radio	1	2	
	2. Television	1	2	
	3. Pharmacy	1	2	
	4. Health Post	1	2	
	5. Health Center	1	2	
	6. Hospital	1	2	
	7. Health Workers/Volunteers	1	2	
	8. Friends/Neighbors	1	2	

Q. N.	Questions	Coding Categories		Skip
	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?	_____ _____		
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
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? **(For Pokhara and Kathmandu only)**	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	

11.0 KNOWLEDGE AND PARTICIPATION IN STI AND HIV/AIDS PROGRAMS

Q. N.	Questions	Coding Categories	Skip
1101	Have you met or discussed or interacted with Peer Educators (PE) or Outreach Educators (OE) or Community Mobilizes (CM) or Community Educators (CE) in the last 12 months?	Yes ..... 1 No..... 2 No response..... 99	→1105
1102	What activities did these PE or OEs involve you in when you met them? (Multiple answers. DO NOT READ the possible answers)	Discussion on how HIV/AIDS is/isn't transmitted. ..... 1 Discussion on how STI is/isn't transmitted……. ..... 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
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 Nav Kiran ..... 13 Jhapa Plus ..... 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	

Q. N.	Questions	Coding Categories	Skip
1109	Have you visited any STI clinic in the last 12 months?	Yes ..... 1 No..... 2	→ 1113
1110	What did you do when you visited such STI clinic? **(Multiple answers. DO NOT READ the possible answers given below)**	Blood tested for STI ..... 1 Physical examination conducted for STI identification ..... 2 Discussion on how STI is/isn't transmitted. ..... 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 NRCS ..... 7 NSARC..... 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	

Q. N.	Questions	Coding Categories	Skip
		Others (Specify) _____ 96 Don't know 98	
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	

Q. N.	Questions	Coding Categories	Skip
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	
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 – 4: Oral Informed Consent

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

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

Principal Investigator/s: Satish Raj Pandey, FHI/Nepal
Laxmi Bilas Acharya, FHI/Nepal

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FAX: +977 1 441 7475

Introduction

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

Information about the Research

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

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

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

Possible Risks

The risk of participating in this study is the minor discomfort during blood drawing. Providing blood sample does not put you at any other risk. Some of the questions we ask make you feel uncomfortable to answer them. You are free not to answer such questions and also to stop participating in the research at any time you want to do so. You might feel some mental stress after getting your test results. But at such time you will get counseling on HIV and STI

through a qualified counselor. They will provide information about STIs and counseling for any mental stress you have.

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

Possible Benefits

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

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

If You Decide Not to Be in the Research

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

Confidentiality

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

Payment

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

Leaving the Research

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

If you have a questions about the study

If you have any questions about the research, please contact:

Satish Raj Pandey, ASHA project - FHI/Nepal, Baluwatar, Kathmandu, Phone: 01-4437173;

OR

Siddhartha Man Tuladhar, New ERA, Kalopool, Kathmandu, Phone: 01-4413603;
OR
Laxmi Bilas Acharya**,** ASHA project - FHI/Nepal, Baluwatar, Kathmandu, Phone: 01-4437173
We will not be able to pay for/care for injuries that occur as a result of the study.

