

**Integrated Biological and Behavioral Surveillance  
Survey among Female Sex Workers in Pokhara  
Valley, Nepal**

**Round V**



**Ministry of Health  
National Centre for AIDS and STD Control  
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## **Field Work Conducted by**

### **South Asian Institute for Policy Analysis and Leadership (SAIPAL)**

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## LIST OF ABBREVIATION

AIDS	Acquired Immune-Deficiency Syndrome
ART	Anti-Retroviral Therapy
CHBC	Community and Home Based Care
CSWs	Commercial Sex Workers
CWES	Children Women Empower Society
DIC	Drop-in-Centre
DoHS	Department of Health Service
DPHO	District Public Health Office
EQA	External Quality Assessment
EQAS	External Quality Assurance Scheme
FPAN	Family Planning Association of Nepal
FSWs	Female Sex Workers
GOs	Governmental Organizations
HA	Health Assistant
HIV	Human Immunodeficiency Virus
HTC	HIV Testing and Counseling
IBBS	Integrated Biological and Behavioral Surveillance
ID	Identification Number
IDUs	Injecting Drugs Users
IEC	Information, Education and Communication
IUCD	Intrauterine Contraceptive Device
KPs	Key Populations
MARPs	Most at Risk Populations
MDG	Millennium Development Goals
MLM	Male Labor Migrants
MSM	Men who have Sex with Men
NCASC	National Centre for AIDS and STD Control
NGOs	Non-Governmental Organizations

NHRC	Nepal Health Research Council
NPC	National Planning Commission
NPHL	National Public Health Laboratory
NRCS	Nepal Red Cross Society
NRs.	Nepalese Rupees
OE	Outreach Educators
PE	Peer Educators
PLHIV	People living with HIV
PMTCT	Prevention of Mother to Child Transmission
PPS	Probability Proportional to Size
PWID	People Who Inject Drugs
RPR	Rapid Plasma Regain
SACTS	STD/AIDS Counseling and Training Services
SAIPAL	South Asian Institute for Policy Analysis and Leadership
SC	Save the Children
SGS	Second Generation Surveillance
SI	Strategic Information
SITWG	Strategic Information Technical Working Group
SPSS	Statistical Package for the Social Sciences
STI	Sexually Transmitted Infection
TPPA	Treponema Pallidum Particle Agglutination
TPHA	Treponema Pallidum Hemagglutination Assay
UNAIDS	Joint United Nations Program on HIV/AIDS
UNDP	United Nation Development Program

## EXECUTIVE SUMMARY

This fifth round of Integrated Biological and Behavioral Surveillance (IBBS) survey was conducted among Female Sex Workers (FSWs) in Pokhara valley with the aim to monitor the trends of HIV and STIs (syphilis, gonorrhea and Chlamydia) prevalence and also the relevant risk behaviors in this population.

This descriptive serial cross-sectional survey was conducted between January and April 2016. Two stage cluster sampling method was followed in this study. Altogether 342 FSWs were participated for the study. A set of semi-structured questionnaire was prepared and administered to the female sex workers to acquire information on their HIV/STIs related knowledge and behavior including socio-demographic information, sexual behavior, exposure to HIV/STIs awareness program etc. Simultaneously, biological data (blood and vaginal swab) was collected to determine the prevalence of HIV and STI among surveyed female sex workers. Sero-prevalence of HIV infection was determined by using the standard diagnostic algorithms (rapid tests) and syphilis was tested using the Rapid Plasma Regain (RPR) test card. Gonorrhea and Chlamydia pathogens were determined by multiplex PCR based pathogen detection assay on syndrome cases confirmed under clinical observation.

Among the total 342 female sex workers (FSWs), 67.8% were establishment based and remaining 32.2% were street based. Though their birth place varies, majority of them were living in Pokhara since birth. The mean age of the respondents was 23.96, ranging from 16 to 48 years, with the majority of the sample clustered between 21-25 years of age. Majority of respondents (34.5%) were relatively from disadvantaged group (*janajati*). Almost 90% of respondents were literate of which 14 % of them had never attended formal schooling. More than half of the respondents were unmarried while 48% were ever married. The mean age of marriage for ever married respondents was found to be 17.18 years. Almost 41% had dependents that relied on their income. The 83.7% were children while 66% were adult.

Nearly 19% respondents stated that they had ever had a miscarriage. The history of miscarriage was found higher (25.7%) in street based FSWs than establishment based (13.3%). Likewise, 31.1% (51 out of 164) respondents reported that they had aborted their pregnancy. The number of FSWs who aborted their pregnancy was found to be high in establishment based (35.6% i.e.32 out of 90) than in street based (19 out of 74 i.e., 25.7%).

Regarding contraceptive methods, most of the respondents had heard about condom i.e., 95.9%, followed by oral pill (76.6%). In order to delay or avoid pregnancy 58.5% respondents were practicing at least one method of family planning. Higher percentage (63.4%) of establishment based FSWs were adopting method of family planning as compared to street based (48.2%). Condom is the most popular method among the respondents. Nearly 86% were using condom as a means of family planning.

Overall 0.3% (one out of 342) respondent was confirmed HIV positive and no one had active syphilis (RPR –ve or RPR titre<1:2). While accessing the syphilis history, no one was found to be infected at past (3.2% in 2004 to 0 in 2016). Similarly one respondent (0.3%) was found positive for *Chlymadia Trachomatis* and no one was found positive for *Neisseria Gonorrhoea*. It was found that both the HIV and *Chlymadia Trachomatis* infected one was street based FSW. It was observed that the prevalence of HIV and active syphilis was relatively low in 2016 than in previous rounds of IBBS survey. HIV prevalence was found 2% in 2004 and only 0.3% in 2016.

The average HIV/AIDs knowledge of risk factors answering correctly to all the three ABC (**A:** Abstinence from sex, **B:** Being faithful to one partner or avoiding multiple sex partners, **C:** Consistent condom use or use of a condom during every sex act)was 48.2 % and that of comprehensive knowledge of HIV/AIDS to all the five BCDEF (**B:** Being faithful to one partner or avoiding multiple sex partners, **C:** Consistent condom use or use of a condom during every sex act, **D:** Do you think a healthy-looking person can be infected with HIV, **E:**Can a person get the HIV virus from mosquito bite, **F:** Can a person get HIV by sharing a meal with an HIV infected person) was found 30.7%. The percentage

of FSWs who had knowledge on all the three ABC and all the five BCDEF has decreased by 6.3% from 2011 to 2016.

Half of the FSWs reported having multiple clients in one day. The median number of clients per day was 2.0 with range varying from 1 to 9. Most respondents (81.9%) used a condom at last sex with client and this was found significantly inclined from 64% in 2004 to 81.9% in 2016. Over the past 12 months, the proportion of condom use with regular client increased from 48% in 2004 to 72% in 2008 followed by a gradual drop to 68% in 2011 and 52.9% in 2016. Similarly, consistent condom use with non-paying regular partner was observed in increasing trend from 7% in 2004 to 41.8% in 2016. In each case the condom use was predominantly suggested by the FSWs themselves.

Exposure to HIV/STI awareness program was found very low. The exposure of the respondents to HIV/AIDS/STI related program decreases distraughtly in 2016 from the preceding year. Establishment based sex worker were less exposed to such awareness program. Despite of all these, the percent of female sex workers who had been tested for HIV in the past 12 months has gradually increased over the period of 2006 to 2016 from 29% to 70%. Further, a noticeable decrease was observed in condom carrying practice by 8.7% in 2016 (35% in 2011 to 26.3% in 2016).

Just over 70% respondents said that they had consumed alcohol in the past month. Only a few respondents i.e., 2.3% (8 out of 342) had injected drugs and of those who did, 87.5% of them shared needles. The survey result shows the trend of injecting drug increased from 1% in 2004 to 4.9% in 2011. Then there is decrease by 2.6% in 2016. It was observed that the proportion of respondents who had sex partners being IDU's declined from 7% in 2004 to 2% in 2008 and then inclined to 7.8% in 2011 to 9.1% in 2016.

Experiences of violence were reported amongst respondents with 14.9% being psychologically assaulted, 6.4% being physically assaulted and 6.1% sexually assaulted. The FSWs' attitude towards people living with HIV (PLHIV) can be considered rather

supportive as the majority of them indicate that they will share food and buy food from someone who has HIV.

The limited knowledge of risk factors and exposure to HIV/STIs related awareness program indicate the need of much more awareness efforts among female sex workers in Pokhara. As these risk groups are more likely to engage in sexual activities with multiple partners, awareness program should also focus on the correct and consistent use of condom. Since FSWs has had minimal exposure to HIV awareness and other prevention activities including visiting PEs/OEs, DIC, STI clinic and HTC, these services should be made user-friendly and the significance of knowing ones HIV status should be intensified as well.



# CHAPTER 1: INTRODUCTION

## 1.1 Background

The human immunodeficiency virus (HIV) and acquired immune deficiency syndrome (AIDS) still remains one of the most severe public health issues around the world with approximately 36.9 million people who were living with HIV at the end of 2014 (UNAIDS,2013). In Nepal the first cases of AIDS was reported in 1988. In recent years, the HIV/AIDS epidemic in Nepal has gained greater significance and Nepal has progressed from a “low HIV prevalence” country to one with a so-called concentrated HIV epidemic in certain sub-groups of the population (NCASC, 2005). The existing National HIV and AIDS Strategy (2011-2016) identifies people who Inject Drougs (PWID), Female Sex Workers (FSWs) and their clients, Male Labor Migrants (MLM) and their spouses and Men who have Sex with Men (MSM) as key populations (KP) affected by the epidemic (NCASC, 2012). Among these population, the epidemic is largely transmitted by heterosexual transmission that accounts for around 70%, followed by homosexual route and injecting drugs. Homosexuality and bisexuality account for 10.5% of the cases, blood transfusion accounts for 8%, IDUs account for 5%, and mother-to-child transmission account for 5% (UNAIDS, 2012). The Most at Risk Populations (MARPs) including female sex workers contribute about 23% of new HIV infections and with their partners’ contribute 40% of new infections. The male migrant worker in India from Nepal who meet the sex worker in working area, act as a bridge and transmit the infection to low risk population specially to rural women (NCASC, 2006).

Nepal's HIV prevalence has not changed much over the last five years, it has remained within 0.2 - 0.3 percent. The estimated HIV prevalence among 15-49 years was 0.23 percent in 2013. With this level of HIV infection, there are approximately 40,720 people living with HIV in Nepal. Although HIV prevalence has not changed much, the country has achieved reduction in the number of new infections, from 8,039 new infections annually in 2000 to 1,408 in 2013 (NCASC, 2014).Millennium Development Goals (MDG) report indicated that Nepal was on track to meet the MDG regarding HIV prevalence in 2011, because the number of HIV prevalence adults is in declining trend

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(NPC and UNDP, 2011). However, to meet the MDG target for 2016 (0.12%) set by NCASC, the declining rate of HIV prevalence should be accelerated (DoHS, 2011; NCASC, 2011). In addition, meeting MDG goal for Antiretroviral Therapy (ART) is even more difficult, because in 2012, among 26,876 adults and children with advanced HIV infections, only 7,719 (28.7 percent) were receiving ART (NCASC, 2012). This has to be increased to 80 percent by 2015 to achieve the MDG goal for ART.

The 2011 estimate of HIV affected population shows that the HIV infection was highest among female general population (27.3%) followed by male labour migrant (27%), remaining male population (16%), men sex with men (14.4%), male sex worker (7.2%) clientt of female sex worker (4.4%), injecting drug users (2.2%), and female sex workers (1.5%) (NCASC, 2012). It is also estimated that with current level of progress, the number of people living with HIV in Nepal would fall to 42,750 in 2015 from the 2011 estimate of 50,200 (NCASC, 2012b). In 2011/12, the HIV prevalence rates among the high-risk groups of PWIDs, MSM, FSWs, and CSWs were 6.3, 3.8, 1.7, and 0.0 percent respectively (NCASC, 2011 & 2012)

### **Female Sex Worker**

Sex work is defined as the exchange of sex for money or kind and the structure of sex work vary substantially around the world. Those who sell sex might work with or without a facilitator or controller (e.g. pimp, manager) through establishments such as public spaces, parks, streets. It has been widely accepted that female sex workers (FSWs) are high-risk group acquiring HIV and sexually transmitted infections (STIs). HIV infection among female sex workers plays an important role in the development of HIV epidemics in many regions of the world and has significant potential to cause HIV transmission to the general population, with male clients serving as the bridging group (Niccolai et. al, 2012; Pan et. al, 2011). This group works as source of STIs and HIV infection to the general population, mainly as a result of unprotected sex with their clients. Thus, clients of FSWs are also assumed to be the key to the spread of infection from FSWs to the general population (NCASC, 2010). Hence, the interventions designed to prevent HIV among FSWs will not

only improve the health of individual sex workers but may also decelerate HIV transmission among the broader population associated to sex workers and their clients.

The HIV and STI control board estimated that there are between 24,649 and 28,359 FSWs in Nepal, with an estimated 10,457 and 11,653 in Kathmandu valley alone (NCASC,2011). Globally, female sex workers are 13.5 times more likely to acquire HIV than other women of reproductive age (UNAIDS, 2013). In Asia and the Pacific, the likelihood is even higher with women in sex work; it is 29 times more likely to be living with HIV than other women of reproductive age (Baral et. al, 2012).

Integrated Bio-behavioral Surveillance (IBBS) 2011 reported HIV prevalence of 1.7 and 1.2% among FSWs in Kathmandu and Pokhara valley, respectively (NEW ERA/SACTS/FHI360, 2011). It was reported that, in Kathmandu, HIV prevalence among FSWs decrease from 2.2 in 2008 to 1.7 percent in 2011 (NCASC, 2011 and 2012). The HIV prevalence among street-based sex workers is more than threefold higher in Kathmandu valley i.e., 4.2 vs. 0% (NEW ERA/SACTS/FHI, 2011). Similarly, various IBBS survey carried out in Pokhara between 2004 to 2011 indicate no significant change in HIV prevalence among FSWs over the 8 years period.

Despite the consistent trend of low prevalence of HIV among FSWs for the last decade or so, STI prevalence among FSWs has varied considerably over the last decade. While prevalence of active syphilis among FSWs of Terai districts has decreased from 9.0% in 2003 to 0.3% in 2012, prevalence of gonorrhoea among the same population soared from 1.5% in 2009 to 4.5% in 2012 (NCASC,2014).

IBBS survey conducted in Kathmandu shows that HIV prevalence among FSWs was 2% in 2004, HIV prevalence among FSWs was declined to 1.4% in 2006, it was increased to 2.2% in 2008 and again declined to 1.7% in 2011. However, a significant decline of Syphilis infection has been observed over the same periods. Active syphilis has decreased from 6 percent in 2004 to 0.7 percent in 2011, while prevalence of syphilis has been declined to 2.5 percent in 2011 from 8.8 percent in 2004 (NCASC, USAID and ASHA, 2011).

It has been observed that, in both concentrated and generalized epidemics, HIV prevalence is considerably higher among sex workers than in the general population. The National HIV/AIDS Strategy 2011-2016 has adopted strengthening of the Second Generation Surveillance (SGS) system as one of the key principles of strengthening surveillance of HIV and STI in Nepal. One of the major components of SGS, and strategic direction of the national HIV strategy, is to conduct Integrated Biological and Behavioral Surveillance (IBBS) survey among key populations (KPs) in selected high risk clusters in regular interval. The type of work in which sex workers engage, like, unsafe working conditions, unsafe sex, barriers to the negotiation of consistent condom use, practice of multiple sex partners, unsafe injecting, lack of AIDs awareness and unequal access to appropriate health services are taken as some of the contributing factor for HIV transmission. Violence, alcohol and drug use in some settings also increase vulnerability and risk. Thus changes in these behaviors are a central part of outcome level monitoring. It was believed that the measures of risk behavior can be obtained through program specific behavioral surveys or integrated bio-behavioral surveys. Since 1999 under the HIV/AIDS surveillance plan, the NCASC has been conducting integrated bio-behavioral surveys (IBBS) on a regular basis particularly among the vulnerable populations, such as female sex workers (FSWs), injecting drug users (IUDs), men having sex with men/transgender (MSM/TG), labor migrants, and clients of FSWs in selected geographical areas of Nepal. This is the fifth round of IBBS survey which was planned and conducted so as to meet the targeted activity of National Plan on HIV and STI Surveillance.

## **1.2 Objectives of the study**

The overall objective of the survey is to describe trends in HIV prevalence, risk behaviors, socio-demographics, comprehensive HIV/AIDS knowledge and utilization of interventions among female sex workers in the Pokhara valley. The specific objectives are as follows:

1. To assess the socio-demographic profile of the FSWs in Pokhara valley
2. To estimate the prevalence of HIV and other STI syndromes among FSWs in Pokhara Valley
3. To assess the sexual and injecting behaviours related to HIV and STI among FSWs in the Pokhara Valley

4. To assess the level of condom use and safer sex practices among FSWs in Pokhara valley
5. To explore the associations between risk behaviors and infections with HIV and other sexually transmitted infections among FSWs in Pokhara Valley
6. To explore the knowledge about HIV/STIs, access to available HIV/STI prevention, care and support services among FSWs in Pokhara Valley
7. To assess the extent of alcohol consumption, injecting drug and other substance use among FSWs in Pokhara valley.
8. To explore the experience of stigma, discrimination and physical, sexual and other forms of violence among FSWs in Pokhara Valley
9. To determine the trends in the prevalence of HIV and STI infections among FSWs in Pokhara Valley

## CHAPTER 2: METHODOLOGY

### 2.1 Implementation of the study

The survey has been carried out by SAIPAL in collaboration with Aashirwad Swasthya Sewa Clinic. SAIPAL was responsible for the overall management of the survey and to carry out the fieldwork for data collection using pre-finalized survey tools in coordination with the NCASC and Save the Children. SAIPAL analyzed the collected data and prepared the report. Aashirwad Swasthya Sewa Clinic, on the other hand, had set up the laboratory in the field sites, provided training to lab technicians, supervised and collected blood samples, and conducted HIV and syphilis testing. The survey was conducted in close collaboration with many organizations working with FSWs like Goreto Nepal, Naulo Ghumti, Children Women Empower Society (CWES) and Red Cross Society.

### 2.2 Survey design

This is a descriptive serial cross-sectional survey using the same methods that were used in the previous rounds of IBBS surveys for FSWs. Face to face semi-structured interview was conducted to assess the risk behaviors of the FSWs. A biological samples test (blood test) was performed to measure the prevalence of HIV and STIs (syphilis). Moreover, vaginal swab was collected for those who have STI symptoms to test the Gonorrhoea and Chlamydia.

### 2.3 Survey population and survey area

The survey was conducted in Pokhara Valley among FSWs, who are one of the high-risk sub-populations identified in Nepal. The definition of the FSWs used in the survey was:

*“Women aged 16years and above reporting receipts of payment in cash or kind for sex with a male within the last 6 months”.*

This definition is being used since the first round of IBBS surveys (2004) in Pokhara Valley and other sites of Nepal.

There were mainly two types of sex work reported previously namely street-based sex work and the establishment-based sex work (New Era, 2011). In this round of IBBS survey, we tried to address both of these typologies of sex works. The operational definitions set for sample population are as follow:

***Street-based FSWs:** FSWs aged 16 years and above who solicit their clients from the streets, squatter settlements, premises of garment factories, and small liquor stalls (Bhattipasals).*

***Establishment-based FSWs:** FSWs aged 16 years and above who are based in establishments like hotels, lodges, restaurants, massage parlors, discotheques, guest houses spa and solicit their clients from there.*

## **2.4 Sample size**

Because the IBBS is being conducted repeatedly over the last few years, the sample size was calculated based on the prediction of a change over time in a specific variable of interest using the following formula (FHI360, 2000).

$$n = DE * ((z\alpha + z\beta)^2 (p1q1 + p2q2) / (p2 - p1)^2)$$

The variable of interest selected to represent a change over time was condom use at last sex. As there are no accurate estimates for condom use at last sex among FSWs in Nepal, it was used 68% (based on IBBS Pokhara in 2011). To detect the sample size, it was assumed a 10% increase in condom use at last sex from 68% to 78% over time, using a confidence interval of 95%, power of 80% and a design effect of 1.4 (Table 2.1), the sample size for FSWs in Pokhara was calculated to be 336.48. The sample is further increased by 2% to account for contingencies such as non-response or recording error. Hence, altogether 342 FSWs were recruited for the survey from Pokhara valley.

**Table 2.1 Definitions for the sample size calculation formula to survey FSWs**

<b>Formula term</b>	<b>Calculation</b>
DE (design effect) The design effect helps to mitigate biases associated with the sampling technique and to account for common random biases such as participants enrolling in a study more than one time and interviewer and response biases	1.4
P1 (baseline) Proportion at baseline	0.68
P2 (final evaluation) Proportion expected in the next round	0.78
Z $\alpha$ (95%) standard error associated with a level of confidence of 95%)	1.645
Z $\beta$ (80%) level of power in for the analysis	0.84
Sample size (n)	336.48
The sample is further increased by 2% to account for contingencies	n + 2%
Final sample size (N)	342

## **2.5 Sample design**

In order to compile the sampling frames, a preliminary mapping exercise was conducted in the first phase of the survey. In the preliminary visit of the survey sites, the survey team had identified the locations and survey population was estimated. The survey team was mobilized to the survey area to identify all possible locations where more FSWs were active (pockets) and to determine the number of FSWs who could be met at the time of the survey. FSWs available in a location during the time were listed and duplications in counting were minimized by listing those FSWs who were reported to be in the cluster for most of their time. Information regarding FSWs was pulled in from local key informants such as pimps, clients of FSWs, drivers, shopkeepers and restaurant/cabin staff members.

Similarly, the survey team had visited local organizations working with the survey population and collected the information from them too. At the visited location, the number of FSWs talked to, seen but not talked to, and reported by informants were aggregated to estimate a total number of FSWs in that specific location. A list of locations with the enumerated number of FSWs was prepared for the whole of Pokhara Valley.

Based on mapping exercise, sampling frames were prepared. The locations were divided into clusters or geographical area where FSWs sell sex. Areas with small numbers of FSWs [IBBS survey among FSWs in Pokhara Valley-2015, Round -V](#)



were merged together with the nearest location of other FSWs with similar typologies in order to ensure that the smallest clusters comprised at least 20 FSWs.

A two stage cluster sampling method was adopted to draw the samples. In the first stage, probability proportional to size (PPS) method was used to draw 30 clusters (out of total 47 clusters) from the sampling frame. At the second stage, the survey team members listed the number of FSWs present at the time of survey in each location within the selected cluster. Necessary help from local key informants was also considered to develop the list of FSWs present in the cluster at the time of field visit. From this list, 12 respondents from each cluster were randomly selected. Therefore, with the above sampling approach a total of 360 respondents were randomly selected from the sampled clusters. Refusals were recorded separately for each cluster. Though the sample size was 342, a total of 360 were listed to fulfill the probable refusal case. The field work for the survey started in January and ended in April 2016.

## **2.6 Identification and recruitment of FSWs**

Though it was a challenging task to recognize and engage FSWs from various areas, our experienced and dedicated researchers who had been frequently engaged in research of similar nature made it far easier.

Before proceeding in the actual field work, coordination meeting was organized with different stakeholders, organizations and key persons who had been working for the survey population and could provide the information about them. Moreover, study team made a consultation with the staff of HTC center, Drop in Center and STI clinic along with different peer and outreach educators (OEs/PEs).

The survey team established two interview sites with mobile clinic and laboratory for selected cluster at guest house/hotel. However, spots were established only after the consultations with local GOs, NGOs, and community people as well as with security personnel to ensure the security of the FSWs at the interview locations. Two mobile clinics; one in Srijana Chowk and other in Gaurighat, Lakeside were established at a time

with the aim to provide the package of services such as history taking, pre and post-test counseling, clinical examination, laboratory testing for HIV and STIs and syndrome treatment. After the decrease in flow of FSWs in Gaurighat site, it moved to Hallan Chowk.

After the establishment of site, the researchers started to approach the randomly selected sampled respondents. To ensure the eligible respondents according to survey definition, many screening questions were asked. Respondents, who answered satisfactorily of all the screening questions, were considered as eligible respondents and informed briefly about the purpose, objectives and methodology of the survey. After agreeing to participate in a survey the field enumerators took them into interview site and administered an informed consent witnessed by motivator to ensure that they understood the consent well. They were also informed about the services being offered for them at the clinic. Then they were given a small slip with a unique identifying number, which was then recorded on their behavioral survey and their biological samples. Then after respondent were enrolled in the process of interview, testing of blood for HIV, clinical examination and the treatment of STIs followed. However, privacy and confidentiality were strictly maintained during data collection. In addition, NRs. 400 was provided to each respondent to compensate transportation cost. The data collection completed between the 10<sup>th</sup> February and 8<sup>th</sup> March 2016.

## **2.7 Refusal**

People from local NGOs, peer groups and bar owner were used as local motivators to motivate the randomly selected respondents. This helped to build a confidential relationship with the FSWs and facilitated to actively participate in the survey. However, all the participants in the survey were informed that their participation was voluntary. Any of participants could refuse to participate in the survey at any stage even after arriving at the interview sites due to any reason.

Field team approached to 360 randomly selected FSWs, out of them 18 respondents refused to enroll in the survey. Ten of them refused at the time of approaching the sex

workers at different locations due to busy time schedule, five refused after arriving at the interview sites and three participants declined to give biological samples as they recently had test for HIV.

## **2.8 Control of duplication**

Researchers from two spots had coordinated among themselves to avoid duplication of the same FSW as they were more familiar with the participants and could identify them. Also, the lab technicians and clinical person who examined and treated the respondents at the survey site were also made alert.

## **2.9 Survey personnel**

The team leader was responsible to conduct the survey by mobilizing other team members. The survey team comprised a team leader, a research officer, a survey coordinator, a data analyst and 21 field enumerators including runners and one lab supervisor. Two field teams were formed, each comprising one research assistant, one field coordinator, two female interviewers, one staff nurse, one H.A., one lab technician, one counselor, and two local runners. Hence, the total of 25 members formed the team.

## **2.10 Recruitment and training of research team**

The people who were experienced and/or had involved in similar type of study were given first priority as field researcher. Before the field work started, intensive training was provided to the researchers for 6 days (from 3<sup>rd</sup> to 8<sup>th</sup>February) by SAIPAL in coordination with NCASC and SC. The training was conducted with the aim of imparting knowledge to the field researchers regarding IBBS survey, its importance and objective. The focus was centered regarding the whole process of data collection including tools, techniques and mechanism. Moreover, the training session had also included mock interviews, role-plays, class lectures, and sharing previous experiences (problems and solutions). Different possible problems during the field visit that could come up while approaching the sex workers and the ways to solve them had also been discussed. The training also provided a clear concept of informed consent, pre-test counseling, and basic knowledge of HIV/AIDS.

[IBBS survey among FSWs in Pokhara Valley-2015, Round -V](#)

## **2.11 Data collection tools**

A draft of semi-structured questionnaire provided by the NCASC was updated in combined meeting of different stake holders (NCASC, SC, UNAIDS, FHI360, SAIPAL) and other concerned organizations. After the completion of the training to the survey team, the tools were pre-tested in similar place and population in Kathmandu. The tools were finalized by incorporating the feedback received during the pre-test exercise. However, the information collected during the pre-test are not included in this report.

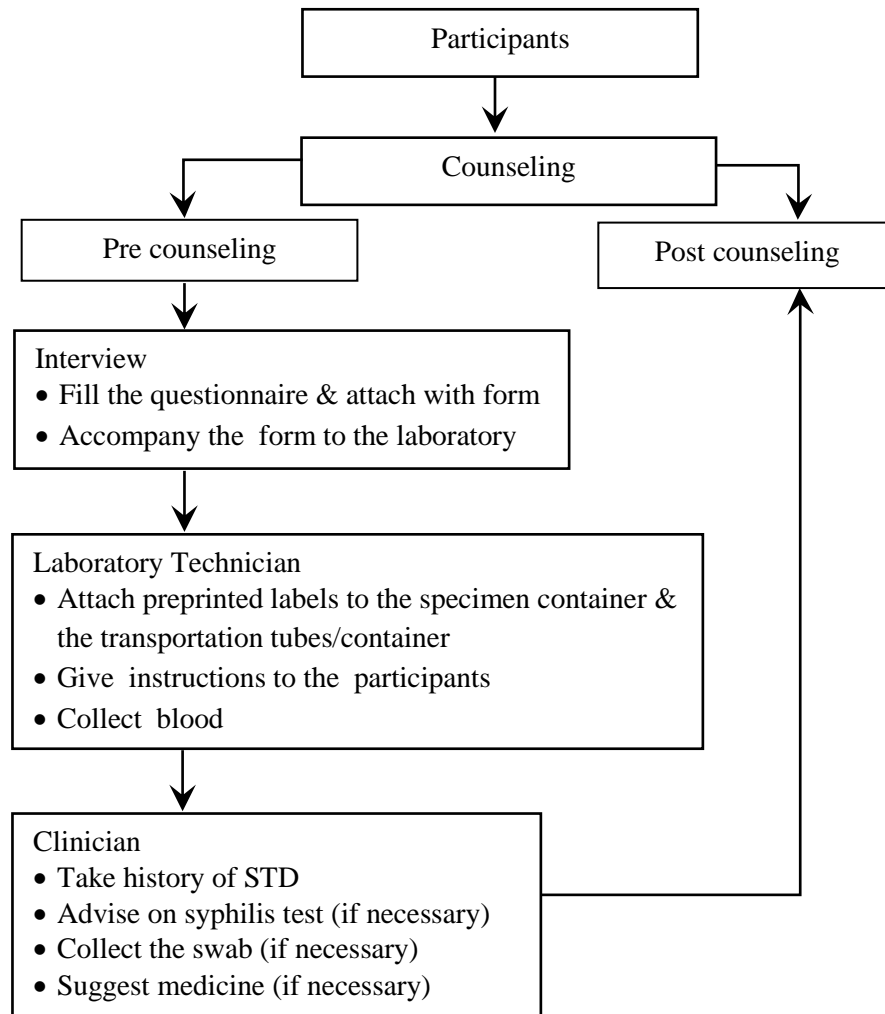
## **2.12 Field operation procedures**

### ***Interview Site Set-up***

Two interview sites with clinic and laboratory facilities were established in Srijana Chowk and Gaurighat. However, the site from Gaurighat moved to Hallan Chowk as the flow of respondents decreased. Locations for interview sites were selected with the view of maximizing the convenience for bringing respondents to the clinic after consulting different stakeholders. Each clinic included a lab facility for blood drawing and centrifuging the blood for separation of sera. Separate room for each activity, including interview, blood collection, general physical check-up, STI examination and counseling were managed.

### ***Clinical Procedures***

Along with symptomatic examination of STIs, vital signs (temperature, blood pressure, pulse rate, weight) were also measured and syndrome treatment was provided for all the participants. Moreover, information about current STI symptoms was asked to all the participants. Genital examination was performed and accompanied with speculum examination for symptomatic respondents and provided medicine in accordance with the national STI case management guidelines 2006. Altogether 11 respondents received syndrome treatment for STIs. General medicine like paracetamol, alkalizing agents and vitamins were distributed as per necessity.



**Figure 1.1 Flow chart of process**

***Biological testing***

After completing the behavioral survey with respondents' consent, a 5 ml blood sample was collected for HIV and Syphilis test and the serum was separated. Both HIV rapid tests and syphilis RPR tests were performed using the serum. At the same time, vaginal swab for testing gonorrhea and Chlamydia was also collected only from symptomatic respondents. All the collected samples were labeled with respondent's unique identifying number. All the samples collected for testing gonorrhea and Chlamydia were placed into transport tube containing specimen transport buffer. Then the specimens were frozen at a temperature of -12 to -20°C and sent back to National Public Health Laboratory (NPHL) for analysis after all the activities in the field were completed.

Blood samples were screened for HIV following national HIV testing algorithm

- First step A1: Determine HIV<sup>1/2</sup> - for screening the test
- Second step A2: Uni-Gold HIV- to confirm the positive sample
- Third step A3: Statpak HIV- <sup>1/2</sup> as a tie breaker test for final confirmation of samples that were found reactive on the first step and non-reactive on the second step

Rapid Plasma Regain (RPR) test card was used for syphilis test. All samples with positive RPR were further tested for the titre of up to 64 times dilution. On the basis of titre of RPR, all the specimens with RPR/TPHA positive results were divided into two categories.

- RPR +ve with Titre < 1:8 - History of syphilis
- RPR +ve with Titre 1:8 or greater - Current syphilis requiring immediate treatment

Gonorrhea and Chlamydia pathogens were determined by multiplex PCR based pathogen detection assay on syndrome cases confirmed under clinical observation.

Universal precautions and stringent waste management protocols were also followed.

## National HIV testing algorithm: serial testing algorithm

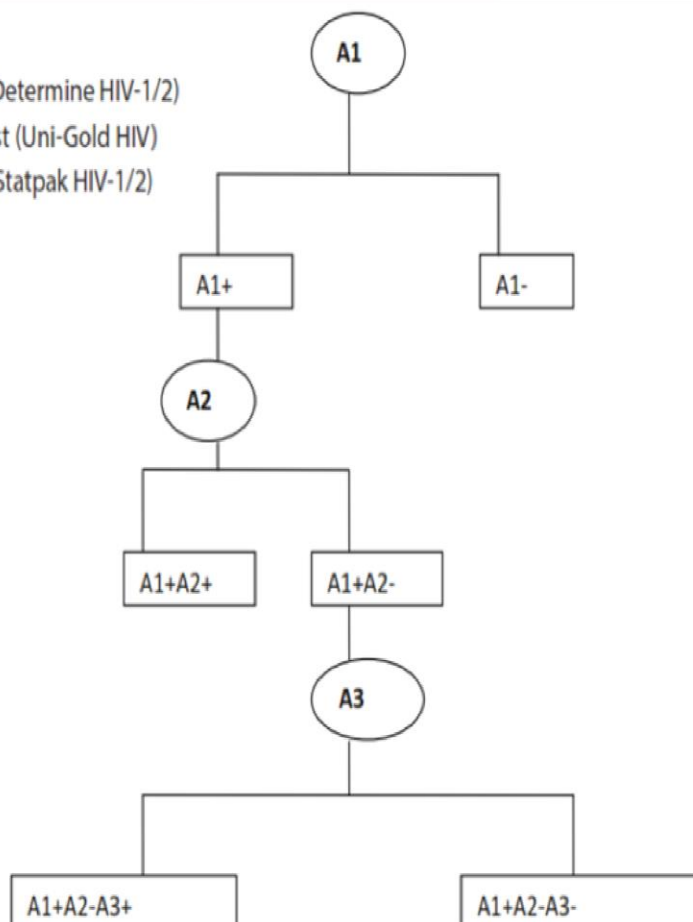
A1: Screening Rapid test (Determine HIV-1/2)

A2: Confirmatory Rapid test (Uni-Gold HIV)

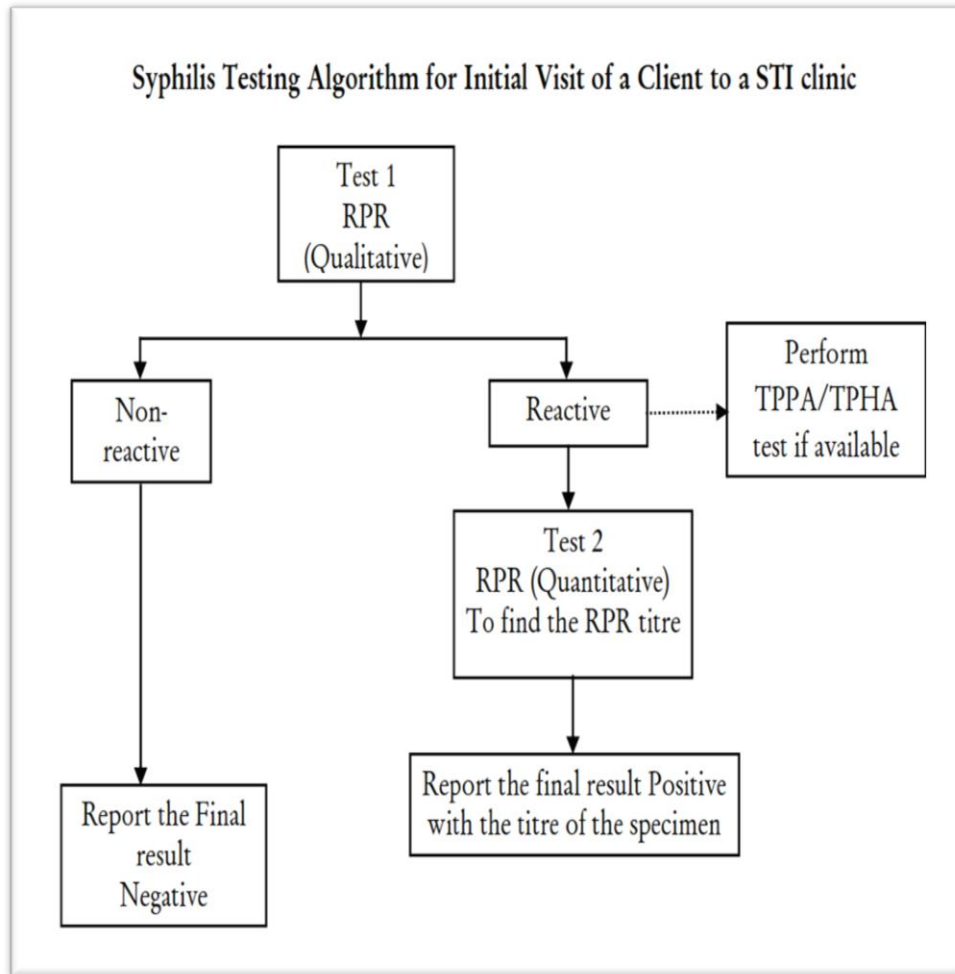
A3: Tiebreaker Rapid test (Statpak HIV-1/2)

(+) = Reactive

(-) = Non Reactive



TEST 1 (A1)	TEST 2 (A2)	TEST 3 (A3)	HIV Status
Non-reactive			Negative
Reactive	Reactive		Positive
Reactive	Non-reactive	Non-reactive	Negative
Reactive	Non-reactive	Reactive	Positive



### ***Quality Control of Laboratory Tests***

Quality control was strictly maintained throughout the collection, handling, and testing of the specimens. All the tests were performed using internal controls. These controls do have recorded along with the other laboratory data. Aliquots of selected specimens (serum and vaginal swab) were prepared in the field and sent to Aashirwad Swasthya Sewa Clinic's laboratory in Kathmandu within a week of specimen collection. Specimens were stored at Aashirwad Swasthya Sewa Clinic's laboratory at a temperature of -12 to -20°C. Once all the activities in the field were completed, Aashirwad Swasthya Sewa Clinic handed over the specimens to NPHL for external quality assessment.



## 2.13 External quality assessment

External quality assessment (EQA) is evaluation to the performance of a testing laboratory by an external agency. An External Quality Assessment Scheme (EQAS) is very essential to determine the quality of testing. All HIV positive samples and 10% of HIV negative were sent to National Public Health Laboratory (NPHL) for external quality assessment (EQA). Similarly, all RPR reactive and 10% of non-reactive samples (Serum samples) were sent for conformation at NPHL as a part of EQA.

### HIV testing

Altogether 35 serum specimens were sent for NPHL for external quality assessment. Among them 1 was identified as HIV positive in the field. Rapid HIV test was repeated by NPHL and result was found same as in field.

Test result from field	NPHL results		Total
	Positive	Negative	
Positive	1	0	1
Negative	0	34	34
<b>Total</b>	<b>1</b>	<b>34</b>	<b>35</b>

### RPR testing

Altogether 33 serum specimens were sent at NPHL for RPR retesting. All the 33 test results from NPHL were found in accord with field results and conformed as negative.

Test result from field	NPHL results		Total
	Positive	Negative	
Positive	0	0	0
Negative	0	33	33
<b>Total</b>	<b>0</b>	<b>33</b>	<b>33</b>

**Nucleic acid amplification tests (NAAT) - Testing of *Gonorrhea* and *Chlymadia* by PCR (Polymerase chain reaction) technique**

Altogether 11 sample of vaginal swab were sent to NPHL for *Neisseria gonorrhoea* and *Chlymadia trachomatis* PCR testing. Among them 1 sample was found positive for *Chlymadia trachomatis* and all the 11 sample was found negative for *Neisseria gonorrhoea*.

## **2.14 Coordination and monitoring**

The overall monitoring of the survey was carried out by NCASC/SC. The Key team members attended the call made by NCASC/SC for monitoring of proposed study and present the progress in research work. SAIPAL carried out the overall coordination of the field implementation and report writing of the survey. Aashirwad Swasthya Sewa Clinic was responsible for setting up the laboratory and collecting, storing, and testing blood samples.

The key research team members had monitored and supervised the field activities. The research officer was responsible on a day-to-day basis for ensuring that the survey was being implemented in the field according to the protocol. Team meetings were conducted every week to plan ahead and solve any sort of field-level problems. The research officer in the field reported to the project coordinator whenever necessary. A technical staff from Aashirwad Swasthya Sewa Clinic was also assigned for monitoring to the technical units in field work. The observations and suggestions during the monitoring were shared with the research team in the field at the end of the monitoring visit and were also communicated with the team leader.

## **2.15 Ethical issues**

Ethical approval was obtained from the Nepal Health Research Council (NHRC), the government's ethical clearance body. The approved survey protocol, consent forms, and questionnaires were used in field work. The participants involved in the in-depth interviews and sample surveys were fully informed about the nature of the study. They were also be

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 and withdrawal would not affect the services they would normally receive from the survey. A consent form describing the objectives of the study, the nature of the participant's involvement, the benefits, and confidentiality issues were clearly informed to all the respondents.

## **2.16 Constraints in the field work**

It was quite a challenging task to convince the FSWs to participate in the survey. As they had to go for lengthy interview process and wait for the test result they did not show much interest in participation. Frequent and strict police patrol was also a cause which created difficulty to the researchers to find survey populations. Moreover, the transportation strike for three days and public holidays made slight obstacles during the period of data collection.

## **2.17 Data processing and analysis**

After completing data collection, all the data was kept secured. All data was made accessible only to the core research team. All the information was kept confidential and no leakage has been made between data and subject for their protection.

All completed questionnaires in tab were downloaded from server then was manually edited and coded. A cleaned data set was transferred into SPSS database. Before transferring to the SPSS software, consistency and range checks were carried out for all the questionnaires. Those data were then analyzed with SPSS 21.0. Results were obtained through the frequency distribution and cross tabulation of the variables. Necessary tables, figures were presented in proper context. A detailed plan for higher level statistical analysis such as trend analysis was prepared after the completion of descriptive analysis.

## **2.18 Data quality**

The team leader was also involved in the field in data collection. The team leader accompanied the team, supervised the fieldwork and provided feedback. The core team members were complemented by the team and spent time to monitor the fieldwork. Particularly, they examined each of the completed questionnaires and provided feedbacks on the spot to the field researchers. Frequent telephonic communications with the researchers had maintained to monitor the progress and quality of the data collection.

## **2.19 Dissemination of IBBS survey findings**

Dissemination of the IBBS surveys was conducted at two levels: First, the key findings were shared with the survey community in Pokhara valley and their comments were incorporated to support the IBBS findings. The survey finding was also shared at the national/central level in Kathmandu among a wider group of government, non-government organizations, donor agencies and stakeholders working in the field of HIV and AIDS in Nepal. Focus of the central-level dissemination was primarily on the status and the trends of the HIV epidemic among FSWs in Pokhara valley. It is expected that the finding shall support to draw possible policy and program-level conclusions.

## CHAPTER 3: KEY FINDINGS

### 3.1 Socio-demographic characteristics

This chapter includes the composition of socio-demographic characteristics of the surveyed female sex workers of Pokhara valley.

A total of 342 FSWs of different categories were interviewed for IBBS survey of Pokhara valley. Among them 232 (67.8%) were establishment based and 110 (32.2%) were street-based FSWs.

**Table 3.1 Type of FSWs**

Type of FSWs	Frequency	Percent
Establishment based	232	67.8
Street based	110	32.2
<b>Total</b>	<b>342</b>	<b>100.0</b>

**Table 3.2 Birthplace and residential status of female sex workers**

Birthplace and Residential status	Frequency	Percent
Kaski	126	36.8
Syangja	30	8.8
Tanahu	17	5.0
Gorkha	14	4.1
Parbat	11	3.2
India	3	0.9
Other places	141	41.2
<b>Period of living</b>		
Since birth	146	42.7
Up to 12 Months	20	5.8
13 Months - 60 Months	95	27.8
61 Months - 120 Months	56	16.4
More than 120 Months	25	7.3
<b>Total</b>	<b>342</b>	<b>100.0</b>

The birthplace of 36.8% respondents was Kaski district including Pokhara itself. Three female sex workers were born in India and rest of respondents came from adjoining districts of Syangja, Tanahu, Parbat, Gorkha, Morang, Kathmandu, Sindhupalchowk, Dolakha etc. Though their birth places vary, majority (42.7%) of them were living in Pokhara since birth. Almost 16% were living in Pokhara for 6 years and even more.