Your Rights as a Participant

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

VOLUNTEER AGREEMENT

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

_____

Signature of witness Date

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

_____

Signature of Person Who Obtained Consent Date

ANNEX – 5: Clinical/Lab Checklist

CONFIDENTIAL

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

Clinical/Lab Checklist

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

Name of Clinician: _____

Name of Lab Technician: _____

(A) Clinical TEST

Weight : _____Kg

B.P. : _____mm of Hg

Pulse : _____

Temperature : _____° 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

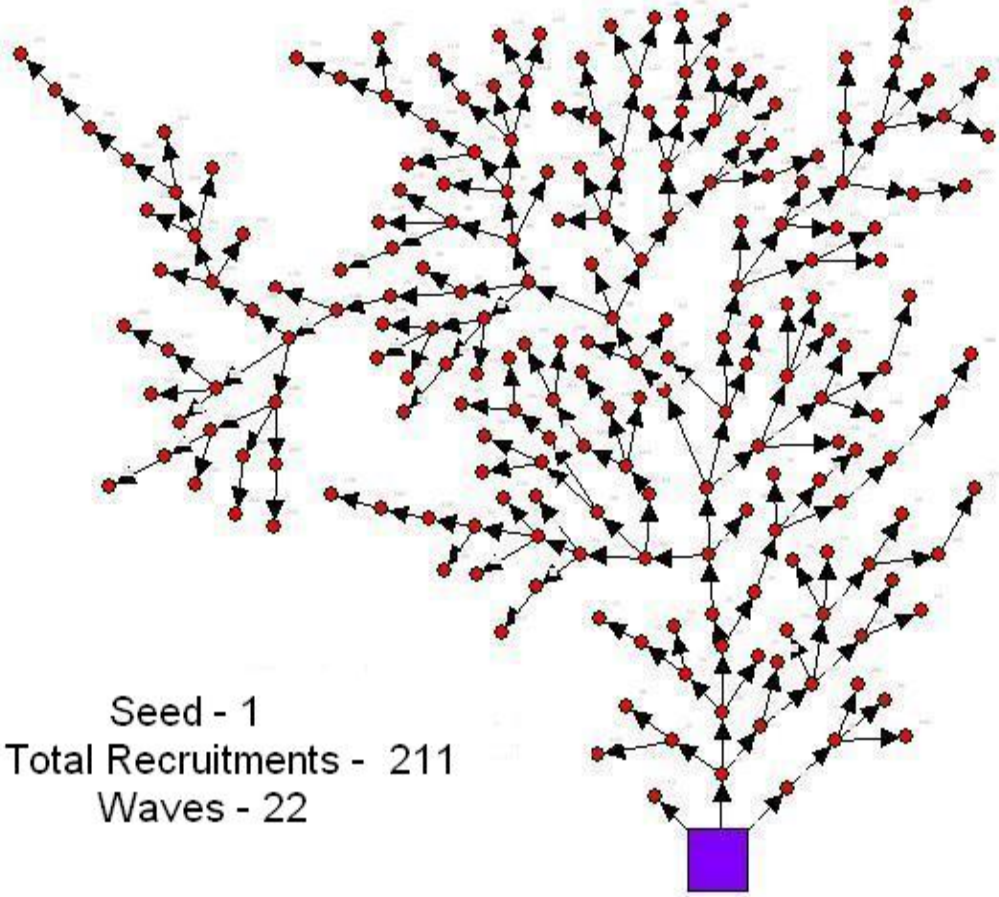
[If yes, give genital ulcer syndrome treatment and time for follow-up]