**Table 3.3 Socio-demographic characteristics of female sex workers**

Socio-demographic characteristics of respondents	Total		Establishment		Street based	
	N	%	N	%	N	%
<b>Age (Mean: 23.96 / Median: 23.0 / Range: 16-48)</b>						
16-20	101	29.5	64	27.6	37	33.6
21-25	138	40.4	111	47.8	27	24.5
26-30	71	20.8	44	19.0	27	24.5
31-35	19	5.6	8	3.4	11	10.0
36-40	8	2.3	2	0.9	6	5.5
41-45	3	0.9	1	0.4	2	1.8
46-50	2	0.6	2	0.9	0	0.0
<b>Caste</b>						
Dalit	49	14.3	22	9.5	27	24.5
Relatively disadvantaged <i>janajati</i>	118	34.5	90	38.8	28	25.5
Disadvantaged non-dalitterai caste groups	6	1.8	5	2.2	1	0.9
Relatively advantaged <i>janajatis</i> (Newar, upper caste groups)	71	20.8	50	21.6	21	19.1
	98	28.7	65	28.0	33	30.0
<b>Literacy status</b>						
Illiterate	34	9.9	11	4.7	23	20.9
Literate	308	90.1	221	95.3	87	79.1
<b>Level of education</b>						
Primary	46	14.9	39	17.6	7	8.0
Lower secondary	46	14.9	35	15.8	11	12.6
Secondary	126	40.9	85	38.5	41	47.1
Higher secondary	29	9.4	25	11.3	4	4.6
Above Higher secondary	18	5.8	16	7.2	2	2.3
Literate without formal schooling	43	14.0	21	9.5	22	25.3
<b>Total</b>	<b>308</b>	<b>100.0</b>	<b>221</b>	<b>100.0</b>	<b>87</b>	<b>100.0</b>
<b>Marital status</b>						
Married	122	35.7	59	25.4	63	57.3
Divorced/Permanently Separated	38	11.1	28	12.1	10	9.1
Widow	4	1.2	3	1.3	1	0.9
Never married	178	52.0	142	61.2	36	32.7
<b>Age at divorce/separated/widowed (Mean: 23.10 / Median: 23.0 / Range: 16-33)</b>						
Below 20	8	19.0	5	16.1	3	27.3
20-24	19	45.2	16	51.6	3	27.3
25-29	12	28.6	9	29.0	3	27.3
30-34	3	7.1	1	3.2	2	18.1
<b>Total</b>	<b>42</b>	<b>100.0</b>	<b>31</b>	<b>100.0</b>	<b>11</b>	<b>100.0</b>
<b>Age at first marriage (Mean: 17.18 / Median: 17.0 / Range: 12-28)</b>						
15 and below	42	25.6	18	20.0	24	32.4
16-20	107	65.2	66	73.3	41	55.4
21-25	13	7.9	6	6.7	7	9.5
26-30	2	1.2	0	0.0	2	2.7
<b>Total</b>	<b>164</b>	<b>100.0</b>	<b>90</b>	<b>100.0</b>	<b>74</b>	<b>100.0</b>

The majority (40.4%) of the respondents was between 21 and 25 years of age. Nearly 30% of respondents were young between 16 to 20 years of age group. The mean age of respondents was 23.96 years with range varying from 16 to 48 years. The median age of the both establishment based and street based FSWs were 23.0 ranging from 16 to 48 years in establishment based and 16 to 45 years in street based.

The population composition represents the various ethnic group of Nepal. In spite of that, the representation of upper caste group is comparatively high i.e. 28.7% followed by relatively disadvantaged *janajati* (excluding Newar, Thakali, Gurung). Out of 342 respondents, majority (90.1%) was literate. Out of total establishment based FSWs, more than 95% were literate and among street based nearly 80% of them were literate.

Majority (52.0%) of respondents was unmarried, but the highest proportion was in the establishment based category where 142 (61.2%) were unmarried. Approximately 48% of respondents were ever married and 35.7% were currently married. Among the currently married respondents, a slightly higher percentage was reported from street based. The median age of the married respondents was 17 years with range varying from 12 to 28 years. Almost 11% respondents were permanently separated from their marital partner. The median age of the divorced respondents was 23 years with range differing from 16 to 33 years.

Out of 342 respondents, only 9.9% were illiterate and the rest 90.1% were literate. The majority (95.3%) of respondent's from establishment based were literate as compared to street based (79.1%). Out of total literate respondents, 14% respondents only can read and write as they haven't attended any formal schooling. Majority (25.3%) of such respondents were street based as compared to establishment based (9.5%).

## **3.2 Living status**

Irrespective of their marital status, few married respondents (9%) reported that they were living with their male friend. Nearly 12% establishment based and 6.3% street based married FSWs were living with their male friend. However, half of the married respondents (50%) were living with their husband at present. Also, equal percentage (9%) of unmarried respondents was living with male friends or boyfriend. Nearly 23% of respondents were living alone, 19.6 with other female and 12.3 with their children.

Almost 41% (141 out of 342) had dependents who rely on their income of which 83.7% were children and 66% were adult. Nearly 50% had 2 to 3 dependents, 17% had one, 25% had 4 to 5 dependents and rest 9.3% had more than six dependents. The mean number of dependent was 3.05 with range varying from 1 to 9 people. (Table 3.4)

## **3.3 Pregnancy history of ever married female sex workers**

Among the ever married respondents, almost 81% had given birth to as a minimum one child. Over 3/4<sup>th</sup> of the respondents (76.8%) and 71.8% had given birth to one male and female child respectively. In total, 4/5<sup>th</sup> of the respondents had given to two children.

While asked about the history of miscarriage and termination of pregnancy, 18.9 % respondents stated that they had ever had a miscarriage. The history of miscarriage was found higher in street based (25.7%) than establishment based (13.3%) FSWs. Most of the respondents (77.4%) had one miscarriage. (Table 3.5)

Likewise, 31.1% respondents reported that they had aborted their pregnancy. The number of FSWs who aborted their pregnancy was found to be high in establishment based (35.6%) than in street based (25.7%).

Out of 51 abortions, 2/3<sup>rd</sup> of the abortion was conducted by health personnel like doctor (37.3%) and nurse (29.4%) whereas 13.7% aborted without any assistance. The respondents stated that they need no help at the time of abortion they had done it themselves simply by taking certain medicine (Table 3.5.1).

IBBS survey among FSWs in Pokhara Valley-2015, Round -V



**Table 3.4 Living status and dependents of FSWs**

Living status and dependents	Total		Establishment based		Street based	
	N	%	N	%	N	%
Respondents living with						
Husband	61	17.8	28	12.1	33	30.0
Male friend	29	8.5	21	9.1	8	7.3
Relatives	48	14.0	29	12.5	19	17.2
Other females	67	19.6	59	25.4	8	7.3
Children	42	12.3	25	10.8	17	15.5
Alone	77	22.5	58	25.0	19	17.2
Family / Mother / Sisters	18	5.3	12	5.2	6	5.5
<b>Total</b>	<b>342</b>	<b>100.0</b>	<b>232</b>	<b>100.0</b>	<b>110</b>	<b>100.0</b>
<b>Currently married respondents living with male friend</b>						
Yes	11	9.0	7	11.9	4	6.3
No	111	91.0	52	88.1	59	93.7
<b>Total</b>	<b>122</b>	<b>100</b>	<b>59</b>	<b>100.0</b>	<b>63</b>	<b>100.0</b>
<b>Unmarried respondents living with male friend</b>						
Yes	16	9.0	12	8.5	4	11.1
No	162	91.0	130	91.5	32	88.9
<b>Total</b>	<b>178</b>	<b>100</b>	<b>142</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>
<b>Have dependents</b>						
Yes	141	41.2	94	40.5	47	42.7
No	201	58.8	138	59.5	63	57.3
<b>Total number of dependents</b>	<b>Mean number of dependent : 3.05</b>		<b>Range: 1-9</b>			
One	24	17.0	17	18.1	7	14.9
2-3	69	48.9	48	51.1	21	44.7
4-5	35	24.8	21	22.3	14	29.8
6-7	7	5.0	4	4.2	3	6.4
8 and above	6	4.3	4	4.2	2	4.3
<b>Total</b>	<b>141</b>	<b>100.0</b>	<b>94</b>	<b>100.0</b>	<b>47</b>	<b>100.0</b>
<b>Total number of dependent adult</b>						
One	34	36.6	19	30.2	15	50.0
2-3	43	46.2	32	50.8	11	36.6
4-5	12	12.9	10	15.9	2	6.7
6-7	4	4.3	2	3.1	2	6.7
<b>Total</b>	<b>93</b>	<b>100.0</b>	<b>63</b>	<b>67.0</b>	<b>30</b>	<b>63.9</b>
<b>Total number of dependent children</b>						
One	48	40.7	32	41.0	16	40.0
2-3	64	54.2	46	59.0	18	45.0
4-5	6	5.1	0	0.0	6	15.0
<b>Total</b>	<b>118</b>	<b>100.0</b>	<b>78</b>	<b>83.0</b>	<b>40</b>	<b>85.1</b>

**Table 3.5 Pregnancy history of ever married female sex workers**

Pregnancy History of Ever Married Female Sex Workers	Total		Establishment based		Street based	
	N	%	N	%	N	%
<b>Respondent ever gave birth</b>						
Yes	132	80.5	74	82.2	58	78.4
No	32	19.5	16	17.8	16	21.6
<b>Total</b>	<b>164</b>	<b>100.0</b>	<b>90</b>	<b>100.0</b>	<b>74</b>	<b>100.0</b>
<b>Male child (Mean: 1.30 / Median: 1.00)</b>						
1	76	76.8	42	79.2	34	73.9
2	18	18.2	9	17.0	9	19.6
3	4	4.0	2	3.8	2	4.3
5	1	1.0	0	0.0	1	2.2
<b>Total</b>	<b>99</b>	<b>100.0</b>	<b>53</b>	<b>71.6</b>	<b>46</b>	<b>79.3</b>
<b>Female child (Mean: 1.40 / Median: 1.00)</b>						
1	56	71.8	35	77.8	21	63.6
2	14	17.9	8	17.8	6	18.2
3	7	9.0	2	4.4	5	15.2
4	1	1.3	0	0.0	1	3.0
<b>Total</b>	<b>78</b>	<b>100.0</b>	<b>45</b>	<b>60.8</b>	<b>33</b>	<b>56.9</b>
<b>Total number of live birth (Mean: 1.80 / Median: 2.00)</b>						
1	63	47.7	35	47.3	28	48.3
2	45	34.1	31	41.9	14	24.1
3	14	10.6	7	9.5	7	12.1
4	8	6.1	0	0.0	8	13.8
5	1	0.8	1	1.4	0	0.0
6	1	0.8	0	0.0	1	1.7
<b>Total</b>	<b>132</b>	<b>100.0</b>	<b>74</b>	<b>100.0</b>	<b>58</b>	<b>100.0</b>
<b>History of miscarriage</b>						
Yes	31	18.9	12	13.3	19	25.7
No	133	81.1	78	86.7	55	74.3
<b>Total</b>	<b>164</b>	<b>100.0</b>	<b>90</b>	<b>100.0</b>	<b>74</b>	<b>100.0</b>
<b>Total number of miscarriage</b>						
1	24	77.4	10	83.3	14	73.7
2	3	9.7	2	16.7	1	5.3
3 and more	4	12.9	0	0.0	4	21.0
<b>Total</b>	<b>31</b>	<b>100.0</b>	<b>12</b>	<b>100.0</b>	<b>19</b>	<b>100.0</b>

Still one fourth (25%) of the respondents wished to have a child. Among them more than half (53.7%) wished to have child after two years, 1/4<sup>th</sup> of them wished to have in the next two years period. Almost 22% (9 out of 41) respondents declared that they wished to have child in the next six months, and 2/3<sup>rd</sup> (6 out of 9) of them were street based FSWs. (Table 3.5.1)

**Table 3.5.1 Pregnancy history of ever married female sex workers**

Pregnancy History of Ever Married Female Sex Workers	Total		Establishment based		Street based	
	N	%	N	%	N	%
<b>History of pregnancies aborted</b>						
Yes	51	31.1	32	35.6	19	25.7
No	113	68.9	58	64.4	55	74.3
<b>Total</b>	<b>164</b>	<b>100.0</b>	<b>90</b>	<b>100.0</b>	<b>74</b>	<b>100.0</b>
<b>Total number of pregnancy aborted</b>						
1	32	62.7	20	62.5	12	63.2
2	8	15.7	5	15.6	3	15.8
3	4	7.8	3	9.4	1	5.3
4	3	5.9	2	6.3	1	5.3
More than four	4	7.9	2	6.3	2	10.5
<b>Total</b>	<b>51</b>	<b>100.0</b>	<b>32</b>	<b>100</b>	<b>19</b>	<b>100.0</b>
<b>Assistance during last abortion</b>						
Doctor	19	37.3	10	31.2	9	47.4
Nurse	15	29.4	8	25.0	7	36.8
Midwife	1	2.0	0	0.0	1	5.3
Traditional birth attendant	2	3.9	2	6.3	0	0.0
Friend / Husband	5	9.8	5	15.6	0	0.0
Nobody / Self by medication	7	13.7	5	15.6	2	10.5
Others	1	2.0	1	3.1	0	0.0
Don't know	1	2.0	1	3.1	0	0.0
<b>Total</b>	<b>51</b>	<b>100.0</b>	<b>32</b>	<b>100.0</b>	<b>19</b>	<b>100.0</b>
<b>Wish to have children</b>						
Yes	41	25.0	21	23.3	20	27.0
No	123	75.0	69	76.7	54	73.0
<b>Total</b>	<b>164</b>	<b>100.0</b>	<b>90</b>	<b>100.0</b>	<b>74</b>	<b>100.0</b>
<b>Wish to have children</b>						
In the next six months	9	22.0	3	14.3	6	30.0
In the next two years	10	24.4	6	28.6	4	20.0
After two years	22	53.7	12	57.1	10	50.0
<b>Total</b>	<b>41</b>	<b>100.0</b>	<b>21</b>	<b>100.0</b>	<b>20</b>	<b>100.0</b>
<b>Pregnant in last 12 months</b>						
Yes	9	5.5	4	4.4	5	6.8
No	147	89.6	83	92.2	64	86.5
Currently pregnant	8	4.9	3	3.3	5	6.7
<b>Total</b>	<b>164</b>	<b>100.0</b>	<b>90</b>	<b>100.0</b>	<b>74</b>	<b>100.0</b>
<b>Outcome of last pregnancy</b>						
Forced Abortion	9	100.0	4	100.0	5	100.0

Altogether, 5.5 % of the married respondents had become pregnant in the last twelve months but all the respondents said that they involved in forced abortion and eight were

currently pregnant. Of the pregnant respondents, majority (6.7%) of them were street based as compared to establishment based (3.3%).

### 3.4 Knowledge and practice of family planning methods

**Table 3.6 Knowledge of family planning methods**

Types of family planning methods heard by respondents	Total		Establishment based		Street based	
	N	%	N	%	N	%
<b>Permanent method</b>						
Female sterilization	151	44.2	85	36.6	66	60.0
Male sterilization	144	42.1	79	34.1	65	59.1
<b>Temporary method</b>						
Condom	328	95.9	220	94.8	108	98.2
Pills	262	76.6	176	75.9	86	78.2
Withdrawal	237	69.3	166	71.6	71	64.5
Injectable	224	65.5	134	57.8	90	81.8
IUCD	181	52.9	100	43.1	81	73.6
Implants	173	50.6	110	47.4	63	57.2
Rhythm method	75	21.9	50	21.5	25	22.7
Others (Emergency contraceptive pills, female condom)	11	3.2	10	4.7	1	0.9
<b>Total</b>	<b>342</b>	<b>*</b>	<b>232</b>	<b>*</b>	<b>110</b>	<b>*</b>
<b>* Multiple responses</b>						

Knowledge of at least one method of family planning is nearly universal among surveyed respondents. Regarding contraceptive methods, most of the respondents had heard about condom i.e., 95.9%, followed by oral pill 76.6% and withdrawal method 69.3%. Similarly, 65.5% respondents mentioned they had heard about injectable (Depo-Provera) and 52.9% mentioned about Intra Uterine Contraceptive Device (IUCD).

### 3.5 Current use of contraception

Only 58.5% respondents were practicing at least one method of family planning in order to delay or avoid pregnancy. Higher percentage (63.4%) of establishment based FSWs was adopting any method of family planning as compared to street based (48.2%). Condom is the most popular method among the respondents. Nearly 86% had been using condom, 51.5 % followed withdrawal method and 47.5 % were taking pills. Implants and IUCD had been inserted by 4% and 2% of respondents respectively.

**Table 3.7 Method of family planning currently practicing by FSWs**

Current use of contraception	Total		Establishment based		Street based	
	N	%	N	%	N	%
<b>Currently using any method to delay or avoid getting pregnant</b> (p=0.008)						
Yes	200	58.5	147	63.4	53	48.2
No	142	41.5	85	36.6	57	51.8
<b>Total</b>	<b>342</b>	<b>100.0</b>	<b>232</b>	<b>100.0</b>	<b>110</b>	<b>100.0</b>
<b>Currently using method of family planning</b>						
Condom	171	85.5	124	84.4	47	88.8
Withdrawal	103	51.5	92	62.6	11	20.8
Pills	95	47.5	85	57.8	10	18.9
Injectable	22	11.0	14	9.5	8	15.1
Female sterilization	9	4.5	4	2.7	5	9.4
Implants	8	4.0	8	5.4	0	0.0
IUCD	4	2.0	2	1.4	2	3.8
Male sterilization	2	1.0	0	0.0	2	3.8
Rhythm method	2	1.0	2	1.4	0	0.0
Others (Emergency contraceptive pills)	6	3.0	6	4.1	0	0.0
<b>Total</b>	<b>200</b>	<b>*</b>	<b>147</b>	<b>*</b>	<b>53</b>	<b>*</b>
<b>* Multiple responses</b>						

## CHAPTER 4: PREVALENCE OF HIV AND STIs

This section describes the pattern of sexually transmitted infections like HIV, syphilis, *gonorrhea* and *chlymadia* among the female sex workers and analysis of the social and behavioral factors associated with these infections among the respondents.

### 4.1 Prevalence of HIV and sexually transmitted infections (STIs)

Overall 0.3% (one out of 342) respondent was confirmed HIV positive, 0.3% was conformed *Chlymadia trachomatis* positive and no one had active syphilis (RPR –ve or RPR titre <1:2) and *Neisseria gonorrhoea*. It was found that both the HIV and *Chlymadia trachomatis* infected one was street based FSW. While accessing the syphilis history, no one was found to be infected in the past.

**Table 4.1 Prevalence of HIV and STIs**

STIs	Establishment based (N=232)		Street based (N=110)		Total (N=342)	
	N	%	N	%	N	%
HIV +ve	0	0	1	0.9	1	0.3
Active syphilis	0	0	0	0	0	0
Syphilis history	0	0	0	0	0	0
<i>Neisseria gonorrhoea</i>	0	0	0	0	0	0
<i>Chlymadia trachomatis</i>	0	0	1	0.9	1	0.3

### 4.2 Association of socio-demographic characteristics with HIV / STIs

The respondent with HIV positive belonged to the 36 years and above age group. It was found that HIV was tested positive in ever married illiterate respondent. HIV prevalence was also observed in the respondent who had been involved in sex trade for two years and more. Similarly, the respondent aged 20 years and younger was found *Chlymadia* positive. *Chlymadia* was found positive in never married and literate respondent who had been involved in sex trade for 1 year.

**Table 4.2 Association of socio-demographic characteristics with HIV / STIs**

Socio-demographic characteristics	N=342	HIV Positive		<i>Chlymadia</i> Positive	
		N	%	N	%
<b>Age</b>					
20 and below	101	0	0	1	1.0
21-35	228	0	0	0	0
36 and above	13	1	7.7	0	0
<b>Education</b>					
Illiterate	34	1	2.9	0	0
Literate without formal schooling	43	0	0	0	0
Literate	265	0	0	1	0.4
<b>Present marital status</b>					
Ever married	164	1	0.6	0	0
Never married	178	0	0	1	0.6
<b>Years of sex work</b>					
12 months and below	90	0	0	1	1.1
13-24 months	72	0	0	0	0
25 months and above	180	1	0.6	0	0

### 4.3 Association of condom use with HIV / STIs

**Table 4.3 Association of condom use with HIV/ STIs**

Association of condom use with STIs	HIV Positive		<i>Chlymadia</i> Positive		Total	
	N	%	N	%	N	%
<b>Use of condom by client</b>						
All the time	1	0.4	0	0	229	67.0
Not all the time	0	0.0	1	0.9	113	33.0
<b>Total</b>	<b>1</b>	<b>0.3</b>	<b>1</b>	<b>0.3</b>	<b>342</b>	<b>100.0</b>
<b>Use of condom by regular client</b>						
All the time	-	-	1	1.0	100	52.9
Not all the time	-	-	0	0	89	47.1
<b>Total</b>	<b>-</b>	<b>-</b>	<b>1</b>	<b>0.5</b>	<b>189</b>	<b>100.0</b>
<b>Use of condom by non-paying regular partners over the last 12 months</b>						
All the time	0	0.0	0	0	143	41.8
Not all the time	1	0.5	1	0.5	199	58.2
<b>Total</b>	<b>1</b>	<b>0.3</b>	<b>1</b>	<b>0.3</b>	<b>342</b>	<b>100.0</b>
<b>Use of condom by person other than client</b>						
All the time	1	0.6	0	0	168	78.9
Not all the time	0	0.0	1	2.2	45	21.1
<b>Total</b>	<b>1</b>	<b>0.5</b>	<b>1</b>	<b>0.5</b>	<b>213</b>	<b>100.0</b>

It was discouraging to notice that the prevalence of HIV was detected in the respondents who consistently use condom with client and with sex partners other than clients, husbands and male friends living together. It was obvious that the HIV was tested positive for those respondents who had not used condom with their non-paying partner (husband or boyfriend) over the past 12 months. Likewise, *Chlymadia* was found positive in the respondents who had not used condom consistently with their client, non-paying regular partner and other client (sex partners other than client, regular client and non-paying

regular partner). But it was found positive in those respondents who consistently used condom with regular client.

#### 4.4 Condom carrying practice, comprehensive knowledge of HIV/AIDS transmission and HTC exposure in past year with HIV infection

**Table 4.4 Association of different variables with HIV infection**

Variables	Total		HIV Positive		HIV Negative	
<b>Condom carrying practice</b>						
All the time	90	26.3	0	0.0	90	100.0
Not all the time	252	73.7	1	0.4	251	99.6
<b>Knowledge of HIV/AIDS Transmission</b>						
<b>Knowledge of all the three ABC</b>						
Knowledge of all the three ABC	165	48.2	0	0.0	165	100.0
No Knowledge	177	51.8	1	0.6	176	99.4
<b>Knowledge of all the five BCDEF</b>						
Knowledge of all the five BCDEF	105	30.7	1	1.0	104	99.0
No Knowledge	237	69.3	0	0.0	237	100.0
<b>Knowledge of all the four DEFG</b>						
Knowledge of all the four DEFG	335	98.0	1	0.3	334	99.7
No Knowledge	7	2.0	0	0.0	7	100.0
<b>Knowledge of all the four HIJK</b>						
Knowledge of all the four HIJK	193	56.4	0	0.0	193	100.0
No Knowledge	149	43.6	1	0.7	148	99.3
<b>Visited PE or OE in the last year</b>						
Yes	133	38.9	0	0.0	133	100.0
No	206	60.2	1	0.5	205	99.5
No response	3	0.9	0	0.0	3	100.0
<b>Visited any DIC in the last year</b>						
Yes	56	16.4	0	0.0	56	100.0
No	286	83.6	1	0.3	285	99.7
<b>Visited any STI clinic in the last year</b>						
Yes	26	7.6	0	0.0	26	100.0
No	316	92.4	1	0.3	315	99.7
<b>Visited any HTC center in the last year</b>						
Yes	48	14.0	0	0.0	48	100.0
No	294	86.0	1	0.3	293	99.7
<b>Total</b>	<b>342</b>	<b>100.0</b>	<b>1</b>	<b>0.3</b>	<b>341</b>	<b>99.7</b>

The table 4.4 shows the relationships between the prevalence of HIV and FSW's exposure to HIV prevention interventions and condom carrying practice. The HIV prevalence was found in respondent who had no knowledge (could not correctly identify ways of preventing transmission of HIV) of all the three ABC (**A**: Abstinence from sex, **B**: Being faithful to one partner or avoiding multiple sex partners, **C**: Consistent condom use or use of a condom during every sex act) and all the four HIJK (**H**: Can a pregnant woman infected with HIV/AIDS transmit the virus to her unborn child, **I**: Can a woman with HIV/AIDS transmit the virus to her new-born child through breastfeeding, **J**: Can a person



get HIV, by using previously used needle/syringe, **K:** Can blood transfusion from an infected person to the other transmit HIV. It was also observed that HIV positive female sex worker had not visited OE/PE, DIC, HTC center and STI clinic.

## CHAPTER 5: SEXUAL BEHAVIOR

This chapter describes the overall sexual behavior of the respondents, including the age at first sexual intercourse, duration of the sex work, income status, types and average number of clients, and the use of condom with different sex partners.

### 5.1 Sexual behavior

The mean age at first sexual intercourse was 17 years with range varying from 12 to 30 years. More than one fifth started sexual intercourse before the age of 15 years. The youngest starting age reported was 12 years old. Almost 1 % (3 out of 342) reported they started sexual intercourse by the time they were 12 years old. Nearly 6 % respondent stated that they didn't know the age at first sexual intercourse.

From the survey it was found that majority (58.5%) of sex workers were based on hotel/lodge followed by dance restaurants (40.9%). And the rest were based on disco, house settlement, cabin restaurant, *dohori* restaurant, massage parlour, *bhattipasal* and garment factory. Likewise some were call girl and some do the haggling on sex at street.

The survey also revealed that the establishment based sex workers were mainly based on hotel / lodge (53.4%) and dance restaurant (53%). Moreover, 31.9% were based on disco, 15.5% each on *dohori* and cabin restaurants. The street based sex workers visited mainly on crossroads to deal with clients. Besides, 8.2 % of them were call girl, 69.1% were based on hotel/lodge and 18.2 % from house settlement.

One fourth of the respondents stated that they were in this sex profession for about one year, out of which 26.4 % were based on street and 18.5% were establishment based. Approximately 58% said they had been working in this profession for five year. Nearly 14% respondents were involved in this occupation for over five years or even longer. The remaining 1.8% said they didn't know the duration of involvement in this occupation. The longest duration practice reported by respondent was 8 years.

**Table 5.1 Sexual behavior of female sex workers**

Sexual behavior	Total		Establishment based		Street based	
	N	%	N	%	N	%
<b>Age at first sexual intercourse (Mean age : 17 / Range 12-30)</b>						
15 and Less	78	22.8	50	21.6	28	25.5
16-20	223	65.2	154	66.4	69	62.7
21-25	21	6.1	13	5.6	8	7.3
26-30	1	0.3	0	0.0	1	0.9
Don't know	19	5.6	15	6.5	4	3.6
<b>Duration of sex work</b>						
12 months and below	90	26.3	44	19.0	46	41.8
13 months - 24 months	72	21.1	43	18.5	29	26.4
25 months - 36 months	59	17.3	40	17.2	19	17.3
37 months - 48 months	42	12.3	40	17.2	2	1.8
49 months - 60 months	26	7.6	21	9.1	5	4.5
61 months - 72 months	10	2.9	10	4.3	0	0.0
73 months - 84 months	3	0.9	2	0.9	1	0.9
85 months - 96 months	34	9.9	26	11.2	8	7.3
Don't know	6	1.8	6	2.6	0	0.0
<b>Sex worker based on</b>						
Disco	76	22.2	74	31.9	2	1.8
Dance Restaurant	140	40.9	123	53.0	17	15.5
Cabin Restaurant	49	14.3	36	15.5	13	11.8
Call Girl	19	5.6	10	4.3	9	8.2
Massage Parlor	23	6.7	23	9.9	0	0.0
House Settlement	70	20.5	50	21.6	20	18.2
BhattiPasal	11	3.2	11	4.7	0	0.0
Street	7	2.0	0	0.0	7	6.4
Garment/Carpet Factory	3	0.9	3	1.3	0	0.0
Restaurant/Tea shop	20	5.8	13	5.6	7	6.4
Dohori Restaurant	38	11.1	36	15.5	2	1.8
Hotel/Lodge	200	58.5	124	53.4	76	69.1
Other (Specify)	5	1.5	4	1.7	1	0.9
<b>Total</b>	<b>342</b>	<b>*</b>	<b>232</b>	<b>*</b>	<b>110</b>	<b>*</b>
<b>Ever worked as a sex worker in other places</b>						
Yes	14	4.1	9	3.9	5	4.5
No	328	95.9	223	96.1	105	95.5
<b>Total</b>	<b>342</b>	<b>100.0</b>	<b>232</b>	<b>100.0</b>	<b>110</b>	<b>100.0</b>
<b>* Multiple responses</b>						

## 5.2 Sex worker and their client

Over one fourth of the respondents (31.6%) reported that they were working seven days in a week. Those were significantly more likely to be establishment based sex workers (45.3%). Only 3.5 % stated that they were working one day per week. Approximately 15% said they had been working 3-4 days per week as a sex worker. The association between the type of sex worker and number of working days in a week was found to be statistically significant ( $p < .001$ ).

The spread of HIV largely depends upon unprotected sex among people with a high number of partners. Having limited sexual partners is associated with lower risk of transmission of HIV (Ghani et al, 2005). Though logically, visiting the same partner than with many other partners might lessen the risk of transmission of HIV. The study revealed that the mean number of clients served by these typology of sex work combined was 2.2 clients per day with range varying from 1 to 9 (2.22 for establishment based and 2.16 for street based).

The most common number of client was 2 to 3 per day. Half of the respondents (50%) reported that the number of client per day was 2 to 3. Establishment based FSWs was likely to have more clients per day than street based sex workers. Additionally, a lesser number of respondents (2%) had visited more than nine clients per day and these were all establishment based sex worker.

Just over 2/3<sup>rd</sup> of the respondents (35.7%) had been to only one client on the day preceding the day of interview. Comparatively more number (148 out of 342) of clients had not visited any clients on the previous day of interview.

The median number of client saw by respondents in the past week was 3 (range 0-15 clients). Establishment based FSWs had an average of 3 clients per week with range varying from 0 to 12 clients. Street based sex workers seemed to have higher number of clients (0 to 15) per week with an average of 2 clients in the last week (of the interview held). Majority (105 out of 342) of the respondents could not recall the number of clients they visited during past week (of the interview held).

**Table 5.2 Number of clients and average working days as reported by FSWs**

Number of working days and clients of sex workers	Total		Establishment		Street based	
	N	%	N	%	N	%
<b>Average days/week working as a sex worker (p&lt;.001)</b>						
1	12	3.5	2	0.9	10	9.1
2	27	7.9	6	2.6	21	19.1
3	51	14.9	14	6.0	37	33.6
4	51	14.9	35	15.1	16	14.5
5	47	13.7	29	12.5	18	16.4
6	46	13.5	41	17.7	5	4.5
7	108	31.6	105	45.3	3	2.7
<b>Number of clients per day</b>						
Mean/Median number of clients/ day	2.20/2.00		2.22 / 2.00		2.16 / 2.00	
Range	1-9		1-9		1-7	
One	129	37.7	89	38.4	40	36.4
2-3	171	50.0	114	49.1	57	51.8
4-5	27	7.9	17	7.3	10	9.1
6-7	8	2.3	5	2.2	3	2.7
8 and above	7	2.0	7	3.0	0	0.0
<b>Number of clients on previous day (p= .005)</b>						
Mean / Median no. of clients previous day	0.88 / 1.00		0.91 / 1.00		0.83 / 1.00	
Range	0-7		0-7		0-3	
None	148	43.3	95	40.9	53	48.2
One	122	35.7	95	40.9	27	24.5
2-3	66	19.3	36	15.5	30	27.3
4-5	3	0.9	3	1.3	0	0.0
6-7	3	0.9	3	1.3	0	0.0
<b>Number of clients last week (p=.007)</b>						
Mean / Median no. of clients last week	3.44 / 3.00		3.73 / 3.00		2.81 / 2.00	
Range	0 - 15		0-12		0-15	
None	16	4.7	10	4.3	6	5.5
One	32	9.4	17	7.3	15	13.6
2-3	96	28.1	58	25.0	38	34.5
4-5	55	16.1	45	19.4	10	9.1
6-7	22	6.4	20	8.6	2	1.8
8-9	10	2.9	9	3.9	1	0.9
10 and above	6	1.8	3	1.3	3	2.7
Don't know	105	30.7	70	30.2	35	31.8
<b>Total</b>	<b>342</b>	<b>100.0</b>	<b>232</b>	<b>100.0</b>	<b>110</b>	<b>100.0</b>

### 5.3 Types of clients

Respondents reported that they have been engaged in this sex tradition with different types of clients. Among them businessman (37.4%), service holder (33%), migrant worker / Lahore (32.5%) and contractor (22.5%) were the most dominant. Nonetheless, 26.6% respondents were unknown about the profession of their client. From the survey it has been reflected that most of the students approached street based sex worker (25.5) as compared to establishment based (6.5%). It was seen that a large percentage of foreigners (15.5%),

industrial / wage worker (21.6%), contractor (29.7%), bus, truck or tanker driver (14.7%), migrant worker/*Lahore* (39.7%) opt for establishment based sex worker.

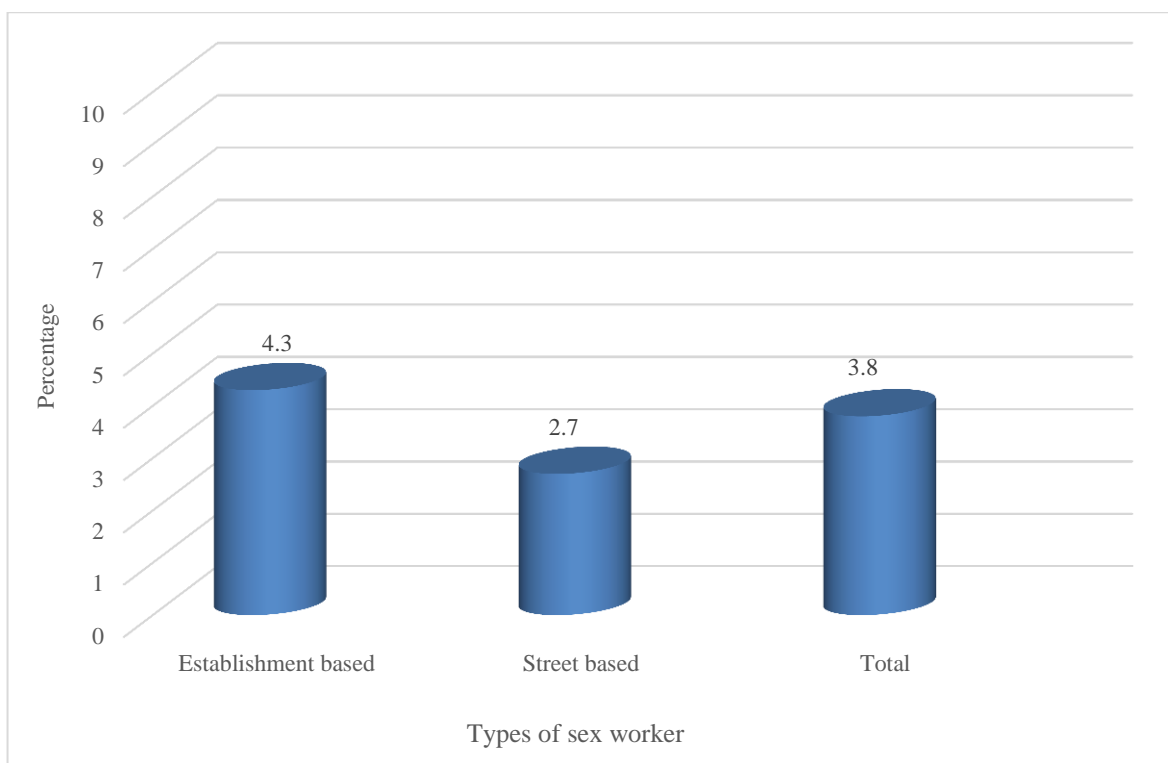
**Table 5.3 Occupational background of clients of FSWs**

Occupation of the clients of FSWs	Total		Establishment based		Street based	
	N	%	N	%	N	%
Bus, truck or tanker worker	39	11.4	34	14.7	5	4.5
Taxi, jeep, microbus or minibus worker	50	14.6	39	16.8	11	10.0
Industrial/wage worker	55	16.1	50	21.6	5	4.5
Police	21	6.1	16	6.9	5	4.5
Soldier/Army	25	7.3	18	7.8	7	6.4
Student	43	12.6	15	6.5	28	25.5
Service holder	113	33.0	73	31.5	40	36.4
Businessmen	128	37.4	96	41.4	32	29.1
Mobile Businessmen	13	3.8	9	3.9	4	3.6
Migrant worker/ <i>lahurey</i>	111	32.5	92	39.7	19	17.3
Contractor	77	22.5	69	29.7	8	7.3
Foreigner (Indian and other Nationals)	39	11.4	36	15.5	3	2.7
Farmer	4	1.2	3	1.3	1	0.9
Others (pilot, engineer, producer, leader)	13	3.8	10	4.3	3	2.7
Don't know	91	26.6	66	28.4	25	22.7
<b>Total</b>	<b>342</b>	<b>*</b>	<b>232</b>	<b>*</b>	<b>110</b>	<b>*</b>
<b>Professional background of last client</b>						
Bus, truck or tanker worker	11	3.2	7	3.0	4	3.6
Taxi, jeep, microbus or minibus worker	10	2.9	5	2.2	5	4.5
Industrial/wage worker	14	4.1	11	4.7	3	2.7
Police	5	1.5	4	1.7	1	0.9
Soldier/Army	5	1.5	1	0.4	4	3.6
Student	24	7.0	6	2.6	18	16.4
Service holder	48	14.0	27	11.6	21	19.1
Businessmen	47	13.7	38	16.4	9	8.2
Mobile Businessmen	4	1.2	2	0.9	2	1.8
Migrant worker/ <i>lahurey</i>	29	8.5	21	9.1	8	7.3
Contractor	24	7.0	19	8.2	5	4.5
Foreigner (Indian and other Nationals)	6	1.8	6	2.6	0	0.0
Farmer	1	0.3	1	0.4	0	0.0
Others (pilot, engineer, producer, leader)	10	2.9	8	3.4	2	1.8
Don't know	104	30.4	76	32.8	28	25.5
<b>Total</b>	<b>342</b>	<b>100.0</b>	<b>232</b>	<b>100.0</b>	<b>110</b>	<b>100.0</b>
<b>* Multiple responses</b>						

Nearly equal percent of respondents (14%) reported service holder and businessmen were their last clients. However, 30.4% (104 out of 342) were not aware about the profession of their last client.

## 5.4 Types of sex practiced by FSWs

Nearly 4 % (13 out of 342) of respondents reported that besides vaginal penetrative act, they had practiced other types of sexual acts like anal, oral and masturbation. Out of total respondents, almost 4 % (10 out of 232) establishment based and 2.7% (3 out of 110) street based FSWs had practiced other type of sexual act besides vaginal act (Figure5.1).



**Figure 5.1: Practice of sexual act other than vaginal**

It was observed that the type of sex also influenced the level of exposure to STIs and HIV infection. Since condom use is mostly lacking in these type of sex act these are considered as risky behaviors. In the past year, out of 13 respondents, more than three-fourth of the respondents had practiced oral sex, 46.2 % masturbation and 15.4% practiced anal sex. Most of the respondents (12 out of 13; 92%) reported that they had performed vaginal act during their last sexual contact (Table5.4).

**Table 5.4 Types of sexual act ever practiced by FSWs**

Types of sex	Total		Establishment		Street based	
	N	%	N	%	N	%
<b>Oral</b>						
Yes	10	76.9	8	80.0	2	66.7
No	3	23.1	2	20.0	1	33.3
<b>Total</b>	<b>13</b>	<b>100.0</b>	<b>10</b>	<b>100.0</b>	<b>3</b>	<b>100.0</b>
<b>Anal</b>						
Yes	2	15.4	1	10.0	1	33.3
No	11	84.6	9	90.0	2	66.7
<b>Total</b>	<b>13</b>	<b>100.0</b>	<b>10</b>	<b>100.0</b>	<b>3</b>	<b>100.0</b>
<b>Masturbation</b>						
Yes	6	46.2	6	60.0	0	0.0
No	7	53.8	4	40.0	3	100.0
<b>Total</b>	<b>13</b>	<b>100.0</b>	<b>10</b>	<b>100.0</b>	<b>3</b>	<b>100.0</b>
<b>Type of sex with last client</b>						
<b>Oral</b>						
Yes	7	53.8	6	60.0	1	33.3
No	6	46.2	4	40.0	2	66.7
<b>Anal</b>						
Yes	1	7.7	0	0.0	1	33.3
No	12	92.3	10	100.0	2	66.7
<b>Masturbation</b>						
Yes	5	38.5	5	50.0	0	0.0
No	8	61.5	5	50.0	3	100.0
<b>Vaginal</b>						
Yes	12	92.3	10	100.0	2	66.7
No	1	7.7	0	0.0	1	33.3
<b>Total</b>	<b>13</b>	<b>*</b>	<b>10</b>	<b>*</b>	<b>3</b>	<b>*</b>
<b>Clients refusing to pay for sexual services</b>						
Yes	35	10.2	13	5.6	22	20.0
No	307	89.8	219	94.4	88	80.0
<b>Total</b>	<b>342</b>	<b>100.0</b>	<b>232</b>	<b>100.0</b>	<b>110</b>	<b>100.0</b>
<b>Frequency of refusing to pay (Mean : 4.97 / Median : 3.00)</b>						
One time	2	5.7	1	7.7	1	4.5
2-3 times	18	51.4	8	61.5	10	45.5
4-5 times	5	14.3	0	0.0	5	22.7
6 and more	10	28.6	4	30.8	6	27.2
<b>Total</b>	<b>35</b>	<b>100.0</b>	<b>13</b>	<b>100.0</b>	<b>22</b>	<b>100.0</b>
<b>* Multiple responses</b>						

A certain number of respondents (35 out of 342; 10%) told that their clients refused to pay for the service they provided. Such is the case with street based workers than establishment based. Over half of respondents (18 out of 35; 51%) reported that they encountered such cases for 2 to 3 times. Nearly 29% respondent faced this type of event for 6 times and even more. (Table 5.4)



## 5.5 Income of FSWs from sex work and other job

**Table 5.5 Income of FSWs from sex work and other jobs in Pokhara**

Income from sex work and other job	Total		Establishment based		Street based	
	N	%	N	%	N	%
<b>Average weekly total income per sexual transaction</b>						
<b>Mean income : 5266.37 Range: 300 – 22000 (p=0.001)</b>						
500 and less	15	4.4	2	0.9	13	11.8
501-1000	31	9.1	23	9.9	8	7.3
1001-2000	47	13.7	27	11.6	20	18.2
2001-3000	41	12	24	10.3	17	15.5
3001-4000	33	9.6	23	9.9	10	9.1
4001-5000	40	11.7	30	12.9	10	9.1
5001-6000	22	6.4	18	7.8	4	3.6
6001-7000	25	7.3	19	8.2	6	5.5
7001-8000	24	7.0	18	7.8	6	5.5
8001-9000	17	5.0	14	6.0	3	2.7
9001-10000	6	1.8	5	2.2	1	0.9
10001 and above	41	12.0	29	12.5	12	10.9
<b>Have other work besides sex work</b>						
Yes	221	64.6	194	83.6	27	24.5
No	121	35.4	38	16.4	83	75.5
<b>Total</b>	<b>342</b>	<b>100.0</b>	<b>232</b>	<b>100.0</b>	<b>110</b>	<b>100.0</b>
<b>Types of jobs besides sex work</b>						
Waiter	76	34.4	74	38.1	2	7.4
Housemaid/restaurant employee	44	19.9	33	17.0	11	40.7
Wage laborer	3	1.4	0	0.0	3	11.1
Own restaurant/liquor shop ( <i>bhattipasal</i> )	8	3.6	8	4.1	0	0.0
Masseuse	28	12.7	28	14.4	0	0.0
Dancer	97	43.9	97	50.0	0	0.0
Business (retail store, fruit shop etc.)	7	3.2	3	1.5	4	14.8
Knitting /tailoring	6	2.7	3	1.5	3	11.1
Peer educator	1	0.5	0	0.0	1	3.7
Job (teacher, peon, departmental store etc)	3	1.4	3	1.5	0	0.0
Others(housewife, farmer, drug supplier, parlor)	11	5.0	9	4.6	2	7.4
<b>Total</b>	<b>221</b>	<b>*</b>	<b>194</b>	<b>*</b>	<b>27</b>	<b>*</b>
<b>Average weekly income from other sources</b>						
<b>Mean income : 4840.18 Range: 1000 – 20000 (p=&lt;.000)</b>						
500-1000	6	2.7	2	1.0	4	14.8
1001-2000	58	26.2	43	22.2	15	55.5
2001-3000	46	20.8	43	22.2	3	11.1
3001-4000	17	7.7	16	8.2	1	3.7
4001-5000	29	13.1	27	13.9	2	7.4
5001-6000	12	5.4	12	6.2	0	0.0
6001-7000	9	4.1	8	4.1	1	3.7
7001-8000	9	4.1	9	4.6	0	0.0
8001-9000	3	1.4	3	1.5	0	0.0
9001-10000	16	7.2	16	8.2	0	0.0
10001 and above	16	7.2	15	7.7	1	3.7
<b>Total</b>	<b>221</b>	<b>100.0</b>	<b>194</b>	<b>100.0</b>	<b>27</b>	<b>100.0</b>

The mean income of respondents was 5266.37 ranging from 300 – 22,000. While calculating the income of sex worker both cash and gift have been taken into consideration. Nearly 14% respondents earned Rs. 1001- Rs.2000 per sexual transaction. A total of 41 respondents (12%) earned above Rs. 10,000. It was observed that the figure of earning was found to be higher in establishment based than in street based sex worker (these were statistically significant).