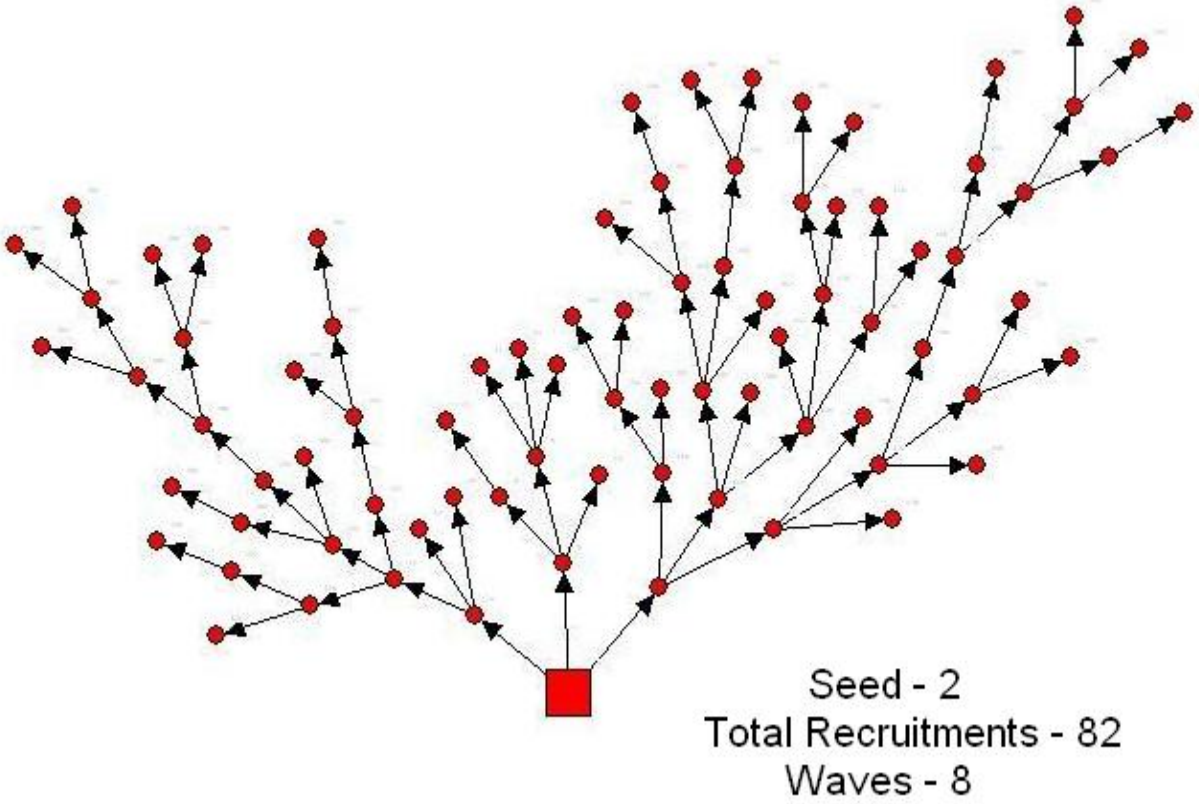
103. Have you had a tender or non-tender/solid or fluctuant swelling in the groin area in the past one month?

1. Yes 2. No

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

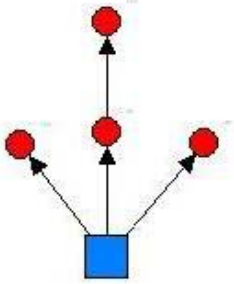
ANNEX – 6: Respondent Driven Sample of IDUs




Seed - 2
Total Recruitments - 82
Waves - 8

Seed - 3
Total Recruitment - 1
Wave - 0

Seed - 4
Total Recruitment - 1
Wave - 0



Seed - 5
Total Recruitments - 5
Waves - 2

ANNEX – 7: Participation in Post Test Counseling

Date	Counseling Center	Expected Client	Client Counseled		Client with HIV+	Client with HIV-
			N	%		
February 9 – April 6, 2009	Naulo Ghumti	300	26	11.3	1	25

ANNEX – 8: Reasons for Not Injected Drugs on the Previous Day

Injecting Practice	Estimated Population Proportions (%)	95% CI
Reasons for not injecting yesterday n=64		
Lack of money	71.0	28.5 – 97.1
Not use regularly	27.0	0.0 – 33.5
To quit slowly	20.8	3.1 – 54.3
Taking other medicines	5.7	5.6 – 16.8
Was in custody	2.8	2.0 – 10.6

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

ANNEX – 9: Part of the Body for Injecting Drugs

Typical Injection Points	Estimated Population Proportions (%) (N=300)	95% CI
Joint of leg and hip	42.0	39.8 – 51.5
Arm	21.3	16.1 – 25.9
Wrist	17.2	12.0 – 21.4
Elbow	6.3	3.8 – 8.7
Calf	4.3	0.9 – 5.9
Thigh	4.0	1.1 – 6.3
Palm	2.2	0.5 – 4.1
Armpit	1.1	0.2 – 1.8
Knee	0.7	0.0 – 1.2
Finger	0.4	0.0 – 0.6
Others	0.5	0.1 – 0.8

ANNEX – 10: Gathering Place to Inject Drugs

Gathering Places to Inject Drugs	Estimated Population Proportions (%) (N=300)	95% CI
Forest/Bushes/lawn/Farmland/chaur/Bansghari	43.2	35.4 – 48.8
Road	16.5	15.6 – 25.6
Own/friends/Drug-user's room/House	15.9	10.6 – 20.0
River bank	13.9	9.2 – 17.9
Toilet	2.2	0.6 – 4.1
Around school/Campus	2.0	0.1 – 3.5
Pool House	1.6	0.2 – 3.1
Bus/taxi/garage	1.4	0.4 – 2.3
Hotel/Lodge/Restaurant	1.4	0.1 – 2.9
Bus Park	1.0	0.3 – 1.6
Temple Area	0.9	0.0 – 1.9