Besides sex trade, 64.6% respondents were engaged in other sorts of jobs. Most of the respondents were employed in various cabin, dance and *dohari* restaurants, *bhatti pasals*, hotel/lodge, massage parlor and teashops/restaurants. Out of 221 respondents engaged in other job, 43.9% were dancer, 34.4% were working as a waitress and 19.9 % were housemaid/restaurant employee as a dish cleaner, cook or as washerwoman.

The mean average weekly income of the respondents from other sources was 4840.18 varying from Rs. 1000 to Rs. 20,000 per week. Just over 1/4<sup>th</sup> of respondents (26.2%) had earned Rs. 1001 to Rs. 2000. Significant difference was observed between the average weekly income from other sources and type of female sex worker ( $p < .000$ ).

## **CHAPTER 6: CONDOM USE AND SAFER SEX PRACTICES**

This chapter describes the accessibility and acquisition of condom and its use with different types of client.

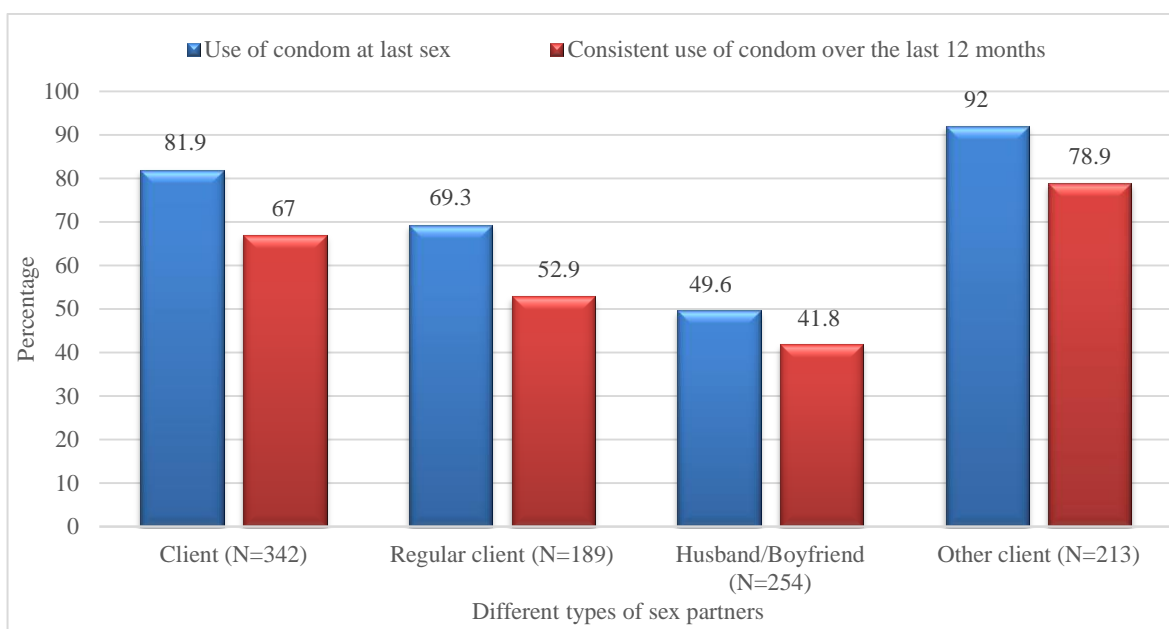
### **6.1 Use of condom and information of sex partner**

Four types of sex partners such as paying clients, non-paying partners, regular partners and other partners, had been identified among the sex workers. Paying partners were those who paid for sex in cash or in kind and non-paying partners were those who would not pay for sex. Husbands, boyfriends /male friends and cohabiting male partners were counted as non-paying partners. Similarly regular partner were those who visited sex worker on regular basis. And the other partners were those who were considered as sex partners other than clients, regular clients, husband and male friends living together.

Unsafe sex practice with multiple partners still remains as the most common mode of HIV transmission. In this regard, respondents were asked about the use of condom with different types of clients, such as regular, non-regular and non-paying cohabiting partners, at last sex and over the last 12 months preceding the survey.

Almost 82% had used condoms during last sexual contact with their clients. Of the 280 respondents who used a condom with their last client, in 66.8 % of cases it was on the suggestion of the respondent themselves. In 32.5% of cases it was the client's suggestion and in 0.7% of cases the use of the condom wasn't discussed it was just used. (Table 6.1)

The percent of using condom with client at last sex was found higher in establishment based sex worker (83.2%) than street based (79.1%). However, no significant association was observed between the type of sex worker and the condom use with client at last sex. (Table 6.2)



**Figure 6.1: Condom use reported by FSWs with different sex partners**

**Table 6.1 Condom use with most recent client**

Condom use with most recent client	Frequency	Percent
Yes	280	81.9
No	62	18.1
<b>Total</b>	<b>342</b>	<b>100.0</b>
<b>Suggested to use condom by</b>		
Respondent	187	66.8
Sex Partner	91	32.5
Don't know	2	0.7
<b>Total</b>	<b>280</b>	<b>100.0</b>
<b>Use of condom with the clients over the past 12 months</b>		
All of the time	229	67.0
Most of the time	52	15.2
Some of the time	38	11.1
Rarely	20	5.8
Never	3	0.9
<b>Total</b>	<b>342</b>	<b>100.0</b>

Although condom use during last sex with clients was high (81.9%), not everyone had been using condom every time they had sex with their clients. Over the past 12 months, the number of respondents using condoms consistently with their clients was 67%. Significant difference ( $p=0.021$ ) was observed between the consistent use of condom and typology of sex worker (62.9% in established based and 75.5% in street based). (Table 6.6)

Condom use with regular client and with non-paying partner was found to be comparatively lower (69.3% and 49.6%) than with last client. Respondents had used condom more often (92%) with other client than last, regular and non-paying partner. It was observed that only 49.6% respondent had used condom at last sex with their husband or male friend. It was also noticed that the use of condom at last sex with regular client and non-paying partner was significantly lower among establishment based sex worker than street based (p= 0.026 and p=0.004 respectively). (Table 6.2)

**Table 6.2: Use of condom with different clients at last sex by type of sex worker**

Use of condom at last sex	Total		Establishment based		Street based	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
<b>Client</b>	<b>(p=0.358)</b>					
Yes	280	81.9	193	83.2	87	79.1
No	62	18.1	39	16.8	23	20.9
<b>Total</b>	<b>342</b>	<b>100.0</b>	<b>232</b>	<b>100.0</b>	<b>110</b>	<b>100.0</b>
<b>Regular client</b>	<b>(p=0.026)</b>					
Yes	131	69.3	102	65.8	29	85.3
No	58	30.7	53	34.2	5	14.7
<b>Total</b>	<b>189</b>	<b>100.0</b>	<b>155</b>	<b>100.0</b>	<b>34</b>	<b>100.0</b>
<b>Non-paying regular partner</b>	<b>(p=0.004)</b>					
Yes	126	49.6	80	44.0	46	63.9
No	128	50.4	102	56.0	26	36.1
<b>Total</b>	<b>254</b>	<b>100.0</b>	<b>182</b>	<b>100.0</b>	<b>72</b>	<b>100.0</b>
<b>Other client</b>	<b>(p=0.123)</b>					
Yes	196	92.0	139	93.9	57	87.7
No	17	8.0	9	6.1	8	12.3
<b>Total</b>	<b>213</b>	<b>100.0</b>	<b>148</b>	<b>100.0</b>	<b>65</b>	<b>100.0</b>

**Table 6.3 Condom use with regular clients**

<b>Condom use with regular clients</b>	<b>Frequency</b>	<b>Percent</b>
<b>Have regular client</b>		
Yes	189	55.3
No	153	44.7
<b>Total</b>	<b>342</b>	<b>100.0</b>
<b>Use of condom with regular client</b>		
Yes	131	69.3
No	58	30.7
<b>Total</b>	<b>189</b>	<b>100.0</b>
<b>Suggested to use condom by</b>		
Respondent	99	75.6
Sex Partner	31	23.7
Don't know	1	0.8
<b>Total</b>	<b>131</b>	<b>100.0</b>
<b>Use of condom by regular client over the past 12 months</b>		
All of the time	100	52.9
Most of the time	38	20.1
Some of the time	29	15.3
Rarely	19	10.1
Never	3	1.6
<b>Total</b>	<b>189</b>	<b>100.0</b>

**Table 6.4 Condom use with non-paying regular cohabiting partner**

<b>Condom use with non-paying regular cohabiting partner</b>	<b>Frequency</b>	<b>Percent</b>
<b>Sexual intercourse with husband or a male friend in past six months</b>		
Yes	254	74.3
No	88	25.7
<b>Total</b>	<b>342</b>	<b>100.0</b>
<b>Use of condom by husband or boyfriend at last sex</b>		
Yes	126	49.6
No	128	50.4
<b>Total</b>	<b>254</b>	<b>100.0</b>
<b>Condom use suggested by</b>		
Respondents	96	76.2
Sex Partner (husband or boyfriend)	28	22.2
Don't know	2	1.6
<b>Total</b>	<b>126</b>	<b>100.0</b>
<b>Use of condom by all non-paying regular partners over the last 12 months</b>		
All of the time	143	41.8
Most of the time	28	8.2
Some of the time	34	9.9
Rarely	35	10.2
Never	49	14.3
Did not have sexual intercourse in the last 12 months	53	15.5
<b>Total</b>	<b>342</b>	<b>100.0</b>

The proportion of consistent use of condom by respondents in their sexual act with regular clients (52.9%) and non-paying partner (41.8%) was found lower than clients (67%) and other clients (78.9%). Moreover, very few FSWs used condoms consistently with their husbands and boyfriends or cohabiting partners as compared to other regular and non-regular clients.

**Table 6.5 Condom use with other client**

<b>Condom use with other client</b>	<b>Frequency</b>	<b>Percent</b>
<b>Sexual intercourse with a person other than client, husband/ male friend</b>		
Yes	213	62.3
No	129	37.7
<b>Total</b>	<b>342</b>	<b>100.0</b>
<b>Use of condom with sex partner other than client, husband and male friend</b>		
Yes	196	92.0
No	17	8.0
<b>Total</b>	<b>213</b>	<b>100.0</b>
<b>Condom use suggested by</b>		
Respondent	159	81.1
Sex partner	37	18.9
<b>Total</b>	<b>196</b>	<b>100.0</b>
<b>Use of condom with other partners over the past 12 months</b>		
All the time	168	78.9
Most of the time	27	12.7
Some times	13	6.1
Rarely	4	1.9
Never	1	.5
<b>Total</b>	<b>213</b>	<b>100.0</b>

It was reported that in all cases (sex with client, regular client, non-paying partner and other client) the respondent herself suggested the client to use condom. Of the 131 of sex workers who used condom with their regular client in 75.6% of cases it was on the suggestion of the respondent themselves. In 23.7% of cases it was the client's suggestion and in remaining 0.8% of cases the use of the condom wasn't discussed (Table 6.3). Similarly, with non-paying regular partner, in 76.2% cases respondent had suggested to use condom and in 22.2% of cases client had evoked (Table 6.4). At the time of last sex with client other than regular client or non-paying regular cohabiting partner it was reported that in majority of cases (81.1%) respondent herself suggested to use condom while remaining 18.9% of cases client induced to use. (Table 6.5)

**Table 6.6 Consistent use of condom with different types of client by types of FSWs**

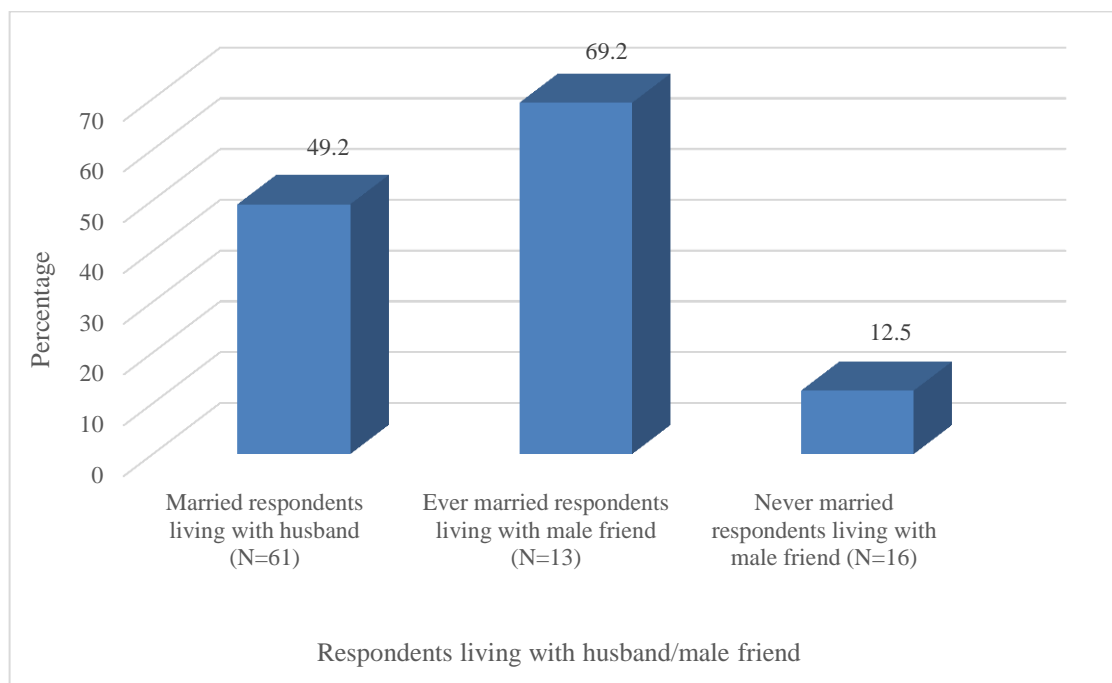
Consistent use of condom	Total		Establishment based		Street based	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
<b>Client</b>	<b>(p=.021)</b>					
All the time	229	67.0	146	62.9	83	75.5
Not all the time	113	33.0	86	37.1	27	24.5
<b>Total</b>	<b>342</b>	<b>100.0</b>	<b>232</b>	<b>100.0</b>	<b>110</b>	<b>100.0</b>
<b>Regular client</b>	<b>(p=.002)</b>					
All the time	100	52.9	74	47.7	26	76.5
Not all the time	89	47.1	81	52.3	8	23.5
<b>Total</b>	<b>189</b>	<b>100.0</b>	<b>155</b>	<b>100.0</b>	<b>34</b>	<b>100.0</b>
<b>Non-paying partner</b>	<b>(p=.0001)</b>					
All the time	143	41.8	76	32.8	67	60.9
Not all the time	199	58.2	156	67.2	43	39.1
<b>Total</b>	<b>342</b>	<b>100.0</b>	<b>232</b>	<b>100.0</b>	<b>110</b>	<b>100.0</b>
<b>Other partner</b>	<b>(p=.922)</b>					
All the time	168	78.9	117	79.1	51	78.5
Not all the time	45	21.1	31	20.9	14	21.5
<b>Total</b>	<b>213</b>	<b>100.0</b>	<b>148</b>	<b>100.0</b>	<b>65</b>	<b>100.0</b>

It is appeared that consistent use of condom with different client over the period of past 12 months was significantly less prevalent among establishment based sex workers than street based. Within the both typology of sex workers, consistent condom use with other client over the past 12 months was relatively high i.e. 79.1% in establishment based and 78.5% in street based FSWs. Relatively low percent of establishment based FSWs i.e., 47.7% consistently use condom with regular client as compared to street based (76.5%). Similarly, 49.4% of establishment based and 77.9% of street based FSWs had consistently used condom with their non-paying regular cohabiting partner. (Table 6.6)

It was discouraging to find comparatively low proportion (41.8%) of respondents using condoms consistently with their husbands and boyfriends. Out of the 164 ever married female respondents, 13 (7.9%) were living with their boyfriend. Similarly out of 178 never married respondents, 16 (9%) were living with their boyfriend. The association between the respondents living with boyfriend and consistent use of condom was found statistically significant. It was found that a very low percentage (only 12.5%) of never married respondent had consistently used condom at the time of sexual intercourse with their boyfriend. Likewise, among the 61 respondents living with their husbands, nearly 50 %,



were using condom consistently. Relatively high percentage (69.2%) of married female living with male friend used condom consistently. Significant difference was observed between the marital status and the consistent use of condom with their husband and male friend ( $p= 0.006$ ). (Figure 6.2)



**Figure 6.2: Consistent use of condom among ever married and never married female by living status**

When asked about the reason for not using condom, out of 62 respondents, who had not been using condom at last sex with client, more than 1/4<sup>th</sup> of them (27.4%) told that they had used other contraceptives. Similarly 22.6 % thought they didn't need it was necessary for them. This could be partly because of use of other contraceptive during the period. A relatively higher percentage of respondents reported that the condom was not available then and there. (Table 6.7)

**Table 6.7 Reason for not using condom by different types of clients**

Reason for not using condom	Clients		Regular clients		Non-paying regular partners		Other clients	
	N	%	N	%	N	%	N	%
<b>At last sex</b>								
Trust in partner	-	-	-	-	59	46.1	-	-
Not available	20	32.2	7	12.1	18	14.1	8	47.1
Used other contraceptive	17	27.4	33	56.9	15	11.7	3	17.6
Didn't think it was necessary	14	22.6	6	10.3	15	11.7	3	17.6
Client offered more money	7	11.3	2	3.4	-	-	-	-
Partner objected	6	9.7	5	8.6	3	2.3	1	5.9
I didn't like to use it	5	8.1	1	1.7	5	3.9	1	5.9
Too expensive	1	1.6	-	-	-	-	-	-
Didn't think of it	-	-	1	1.7	-	-	-	-
Not aware about condom	-	-	1	1.7	-	-	-	-
Wish to have child	-	-	-	-	1	0.8	-	-
Don't know	6	9.7	2	3.4	12	9.4	1	5.9
<b>Total</b>	<b>62</b>	<b>*</b>	<b>58</b>	<b>100.0</b>	<b>128</b>	<b>100.0</b>	<b>17</b>	<b>100.0</b>
<b>In the past year</b>								
Trust in partner	-	-	-	-	84	57.5	-	-
Didn't think it was necessary	34	30.1	46	52.3	79	54.1	12	26.7
Not available	33	29.2	15	16.9	5	3.4	19	42.2
Client offered more money	33	29.2	34	38.2	-	-	-	-
Used other contraceptive	32	28.3	49	55.1	58	39.7	14	31.1
Partner objected	22	19.5	25	28.1	32	21.9	10	22.2
I didn't like to use it	6	5.3	10	11.2	44	30.1	7	15.6
Didn't think of it	6	5.3	2	2.2	1	0.7	1	2.2
Too expensive	1	0.9	-	-	6	4.1	3	6.7
Not aware about Condom	1	0.9	-	-	-	-	-	-
Wish to have child	-	-	-	-	1	0.7	-	-
Other	1	0.9	-	-	2	1.4	-	-
Don't know	13	11.5	5	5.6	9	6.2	3	6.7
<b>Total</b>	<b>113</b>	<b>*</b>	<b>89</b>	<b>*</b>	<b>146</b>	<b>*</b>	<b>45</b>	<b>*</b>
<b>* Multiple responses</b>								

While accessing the reason for not using condom, having trust in their non-paying partner was the most reported (57.5% and 46.1% respectively) reason for not using condom consistently and also at last sex. Similarly, in all the cases unavailability of condom at the time of sex was highly reported by the respondents. Because they had been using other contraceptives they think that it was not necessary to use condom during their sexual act was also reported by most of the respondents. They were not using condom all the time because they usually didn't think about using it, some of them wished to have children, didn't like to use it and the partners' objected were some of the least reported reason. (Table 6.7)

## 6.2 Availability of condom

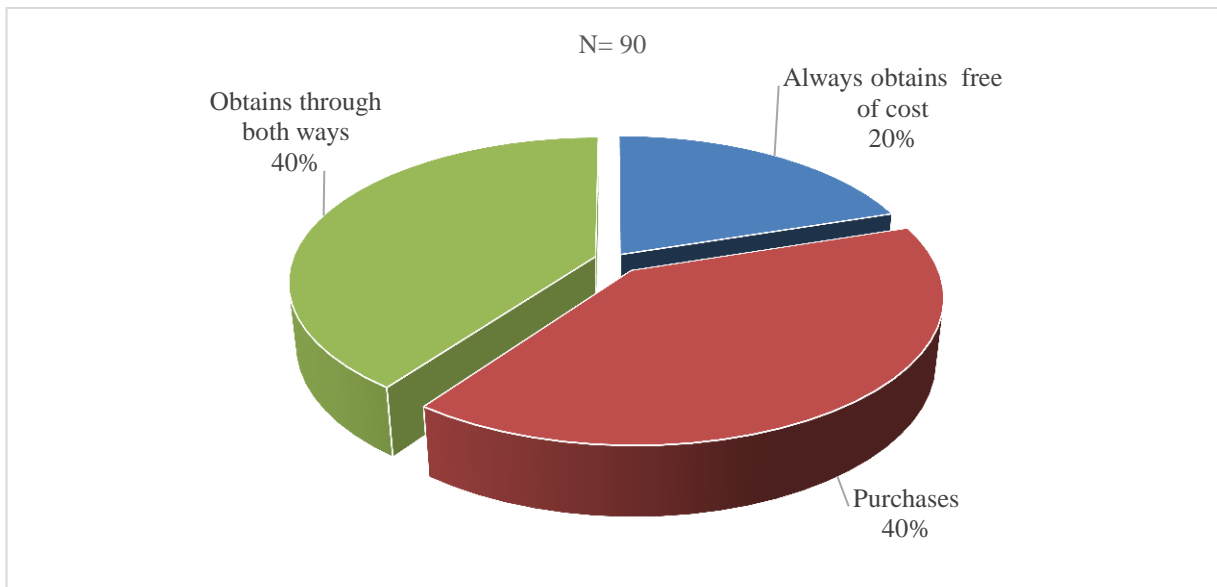
Only 26.3% of respondents told that they carry condoms with them all the time. But when checked only 80% (72 out of 90) of them had it on hand. It was seen that 1/3<sup>rd</sup> of the respondents had 4 or even more condom on hand at that moment in time. Due to the frequent and strict police patrol they were always having fear of caught up by police which might be the reason for the low percent of condom carrying habit. (Table 6.8)

**Table 6.8 Availability of condoms**

Condom acquirement	Frequency	Percent
<b>Condom carrying</b>		
Yes	90	26.3
No	252	73.7
<b>Total</b>	<b>342</b>	<b>100.0</b>
<b>No. of condom at hand with respondents</b>		
None	18	20.0
One	6	6.7
2-3	36	40.0
4-5	19	21.1
6-7	3	3.3
8-9	4	4.4
Above 10	4	4.4
<b>Condom given by any organizations in the past year</b>		
Yes-Free	2	5.6
Yes-on cash	11	30.6
No	23	63.9
<b>Total</b>	<b>36</b>	<b>100.0</b>
<b>* Multiple response</b>		

## 6.3 Modes of obtaining condom

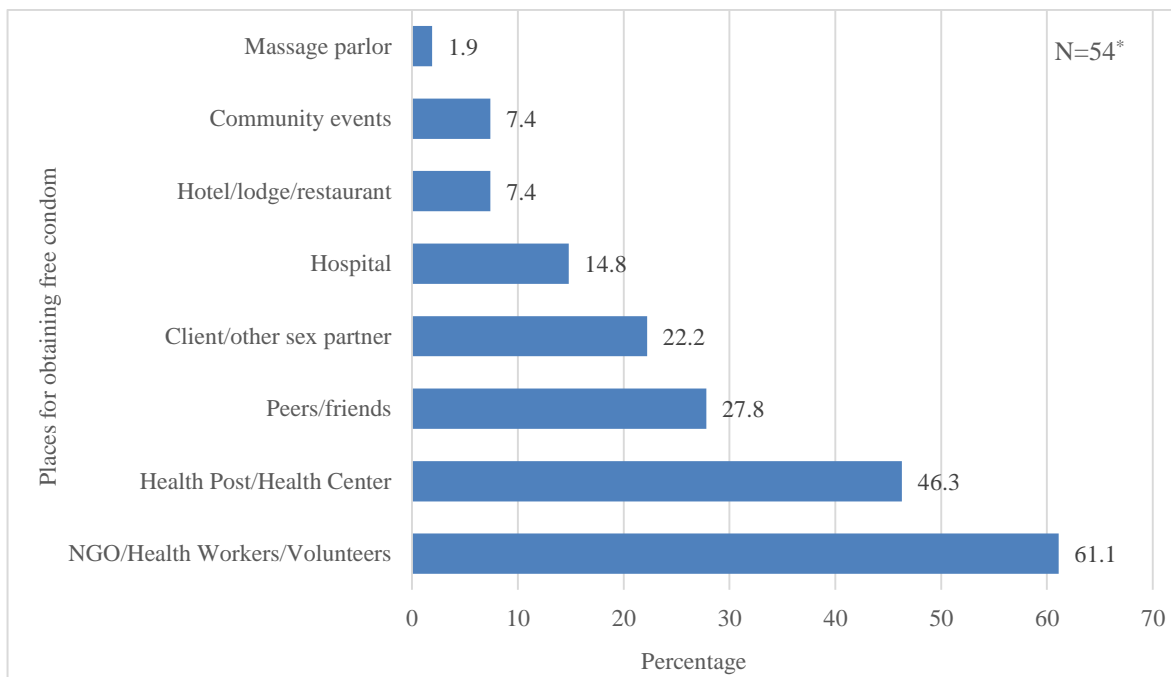
In order to extract the information regarding the modes of obtaining condom question was asked to the respondents whether they obtained condom free or they had to purchase it. One fifth (20%) of respondents said that they always obtained it free. Two fifth (40%) of them told they had to purchase it and the remaining 2/5<sup>th</sup> (40%) of them answered they obtained it from both ways, sometimes got it free and sometimes they had to purchase. (Figure 6.3)



**Figure 6.3: Modes of obtaining condom**

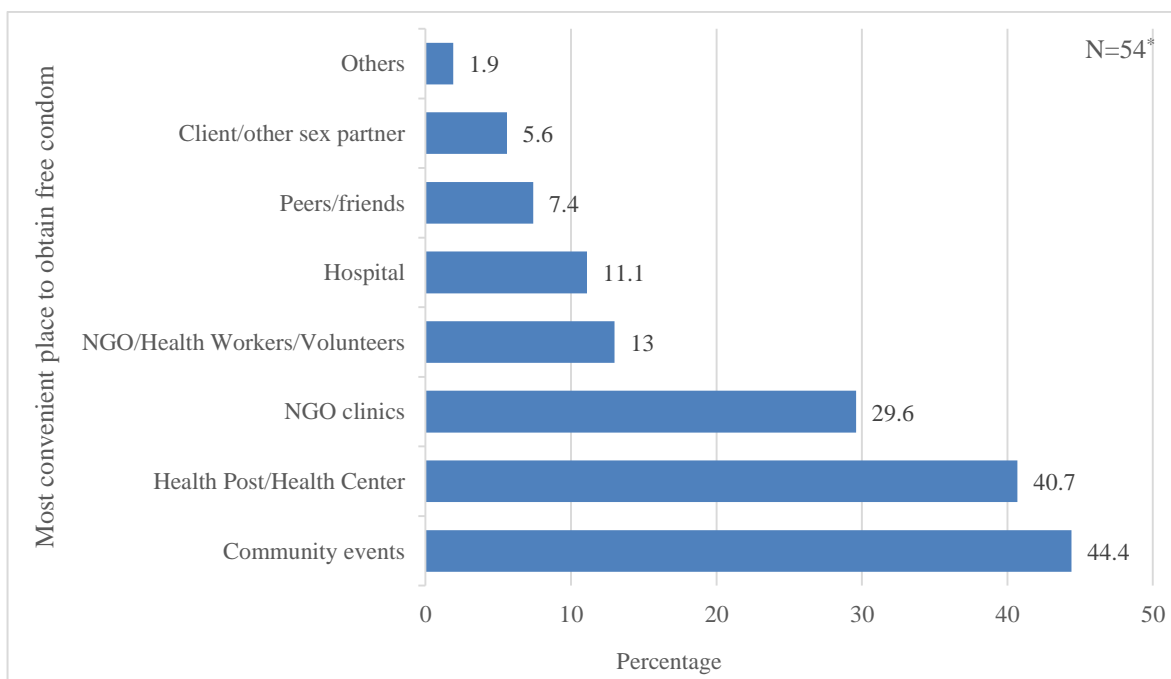
In response to the accessibility of free condom respondents reported that NGO/health workers/ volunteers (61.1%) were the most common connections where they usually got condoms from. Besides, 46.3% said health post / health centers were the venues they accessed condoms from. Over 1/4<sup>th</sup> (25%) of the respondents mentioned they could get free condom from peers or friends. Almost 22 % respondents told that they could get it from clients and other sex partner as well. Hospital, community events, hotel, lodge, restaurants and message parlor were also mentioned as other places from where respondents could get free condoms. (Figure 6.4)

Nearly 45% respondents mentioned that the most convenient place for them to obtain free condom was community event. Some (40.7%) said that health post / center was the most convenient place. Likewise, 30% reported they felt easy collecting free condom from NGO clinics. (Figure 6.5)



\* Multiple responses

**Figure 6.4: Places from where free condom could be obtained from**



\* Multiple responses

**Figure 6.5: Most convenient place to obtain free condom**

## CHAPTER 7: HIV AND STI PREVENTION KNOWLEDGE

This section reports knowledge of HIV transmission, misconceptions about transmission and awareness of HIV and AIDS.

### 7.1 Knowledge of HIV/AIDS among female sex workers

Accurate knowledge of true modes of HIV transmission is as important as rejecting major misconceptions about modes of transmission. Each respondent was assessed for accurate knowledge of prevention from HIV transmission and rejection for major misconception associated with HIV by answering correctly the following statement which requires “yes” to the statement **ABCD** and **HIJK** and “no” to the misconception **EFG**.

Only 48.2% had knowledge of all the three **ABC** and 30.7% had knowledge of all the five **BCDEF**. The large majority (98%) of respondents had knowledge on all the four **DEFG** (**D**: Do you think a healthy-looking person can be infected with HIV, **E**: Can a person get the HIV virus from mosquito bit, **F**: Can a person get HIV by sharing a meal with an HIV infected person, **G**: Can a person get HIV by holding an HIV infected person’s hand). As regards, the transmission routes, more than 92% respondents perceived that AIDS is transmitted through blood transfusion and also through sharing of used syringes. Knowledge of correct and consistent use of condoms as a means of preventing HIV was fairly high among respondents. Nearly 84% mentioned that safe sexual practice could reduce the chance of transmission of AIDS.

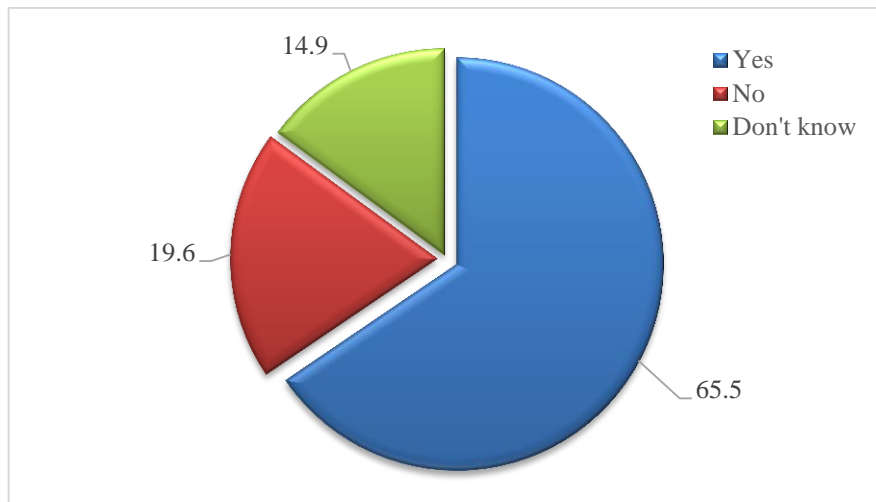
The level of misconception was found lowest among the respondents. The belief that a healthy-looking person cannot be infected with HIV is a common misconception that can result in unprotected sexual intercourse with infected sex partners. The misconception regarding the transmission of HIV by holding an HIV infected person’s hand was 8.8%, similarly, through sharing a meal with an HIV infected person was 14.6% (Table 7.1).

**Table 7.1 Knowledge on HIV/AIDS**

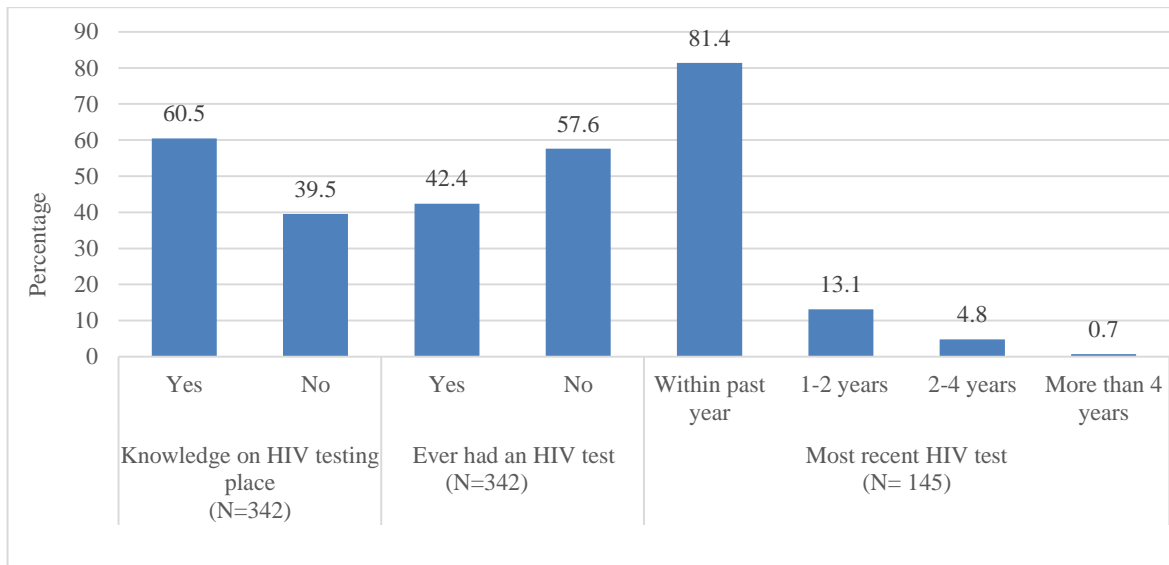
Statement on knowledge related to HIV/AIDS	Yes		No	
	N	%	N	%
A. Can people protect themselves from HIV virus by abstaining from sexual intercourse	228	66.7	114	33.3
B. Can people protect themselves from HIV by keeping sexual contact with only one uninfected faithful sex partner	260	76	82	24
C. Can people protect themselves from HIV, virus-causing AIDS by using condom correctly in each sexual contact	286	83.6	56	16.4
D. Do you think a healthy-looking person can be infected with HIV	247	72.2	95	27.8
E. Can a person get the HIV virus from mosquito bite	113	33.0	229	67.0
F. Can a person get HIV by sharing a meal with an HIV infected person	50	14.6	292	85.4
G. Can a person get HIV by holding an HIV infected person's hand	30	8.8	312	91.2
H. Can a pregnant woman infected with HIV/AIDS transmit the virus to her unborn child	266	77.8	76	22.2
I. Can a woman with HIV/AIDS transmit the virus to her new-born child through breastfeeding	238	69.6	104	30.4
J. Can a person get HIV, by using previously used needle/syringe	316	92.4	26	7.6
K. Can blood transfusion from an infected person to the other transmit HIV	315	92.1	27	7.9
<b>Knowledge of all the three ABC</b>	165	48.2	177	51.8
<b>Knowledge of all the five BCDEF</b>	105	30.7	242	69.3
<b>Knowledge of all the four DEFG</b>	335	98.0	7	2.0
<b>Knowledge of all the four HIJK</b>	193	56.4	149	43.6
<b>Total</b>		*		*
<b>* Multiple responses</b>				

## 7.2 HIV testing and knowledge of testing facilities

In response to the knowledge regarding availability of confidential HIV testing facility in a community, nearly 2/3<sup>rd</sup> of the respondents (65.5%) reported that they had knowledge about such test.



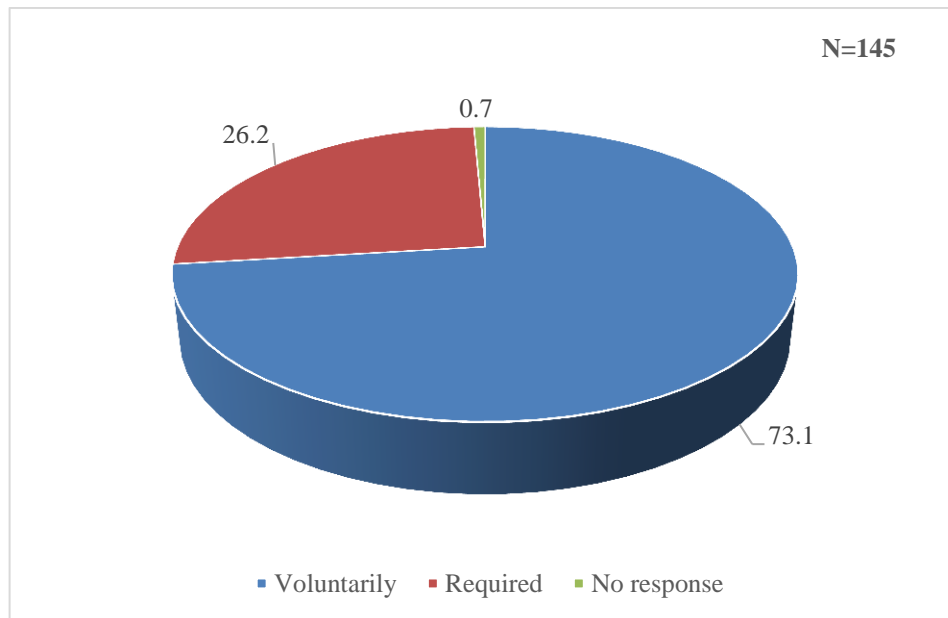
**Figure 7.1: Availability of confidential HIV testing facility in a community**



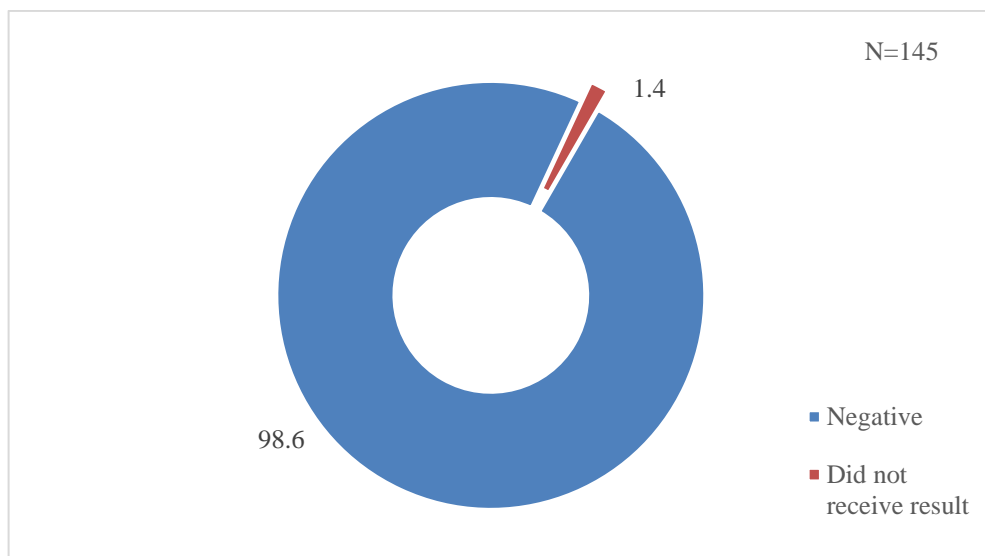
**Figure 7.2: HIV testing among respondents**

In order to protect themselves and to prevent infecting others, it is important for individuals to know their HIV status. Regarding the exposure to previous HIV test, 42.4% was tested for HIV. Of the 145 respondents, 81.4 % stated that they had been tested for HIV within past year, 13.1% was tested for HIV between 1 to 2 year. A large percentage (73.1%) of respondent underwent HIV testing voluntarily. Almost 99% respondents received the test result and knew their HIV status. Out of 145 respondents 2 had not received their test result because they were scared of the result.





**Figure 7.3: Percent distribution of the respondents who voluntarily underwent the HIV test**



**Figure 7.4: Percent distribution of respondents who received their test result**

### 7.3 Knowledge of STIs symptoms, experience symptoms and treatment for STI in the past

Respondents were asked some pertinent questions regarding STI in order to extract the information about the knowledge of STI, symptoms experienced and treatment taken for the case management.

The majority of respondents were aware about various forms of sexually transmitted infections (STIs) and well-known about the signs and symptoms. Most of the respondents (58.5% and 46.3% respectively) understood STI as HIV/AIDS as well as Syphilis / gonorrhea. Just over 2/5<sup>th</sup> (42%) of the respondents stated flow of white discharge and itching around vagina became visible as symptoms of STI. Other symptoms comprehended by respondent were ulcer or sore around vagina (25.1%) and swelling of vagina (18.1%). Lower abdominal pain was perceived by 14% respondent as symptoms of STI. In spite of this, still 22.5% reported that they didn't know about the STI, its sign and symptoms. (Table 7.2)

**Table 7.2 Knowledge on STI symptoms**

Knowledge on STI symptoms	N	Percent
HIV/AIDS	200	58.5
Syphilis ( <i>Bhiringi</i> )/gonorrhea	149	43.6
White discharge/discharge of Pus/ <i>dhatu</i> flow	145	42.4
Itching around vagina	137	40.1
Ulcer or sore around vagina	87	25.4
Swelling of vagina	62	18.1
Lower abdominal pain	48	14.0
Pain in vagina	42	12.3
Painful urination	33	9.6
Unusual bleeding from vagina	32	9.4
Burning during urination	26	7.6
Fever	23	6.7
Weight loss/ get thinner	18	5.3
Don't know	77	22.5
<b>Total</b>	<b>342</b>	<b>*</b>
<b>* Multiple responses</b>		

## 7.4 Existing STI symptoms and treatment

One third of the respondents (32.7%) were experiencing at least one symptom of STI related problems such as lower abdominal pain, frequent urination, and pain during urination, genital warts, foul smelling discharge, vaginal bleeding, vaginal itching, sore in genital area, pain during sex and vaginal smell. Nearly equal proportion of respondent recounted unusual heavy, foul smelling vaginal discharge (14.3%) and lower abdominal pain (13.7%) as currently experiencing symptoms.