ANNEX – 11: Combination of Different Drugs Injected

S.N.	Drugs Combination	Fourth Round – 2009 (N=291)
1	Norphin + Diazepam + Stargun	50
2	Norphin + Diazepam + Phenergan	41
3	Norphin + Diazepam	19
4	Norphin + Diazepam + Phenergan + Stargun	12
5	Diazepam + Phenergan + Stargun	10
6	Norphin + Phenergan + Stargun	10
7	Norphin + Phenaromain + Diazepam + Stargun	10
8	Norphin + Diazepam + Algic	9
9	Norphin + Phenaromain + Diazepam	8
10	Avil + Phenergan + Stargun	8
11	Avil + Diazepam + Phenergan	6
12	Norphin + Phenaromain + Diazepam + Phenergan	6
13	Norphin + Avil + Diazepam	5
14	Norphin + Phenergan	4
15	Diazepam + Phenergan	4
16	Elgic + Phenergan + Stargun	4
17	Phenaromain + Stargun	4
18	Phenaromain + Phenergan + Stargun	4
19	Diazepam + Algic + Phenermine	3
20	Phenaromain + Diazepam + Double 'O'	3
21	Diazepam + Tidigesic Stargun	3
22	Norphin + Avil + Diazepam + Stargun	3
23	Phenaromain + Diazepam + Stargun	3
24	Diazepam + Tidigesic + Phenergan	2
25	Norphin + Tidigesic	2
26	Norphin + Avil + Diazepam + Phenergan	2
27	Norphin + Algic + Phenermine	2
28	Norphin ++ Avil + Phenergan	2
29	Norphin + Diazepam + Starmine	2
30	Avil + Diazepam + Phenergan + Stargun	2
31	Avil + Diazepam + Stargun	2
32	Avil + Phenaromain + Phenergan + Stargun	2
33	Diazepam + Stargun	2
34	Norphin + Diazepam + Elgic + Stargun	2
35	Norphin + Avil + Stargun	2
36	Phenaromain + Elgic + Stargun	2
37	Norphin + Diazepam + Phenergan + Saipam + Starmine	1
38	Norphin + Avil + Phenergan + Stargun	1
39	Phenaromain + Diazepam + Phenergan + Stargun	1
40	Avil + Phenaromain + Diazepam + Tidigesic + Phenergan + Stargun	1
41	Phenaromain + Avil + Phenaromain + Diazepam	1
42	Norphin + Diazepam + Algic + Phenergan	1
43	Norphin + Phenaromain + Diazepam + Tidigesic + Phenergan + Codeine	1
44	Phenergan + Diazepam + Algic	1
45	Norphin + Avil + Phenaromain +Diazepam + Algic + Phenergan + Stargun	1
46	Diazepam + Phenergan + LSD	1
47	Norphin + Elgic + Phenergan + Stargun	1
48	Norphin + Avil + Diazepam + Tidigesic + Elgic + Phenergan + Proxygin + Nit	1
49	Avil + Diazepam + Elgic + Phenergan	1
50	Phenergan + LSD	1
51	Norphin + Avil + Diazepam + Elgic + Phenergan + Stargun	1
52	Phenaromain + Diazepam + Tidigesic + Elgic + Phenergan + Codeine + Proxy	1
53	Phenergan + Dygine + Stargun	1
54	Phenaromain + Diazepam + Elgic + Phenergan + Stargun	1
55	Norphin + Elgic + Phenergan + Dygine	1
56	Phenaromain + Tidigesic + Phenergan + Stargun	1
57	Norphin + Phenaromain + Diazepam + Phenergan + Stargun	1
58	Avil + Phenaromain + Diazepam + Phenergan + Saipam + Stargun	1
59	Avil + Phenaromain + Diazepam + Phenergan + Saipam + Proxyvon+ Stargun	1
60	Norphin + Phenaromain + Diazepam + Elgic + Stargun	1
61	Norphin + Avil + Dygine + Stargun	1
62	Phenaromain + Elgic + Phenergan + Stargun	1
63	Phenaromain + Diazepam + Elgic + Phenergan	1
64	Diazepam + Nytrosun + Stargun	1
65	Diazepam + Lubrigesic + Stargun	1
66	Norphin + Phenaromain + Tidigesic	1
67	Norphin +Bbrownsugar + Nytrosun	1
68	Norphin + Diazepam + Tidigesic	1
69	Norphin + Phenergan + Calmpose + Stargun	1
70	Phenergan + Stargun	1
71	Norphin + Phenaromain + Elgic + Stargun	1

72	Avil + Phenaromain + Stargun	1

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

ANNEX – 12: Drug Switching Practice and Reasons for it

Drug Switching Behavior	Estimated Population Proportions (%)	95% CI
Switched from one drugs to another drugs in past month	**(N=300)**	
Yes	0.4	0.1 – 1.0
No	99.6	99.0 – 99.9
Switched from	**(n=2)**	
Stargun to Jeet	50.0 *	NC
Phenargan +Algic + Stargun to Proxyvon + Nitrovate + Marijuana	50.0 *	NC
Reasons for switching one drug to another #	**(n=2)**	
Lack of money/expensive	50.0 *	NC
Leave slowly	50.0 *	NC

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.
NC – Not calculated (RDSAT conditions were not met)

ANNEX – 13: Types of Treatment and Institutions from Where Treatment Received

Types of Institutions	Types of Treatments (n=120)							
	Residential rehabilitation %	Out patient counseling %	Helped for cold turkey %	Forced for cold turkey %	With out drug %	With other drug %	Self help group %	Other treatment/ help %
Naulo Ghumti	35.0	39.2	4.2	-	-	28.3	-	4.2
Seren Foundation	16.7	18.3	-	-	2.5	10.8	0.8	5.0
Richmond Fellowship	15.0	14.2	-	-	-	10.8	-	1.7
Manish Care	3.3	4.2	0.8	-	-	3.3	-	1.7
Gateway Foundation	2.5	1.7	-	-	-	-	-	-
Magic Circle	1.7	1.7	-	-	-	1.7	-	0.8
Care Foundation	1.7	2.5	-	-	-	0.8	-	-
Youth Vision	0.8	0.8	-	-	-	0.8	-	-
Nava Kiran Ashram	0.8	0.8	-	-	-	-	-	0.8
Lumbani Punarsthapana Kendra	0.8	0.8	-	-	0.8	-	-	-
Support and Cara Center	-	0.8	-	-	-	-	-	-
Manipal Medical collage	-	0.8	-	-	-	-	-	-
Care foundation	-	-	-	-	1.7	-	-	0.8
Patan Hospital	-	-	-	-	-	-	-	-
Own home	-	-	-	-	-	0.8	-	-
Others	5.8	6.7	-	0.8	-	6.7	-	2.5
Total	**85.8**	**92.5**	**5.0**	0.8	**5.0**	**64.2**	0.8	**17.5**

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

ANNEX – 14: 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=66)		
Used other contraceptive	54.8	28.3 – 78.1
Didn't think it was necessary	40.9 *	NC
Don't like them	39.7	14.5 – 52.3
Partner objected	28.1	10.7 – 51.7
Didn't think of it	7.7	0.0 – 9.4
Not available	6.3	2.9 – 11.7
Willing to have baby	1.5 *	NC
Others	13.9	0.0 – 27.9
Reasons of not using condom with sex worker in the last sex (n=18)		
Didn't think of it	55.6 *	NC
Not available	33.3 *	NC
Don't like them	33.3 *	NC
Didn't think it was necessary	5.6 *	NC
Others	5.6 *	NC
Reasons of not using condom with non- regular partner in the last sex (n=37)		
Don't like them	42.8	0.0 – 82.6
Didn't think it was necessary	27.5	6.2 – 29.7
Didn't think of it	27.0 *	NC
Not available	22.9	4.4 – 36.9
Trust on partner	14.2	0.0 – 24.0
Partner objected	8.1 *	NC

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.
NC – Not calculated (RDSAT conditions were not met)