**Table 7.3 Existing STI symptoms and treatment**

Reported STI Symptoms	Total		Establishment based		Street based	
	N	%	N	%	N	%
Pain in the lower abdomen	47	13.7	25	10.8	22	20.0
Pain during urination	24	7.0	9	3.9	15	13.6
Frequent urination	29	8.5	11	4.7	18	16.4
Pain during sex	42	12.3	19	8.2	23	20.9
Ulcer or sore in the genital area	17	5.0	10	4.3	7	6.4
Itching in or around the vagina	38	11.1	19	8.2	19	17.3
Vaginal odor or smell	24	7.0	9	3.9	15	13.6
Vaginal bleeding (unusual)	2	0.6	2	0.9	0	0.0
Unusual heavy, foul smelling vaginal	49	14.3	18	7.8	31	28.2
Genital Warts	7	2.0	7	3.0	0	0.0
<b>Total</b>	<b>342</b>	<b>100.0</b>	<b>232</b>	<b>100.0</b>	<b>110</b>	<b>100.0</b>
<b>Presence of (p&lt;.000)</b>						
At least one symptoms	112	32.7	59	25.4	53	48.2
No symptoms at all	230	67.3	173	74.6	57	51.8
<b>Total</b>	<b>342</b>	<b>100.0</b>	<b>232</b>	<b>100.0</b>	<b>110</b>	<b>100.0</b>
<b>Went for treatment (p=.02)</b>						
Yes	18	16.1	14	23.7	4	7.5
No	94	83.9	45	76.3	49	92.5
<b>Total</b>	<b>112</b>	<b>100.0</b>	<b>59</b>	<b>100.0</b>	<b>53</b>	<b>100.0</b>
<b>Wait for treatment</b>						
Less Than a week	2	11.1	1	7.1	1	25.0
After one week	7	38.9	5	35.7	2	50.0
After two weeks	2	11.1	2	14.3	0	0.0
After four weeks and ahead	7	38.9	6	42.9	1	25.0
<b>Total</b>	<b>18</b>	<b>100.0</b>	<b>14</b>	<b>100.0</b>	<b>4</b>	<b>100.0</b>
<b>Received prescription for medicine</b>						
Yes	16	88.9	13	92.8	3	75.0
No	2	11.1	1	7.1	1	25.0
<b>Obtained all the prescribed medicine</b>						
Yes I obtained all of it	16	100.0	13	100.0	3	100.0
<b>Took all prescribed medicine</b>						
Yes	15	93.8	12	92.3	3	100.0
No	1	6.3	1	7.7	0	0.0
<b>Total</b>	<b>16</b>	<b>100.0</b>	<b>13</b>	<b>100.0</b>	<b>3</b>	<b>100.0</b>

Besides, pain during sex (12.3%) and Itching in or around the vagina (11.1%) were also reported as currently undergoing symptoms. The presence of at least one symptom was

observed significantly lower in establishment based sex worker than street based. Just over 2/3<sup>rd</sup> of respondents did not have any symptoms at all during the period of survey.

Only 16% (18 out of 112) of them had pursued treatment for STI symptoms. Nearly 2/5<sup>th</sup> of respondents (38.9%) waited for one week to initiate treatment and another 38.9% waited for 4 weeks and even more for commencing the treatment. Most of them (16 out of 18) received prescription and obtained all the prescribed medicine. Almost 94% respondents took medicine. (Table 7.3)

## **7.5 Symptoms in the past year**

Only 3.5% respondent reported that they had experienced at least one symptoms of STI in the past year. Unusual heavy foul smelling vaginal discharge and pain in the lower abdomen (4.4%) was the most reported symptoms by the respondents. Nearly equal percent of respondents reported that they had experienced symptoms in the past year (3.4 % from establishment based and 3.6% from street based). Beside this 3.2 % respondents reported that they faced the problem of pain during urination, vaginal smell and genital warts. Some of them also stated that they had experienced pain during sex, itching in or around vagina, ulcer or sore in genital area as well as vaginal bleeding and frequent urination. Most of these problems were experienced by establishment based sex worker than street based.

Among the respondents who experienced symptoms, 83.3% (10 out of 12) of them went for treatment and also received advices from the counselor. During counseling, most of them were asked told to use condom consistently, to reduce the number of sex partner and to take medicine regularly (Table 7.4).

**Table 7.4 Symptoms in the past year**

Symptoms in the past	Total		Establishment based		Street based	
	N	%	N	%	N	%
Pain in the lower abdomen	15	4.4	9	3.9	6	5.5
Pain during urination	11	3.2	7	3.0	4	3.6
Frequent urination	4	1.2	4	1.7	0	0.0
Pain during sex	7	2.0	7	3.0	0	0.0
Ulcer or sore in the genital area	7	2.0	5	2.2	2	1.8
Itching in or around the vagina	10	2.9	7	3.0	3	2.7
Vaginal odor or smell	11	3.2	10	4.3	1	0.9
Vaginal bleeding (unusual)	5	1.5	5	2.2	0	0.0
Unusual heavy foul smelling vaginal discharge	15	4.4	10	4.3	5	4.5
Genital Warts	11	3.2	11	4.7	0	0.0
Others (Specify)	4	1.2	4	1.7	0	0.0
<b>Presence of</b>						
At least one symptom	12	3.5	8	3.4	4	3.6
No symptoms at all	330	96.5	224	96.6	106	96.4
<b>Total</b>	<b>342</b>	<b>100.0</b>	<b>232</b>	<b>100.0</b>	<b>110</b>	<b>100.0</b>
<b>Went for treatment</b>						
Yes	10	83.3	7	87.5	3	75.0
No	2	16.7	1	12.5	1	25.0
<b>Total</b>	<b>12</b>	<b>100.0</b>	<b>8</b>	<b>100.0</b>	<b>4</b>	<b>100.0</b>
<b>Counseling from the treatment place</b>						
Yes	10	100.0	7	100.0	3	100.0
No	0	0.0	0	0.0	0	0.0
<b>Total</b>	<b>10</b>	<b>100.0</b>	<b>7</b>	<b>100.0</b>	<b>3</b>	<b>100.0</b>
<b>Advices from the counselor</b>						
Told me to use condom	8	80.0	7	100.0	1	25.0
Told me to reduce number of sexual partners	6	60.0	5	71.4	1	25.0
Told me to take medicine regularly	6	60.0	4	57.1	2	50.0
Told me not to have sexual contact during medicine taking period	1	10.0	1	14.3	0	0.0
Advised me to come for regular check up	1	10.0	0	0.0	1	25.0
<b>Total</b>	<b>10</b>	<b>*</b>	<b>7</b>	<b>*</b>	<b>3</b>	<b>*</b>
<b>* Multiple response</b>						

# CHAPTER 8: EXPOSURE TO STI/HIV/AIDS AWARENESS PROGRAMS

This chapter describes the extent of participation and exposure of female sex workers to HIV/AIDS awareness program.

## 8.1 Knowledge and/of and participation in STI and HIV/AIDS programs

### 8.1.1 Peer/outreach educator (PE/OE)

**Table 8.1 Knowledge of and participation in STI and HIV/AIDS programs**

<b>Knowledge of and participation in STI and HIV/AIDS programs</b>	<b>Frequency</b>	<b>Percent</b>
<b>Met or discussed or interacted with PE or OE in the last year</b>		
Yes	133	38.9
No	206	60.2
No response	3	0.9
<b>Total</b>	<b>342</b>	<b>100.0</b>
<b>Frequency of visit by PE and/or OE in the last year</b>		
Once	46	34.6
2-3 times	56	42.1
4-6 times	19	14.3
7-12 times	7	5.3
More than 12 times	5	3.8
<b>Total</b>	<b>133</b>	<b>100.0</b>
<b>Activities involved by PE or OE</b>		
Discussion on how HIV/AIDS is/isn't transmitted	100	75.2
Discussion on how STI is/isn't transmitted	88	66.2
Regular/non-regular use of condom	45	34.1
Demonstration on using condom correctly	29	21.8
STI treatment/cure after treatment	12	9.0
Counseling on reducing number of sex partner	3	2.3
Training on HIV and STI, Condom day, AIDS day, participation in	8	6.0
Others (discussion on violence)	8	6.0
<b>Total</b>	<b>133</b>	<b>*</b>

Nearly 39% respondents have had contact with a peer educator or outreach educator in the last one year. And majority (42.1%) of them visited two to three times mainly for general information, for HIV/AIDS/ STI transmission information (75.2%) and consistent use of condom (34.1%) and demonstration on correct use of condom (21.8%) (Table 8.1).

### 8.1.2 Drop in center (DIC) visiting practice

Drop in center (DIC) provides access to information, education and communication (IEC) materials, resources and services in the prevention of HIV/STDs and offers compassionate support services for persons affected by HIV/AIDS. A small number of respondents (16%) had visited drop in center (DIC) in the past year, but those who visited, 2/5<sup>th</sup> (40%) of them visited once, while 39.3% visited twice or thrice. Respondents visited DIC mainly to collect condom (42.9%), learn the correct way of using condom (33.9%) and watch film on HIV/AIDS. Almost 30% of them told they had taken their friend with them to DIC.

**Table 8.2 Knowledge of and participation in STI and HIV/AIDS programs**

<b>Visit to any drop in center (DIC) in the last year</b>		
Yes	56	16.4
No	286	83.6
<b>Total</b>	<b>342</b>	<b>100.0</b>
<b>Reason for visiting DIC</b>		
Went to collect condoms	24	42.9
Went to learn the correct way of using condom	19	33.9
Went to watch film on HIV/AIDS	6	10.7
Participated in discussion on HIV transmission	13	23.2
Participated in discussion on STI transmission	8	14.3
Participated in training, interaction and discussion programs on HIV/AIDS	3	5.4
Went to collect IEC materials	1	1.8
Took friend with me	17	30.4
Other	2	3.6
<b>Total</b>	<b>56</b>	<b>*</b>
<b>Frequency of visit to DICs in the last year</b>		
Once	23	41.1
2-3 times	22	39.3
4-6 times	4	7.1
7-12 times	4	7.1
More than 12 times	3	5.4
<b>Total</b>	<b>56</b>	<b>100.0</b>

### 8.1.3 STI clinic visiting practices

Very few (7.6%) respondent had visited STI clinic. Majority (53.8%) of respondents visited such clinic just once a year. Among the respondents, nearly 2/3<sup>rd</sup> (65%) of them were tested for blood, 23.1% had been physically examined for STI identification and was advised to take prescribed medicine regularly. Still some respondents (5 out of 42; 12%) mentioned that they went with a friend.

**Table 8.3 Knowledge of and participation in STI and HIV/AIDS programs**

<b>Have you visited any STI clinic in the last year</b>	<b>Frequency</b>	<b>Percent</b>
Yes	26	7.6
No	316	92.4
<b>Total</b>	<b>342</b>	<b>100.0</b>
<b>Reason for visiting STI clinic</b>		
Blood tested for STI	17	65.4
Physical examination conducted for STI identification	6	23.1
Was advised to use condom in each sexual intercourse	5	19.2
Was advised to take complete and regular medicine	6	23.1
Was suggested to reduce number of sexual partners	3	11.5
Took friend with me	5	19.2
<b>Total</b>	<b>42</b>	<b>*</b>
<b>Frequency of visit to STI clinic in the last year</b>		
Once	14	53.8
2-3 times	10	38.5
4-6 times	2	7.7
<b>Total</b>	<b>26</b>	<b>100.0</b>

#### **8.1.4 HIV testing and counseling (HTC) centers visiting practice**

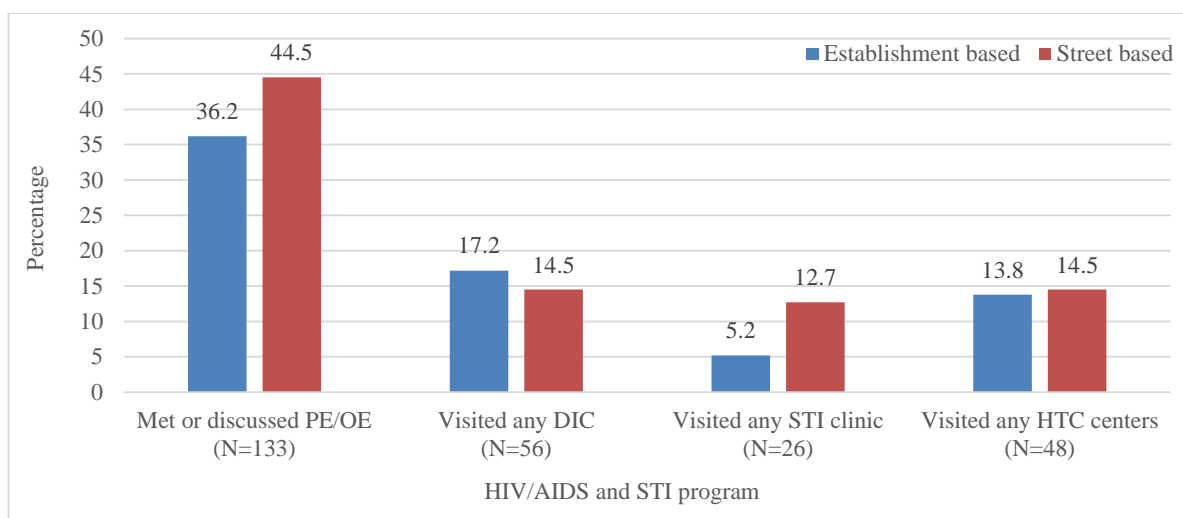
Only 14% respondent visited HTC in the past year. Two third of respondents visited such center only once. Respondents visited HTC mainly for blood test (64.6%), HIV/AIDS test pre-counseling (37.5%) and HIV/AIDS test post-counseling. One third of respondents told they visited HTC just for their friend. Respondents had discussed various topics during their visit to such center. Majority of respondents (72.7%) had talked about their sex partners, 36.4% were advised to visit HTC if problem arose, 27.3% were advised to visit HTC regularly once in a month in any case. Almost 9 % told they talked about condom during such visit.

Data from the survey indicate that a minimal number of female sex workers reported being reached by the STI and HIV/AIDS program. As compared to street based, establishment based sex workers were less exposed to such awareness program. (Figure 8.1)



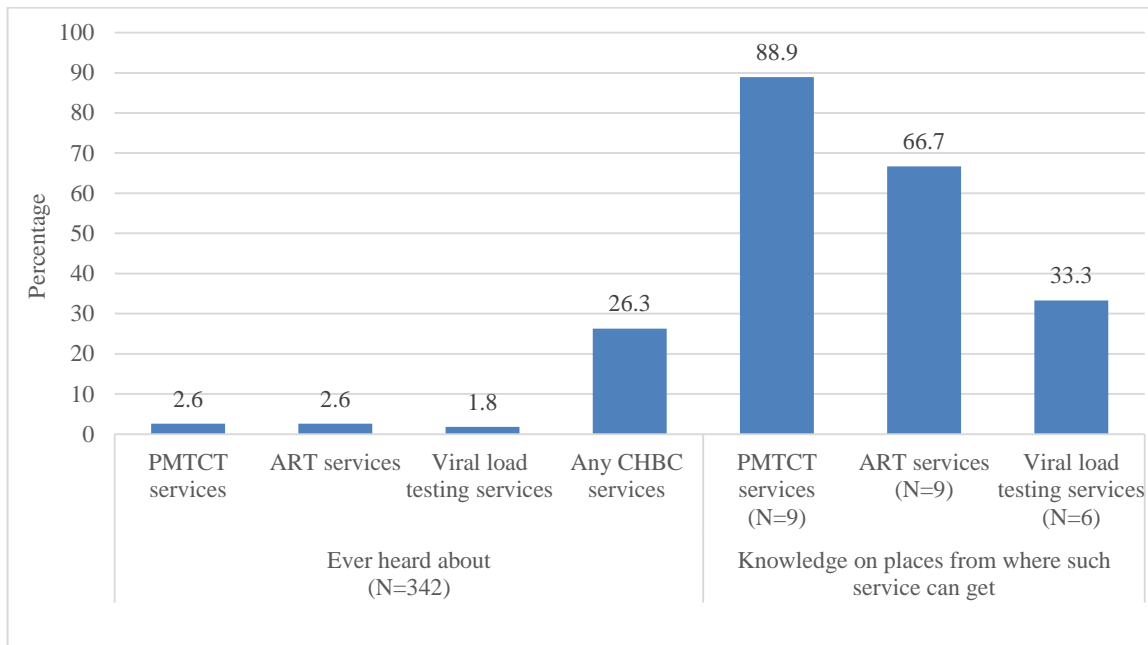
**Table 8.4 Knowledge and/or participation in STI and HIV/AIDS programs**

<b>Visit to any HIV testing and counseling (HTC) centers in the last year</b>	<b>Frequency</b>	<b>Percent</b>
Yes	48	14.0
No	294	86.0
<b>Total</b>	<b>342</b>	<b>100.0</b>
<b>Reason for visiting HTC centers</b>		
Received pre-HIV/AIDS test counseling	18	37.5
Blood sample taken for HIV/AIDS test	31	64.6
Received post HIV/AIDS test counseling	9	18.8
Got information on HIV/AIDS window period	3	6.3
Received HIV/AIDS test result	6	12.5
Took a friend with me	16	33.3
<b>Total</b>	<b>83</b>	<b>*</b>
<b>Frequency of visit to HTC center in the last year</b>		
Once	30	62.5
2-3 times	7	14.6
4-6 times	10	20.8
More than 12 times	1	2.1
<b>Total</b>	<b>48</b>	<b>100.0</b>
<b>Explain the need of HTC by any HIV/AIDS related health workers/ outreach workers</b>		
Yes	11	3.2
No	331	96.8
<b>Total</b>	<b>342</b>	<b>100.0</b>
<b>Topic discussed by the HIV/AIDS related health workers/ outreach workers</b>		
Talked about my sex partners	8	72.7
Advised to visit HTC if I have some problems	4	36.4
Advised me to visit HTC once in a month in any case	3	27.3
Did not talk about HIV testing	2	18.2
Others (Specify) Talk about condom	1	9.1
<b>Total</b>	<b>11</b>	<b>*</b>
<b>* Multiple responses</b>		



**Figure 8.1: Exposure and participation in HIV/AIDS/STI program**

## 8.2 Knowledge regarding HIV prevention and testing services



**Figure 8.2: Knowledge regarding HIV prevention and testing services**

A negligible number of respondents had ever heard about HIV prevention and testing services that had been provided for pregnant women as well as HIV positive individuals. It was reported that just more than one fourth of respondents had heard about such community home based care services (CHBC).

Out of those who had heard about HIV prevention and testing services, one third of the respondents had knowledge about places from where viral loading testing services could be obtained, two third of them had knowledge on places where anti-retroviral therapy (ART) service could be obtained. Majority (88.9%) knew the places for PMTCT (prevention of mother to child transmission) services. (Figure 8.2)

## **CHAPTER 9: USE OF ALCOHOL, ILLICIT DRUGS AND INJECTIONS**

Over 70% respondents have ever consumed alcohol and 28.4% have not drunk in the past 30 days, 35.1% reported that they drank every day. Carrying out sex work whilst under the influence of alcohol or other illicit drugs could reduce the ability of a sex worker to negotiate safer sex practices. More than 2/4<sup>th</sup> of FSWs (26.3 %) and 2/5<sup>th</sup> of client (41.5%) always get drunk when having sex. Only a few respondents (8 out of 342) had injected drugs and of those who did, 87.5 of them shared needles. When asked about the duration of injecting drugs, half of them didn't respond, 12.5% had been taking it for 6 months, 25% had been involving in this activities for 2 years and the remaining 12.5% for 3 years. Out of total respondents, 9.1% had sex partners being IDU's. Just over 19% FSWs used other illicit drugs in the past 30 days.

The proportion of alcohol consumption was found 63% in 2004 to 71.6% in 2006. There was decrease in consumption rate from 75% in 2006 to 65% in 2008. Similarly, the intake of any type of drug was found in increasing trend from 5% in 2004 to 19.3% in 2016.

The survey result shows the trend of injecting drug increased from 1% in 2004 to 4.9% in 2011. Then there is decrease by 2.6% in 2016. It was observed that the proportion of respondents who had sex partners being IDU's declined from 7% in 2004 to 2% in 2008 and then inclined to 7.8% in 2011 to 9.1% in 2016.

**Table 9.1 Use of alcohol, illicit drugs and injections**

<b>Use of alcohol, illicit drugs and injections</b>	<b>Frequency</b>	<b>Percent</b>
<b>Consumption of alcohol in the past month</b>		
Everyday	120	35.1
2-3 times a week	66	19.3
At least once a week	31	9.1
Less than once in a week	23	6.7
Never	97	28.4
Don't know	5	1.5
<b>Drinking habit of FSWs during sex (anal/vaginal) with clients</b>		
Always	90	26.3
Most of the time	73	21.3
Sometimes	71	20.8
Never	102	29.8
Not remember / Don't know	6	1.8
<b>Drinking habit or consuming illicit drugs by clients during sex</b>		
Always	142	41.5
Most of the time	101	29.5
Sometimes	68	19.9
Never	29	8.5
Not remember / Don't know	2	.6
<b>Took different types of drugs (Ganja, Bhang, Nitroson, Nitrovet E.) in the last month</b>		
Yes	66	19.3
No	269	78.7
Don't know	7	2.0
<b>Knowledge of sex partners being IDUs</b>		
Yes	31	9.1
No	311	90.9
<b>Total</b>	<b>342</b>	<b>100.0</b>
<b>Ever injected drugs</b>		
Yes	8	2.3
No	331	96.8
Don't know	3	.9
<b>Total</b>	<b>342</b>	<b>100.0</b>
<b>Duration of injecting drugs</b>		
6 months	1	12.5
12 months	2	25.0
36 months	1	12.5
Don't know / No response	4	50.0
<b>Injected drugs at the time of interview</b>		
Yes	7	87.5
No	1	12.5
<b>Ever exchanged sex for drugs</b>		
Yes	1	12.5
No	7	87.5
<b>Ever exchanged sex for money so that you can buy drug</b>		
Yes	2	25.0
No	6	75.0
<b>Used the syringe which has been already used by others</b>		
No	7	87.5
Don't know	1	12.5
<b>Usual ways of obtaining syringe</b>		
Unknown person	1	12.5
New Syringe given by NGO workers/ volunteers	2	25.0
Syringe purchase by themselves	4	50.0
From friend	1	12.5
<b>Total</b>	<b>8</b>	<b>100.0</b>

# CHAPTER 10: VIOLENCE STIGMA AND DISCRIMINATION

## 10.1 Experience of violence

Studies conducted in many countries indicate that a considerable proportion of women experienced violence in some form or another at some time in their life. Globally, it has been observed that the high rates of HIV infection in women have brought into sharp focus about the problem of violence against women. Studies have revealed an association between violence against women and HIV/STI as both a consequence of/and contributing factor for infection. It has been observed that sexual and physical abuse can result in psychological distress that is manifested in risky sexual behavior, with the result of becoming infected with HIV/STI (Spiwak et al, 2013; Sagtani et al, 2013).

**Table 10.1 Types of activities faced by female sex workers**

Types of activities performed	Total	Client		Non-paying partner		Police personnel	
	N (%)	N	%	N	%	N	%
A. Insulted or made feel bad	39 (11.4)	31	9.1	8	2.3	-	-
B. Belittled or humiliated in front of other people	32 (9.4)	25	7.4	7	2.0	-	-
C. Done things to scare or intimidate on purpose (e.g. by the way he looked at you, by yelling and smashing things	15(4.4)	9	2.6	4	1.2	2	0.6
D. Threatened to hurt you or someone you care about	10 (2.9)	6	1.7	3	0.9	1	0.3
<b>Total ABCD (Psychological violence)</b>	<b>51 (14.9)</b>	<b>38</b>	<b>74.5</b>	<b>10</b>	<b>19.6</b>	<b>3</b>	<b>5.9</b>
E. Slapped or thrown something at you that could hurt you	11 (3.2)	6	1.8	4	1.2	1	0.3
F. Pushed or shoved or pulled hair	11 (3.2)	4	1.2	5	1.5	2	0.6
G. Hit with fist or with something else	7 (2.0)	2	0.6	5	1.5	-	-
H. Kicked , dragged or beat	6 (1.8)	2	0.6	2	0.6	2	0.6
I. Choked or burnt on purpose	2 (0.6)	1	0.3	1	0.3	-	-
J. Use of/or actually used a gun, knife or other weapon	3 (0.9)	2	0.6	1	0.3	-	-
<b>Total EFGHIJ (Physical violence)</b>	<b>22 (6.4)</b>	<b>10</b>	<b>45.5</b>	<b>8</b>	<b>36.4</b>	<b>4</b>	<b>18.2</b>
K. Physically force to have sexual intercourse	14 (4.1)	9	2.6	4	1.2	1	0.3
L. Have sexual intercourse you did not want to because you were afraid of what your partner or any other partner or client might do	17 (5.0)	11	3.2	4	1.2	2	0.6
M. Force to do something sexual that was degrading or humiliating	8 (2.3)	6	1.8	2	0.6	-	-
<b>Total KLM (Sexual violence)</b>	<b>21(6.1)</b>	<b>14</b>	<b>66.7</b>	<b>5</b>	<b>23.8</b>	<b>2</b>	<b>9.5</b>

To find out the extent of violence, female sex workers were asked about the violence they often faced. Amongst respondents experiences of violence were reported with 14.9% being

psychologically assaulted, 6.4% being physically assaulted and 6.1% sexually assaulted (Table 10.1). It was reported that such type of violence activities were performed mostly by client, followed by non-paying partner and police personnel as well.

## 10.2 Stigma and discrimination

When looking at the level of discrimination and stigma against people living with HIV and AIDS, varied responses were accessed. Most of the respondents were more willing to care for and buy food from HIV positive shopkeeper or food seller. Nearly 66% of respondents agreed that individuals living with HIV and AIDS should be allowed to continue work if s/he was not sick. Most of the respondents were less willing to maintain secrecy of HIV positive family member. It was found that a relatively low number (53.8%) would prefer to keep it secret if any member of family tested positive to HIV.

**Table 10.2 Stigma and discrimination**

<b>Willing to take care of HIV positive male relative in the household</b>	<b>Frequency</b>	<b>Percent</b>
Yes	317	92.7
No	18	5.3
Don't know	7	2.0
<b>Willing to take care of HIV positive female relative in household</b>		
Yes	321	93.9
No	16	4.7
Don't know	5	1.5
<b>Willing to maintain secrecy of a HIV positive family member</b>		
Yes	184	53.8
No	136	39.8
Don't know	22	6.4
<b>Willing to buy food from HIV positive shopkeeper or food seller</b>		
Yes	305	89.2
No	33	9.6
Don't know	4	1.2
<b>Extent of care needed by HIV positive person than someone with any other</b>		
Same	83	24.3
More	227	66.4
Less	9	2.6
Don't know	21	6.1
No response	2	.6
<b>Allow to continue work to someone who has HIV but not very sick</b>		
Yes	224	65.5
No	73	21.3
Don't know	38	11.1
No response	7	2.0
<b>Total</b>	<b>342</b>	<b>100.0</b>

## CHAPTER 11: TREND ANALYSIS

This section describes the information on certain indicators of IBBS survey in Pokhara valley between 2004 and 2016.

### 11.1 Prevalence of HIV and syphilis infection

The survey result showed that the HIV prevalence was relatively low in 2016 than in last four round of IBBS survey. There is slight increase in prevalence from 2006 to 2008 by 1% and then decrease in 2011 by 2.7% in 2016. Similarly the active syphilis is also in decreasing trend from 2008 to 2016. However it is statistically insignificant.

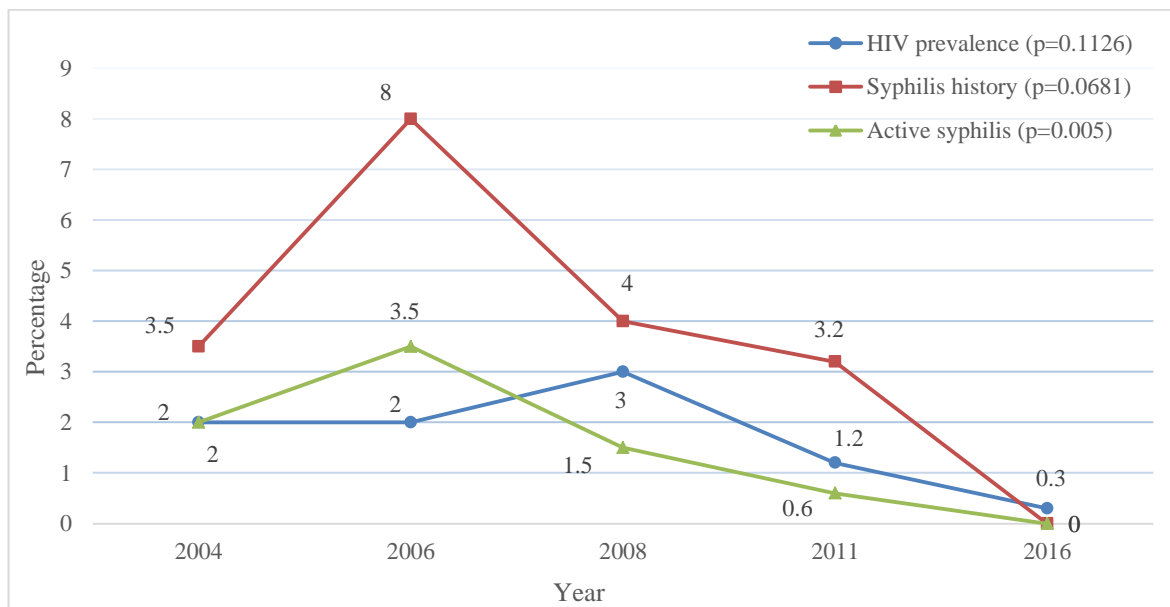
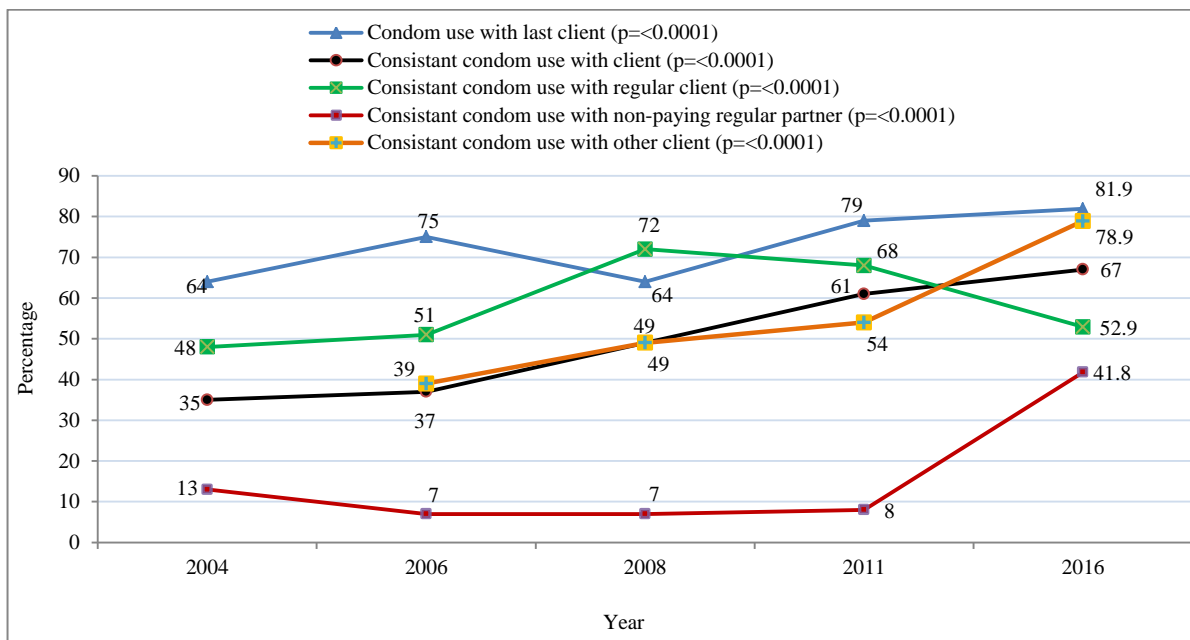


Figure11.1: Trend of HIV and Syphilis prevalence among female sex workers

### 11.2 Condom use with different sex partners

Because of having sexual relationships with multiple partners, sex workers are often at greater risk. Since condoms plays an important role in reducing the risk of infection from HIV or other STIs it is important to use condom consistently rather than occasionally.

The comparative analysis regarding consistent use of condom in the 12 months prior to the interview for female sex workers with last clients, clients, regular clients, nonpaying partners and other clients are presented on figure 11.2.



**Figure 11.2: Trend of condom use with different types of clients/sex partners**

It was observed that the proportion of respondents who used condom with last client significantly inclined from 64% in 2004 to 75% in 2006 followed by a drop to 64% in 2008. Currently increasing trend in use was maintained from 2008 to 2016 (64% in 2008 to 81.9% in 2016).

On the other hand, it was observed that increase in condom use with client was continued all through the time i.e, 35% in 2004 to 67% in 2016. For FSWs with regular clients in the 12 months prior to the interview, the proportion of condom use increased from 48% in 2004 to 72% in 2008 followed by a drop to 68% in 2011 and 52.9% in 2016.

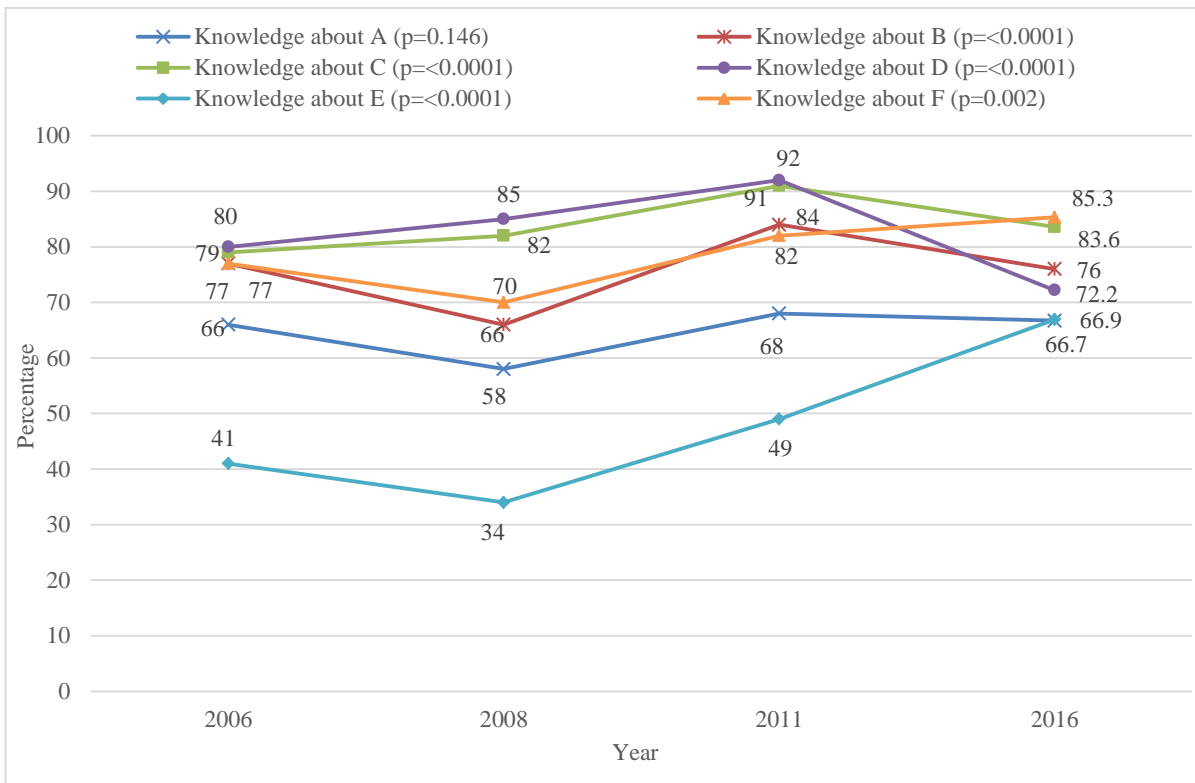
The trend of consistent use of condom with non-paying partner was astonishing. It was observed that a gradient use with non-paying partner was maintained over time by 33.8% i.e. 7% in 2006, 8% in 2011 to 41.8% in 2016.



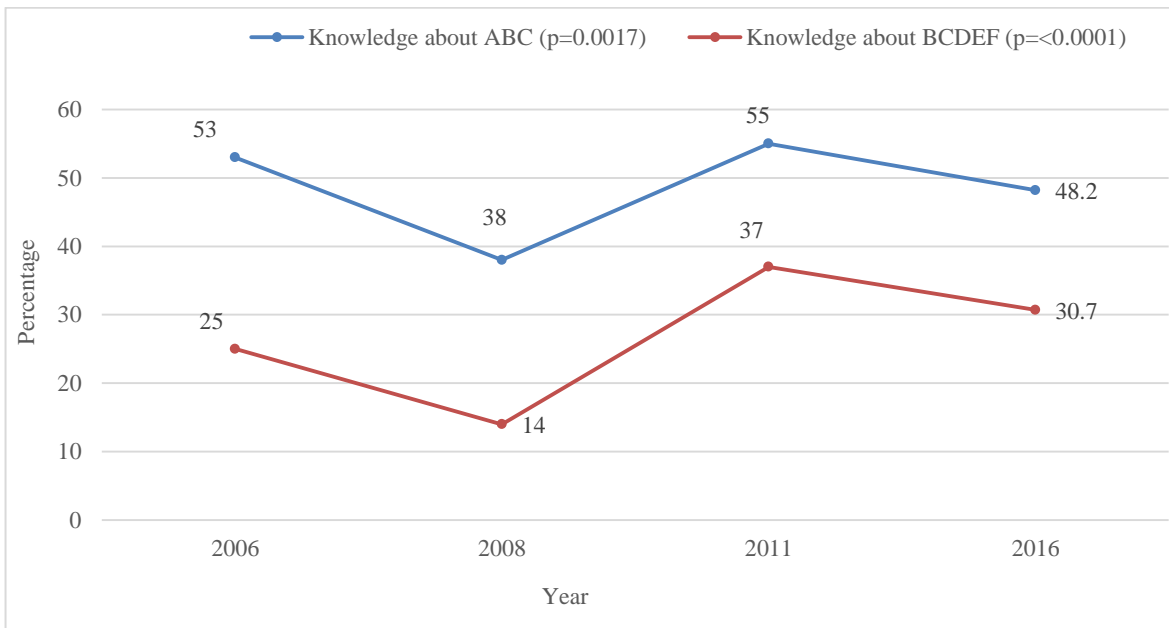
Since there was no data in the 2004 survey on consistent use of condom with other client, data from the 2006 survey was compared to data from 2016. Compared with 2006, in 2016 a substantial increase in consistent use of condom in the 12 months prior to the interview was observed in other clients. It was observed that the proportion of condom use with other clients had increased by 39.9% (39% in 2006 to 78.9% in 2016).

### **11.3 Comprehensive knowledge of HIV/AIDS**

Though the government has focused on awareness programs through government health facilities through mass media as well as female community health volunteers, the knowledge of HIV/AIDS to FSWs between 2006 and 2016 is not in increasing trend. Only statement **A** (people protect themselves from HIV virus by abstaining from sexual intercourse) has increased by 6.2 % from 2006 to 2016. But at the same time, knowledge related to statement **B** (people protect themselves from HIV by keeping sexual contact with only one uninfected faithful sex partner) has decreased from 84% in 2011 to 76% in 2016. Similarly knowledge regarding statement **C** (people protect themselves from HIV, virus-causing AIDS, by using condom correctly in each sexual contact) and **D** (A healthy-looking person can be infected with HIV) has gradually increased from 2008 to 2011 but decreased in 2016 (statement **C** from 91% in 2011 to 83.6% in 2016 and statement **D** from 92% in 2011 to 72.2% in 2016). Gradual increase by 32.9 percent was observed for knowledge regarding statement **E** (person get the HIV virus from mosquito bite) and 15.3% percent for statement **F** (person get HIV by sharing a meal with an HIV infected person) between 2008 and 2016. On the other hand the percentage of FSWs who had knowledge on all the three **ABC** and all the five **BCDEF** has decreased by 6.3% from 2011 to 2016. This decreasing trend in comprehensive knowledge of HIV/AIDS indicates that there needs much more to do to increase the knowledge of HIV/AIDS among female sex workers.



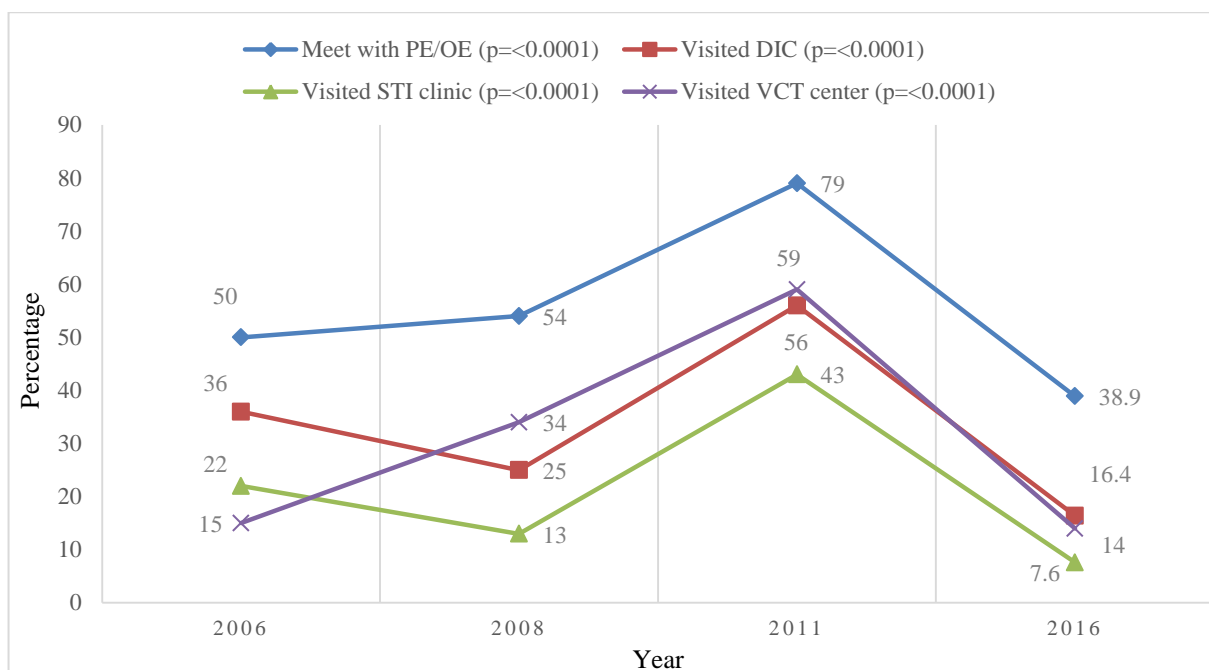
**Figure 11.3: Trend on comprehensive knowledge of HIV/AIDS**



**Figure 11.4: Trend on comprehensive knowledge HIV/AIDS**

## 11.4 Exposure to HIV/AIDS/STI related programs/activities

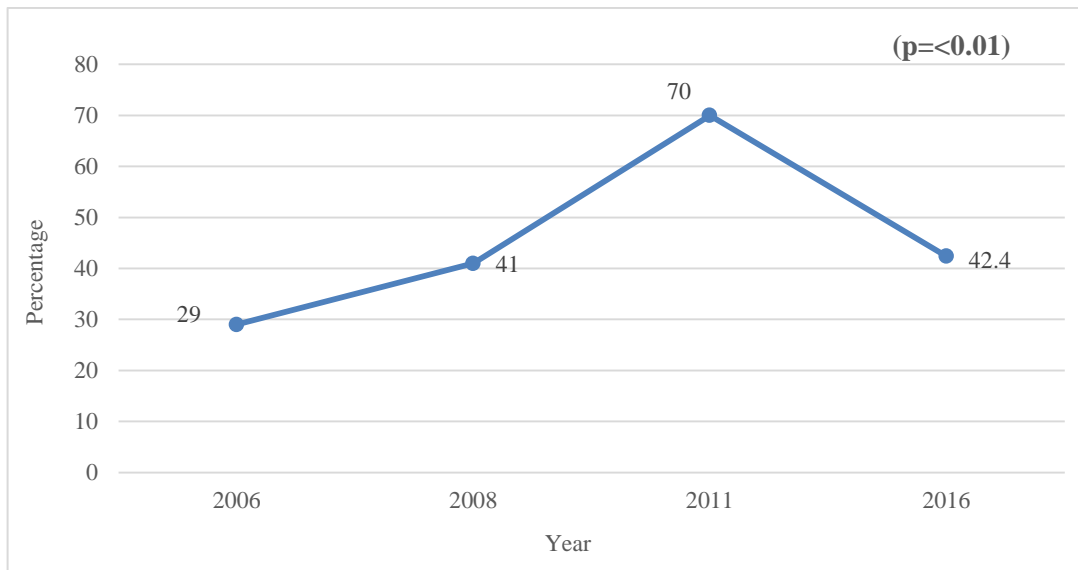
Overall, the exposure of the respondents to HIV/AIDS/STI related program decreases frantically in 2016 from the preceding year. There is a vast decrease in trend in visiting HTC center by 45%, DIC by 40%, STI clinic by 35% and meeting with OE/PE by 40% in 2016.



**Figure 11.5: Trend of exposure to HIV/AIDS related program**

## 11.5 Ever had HIV test

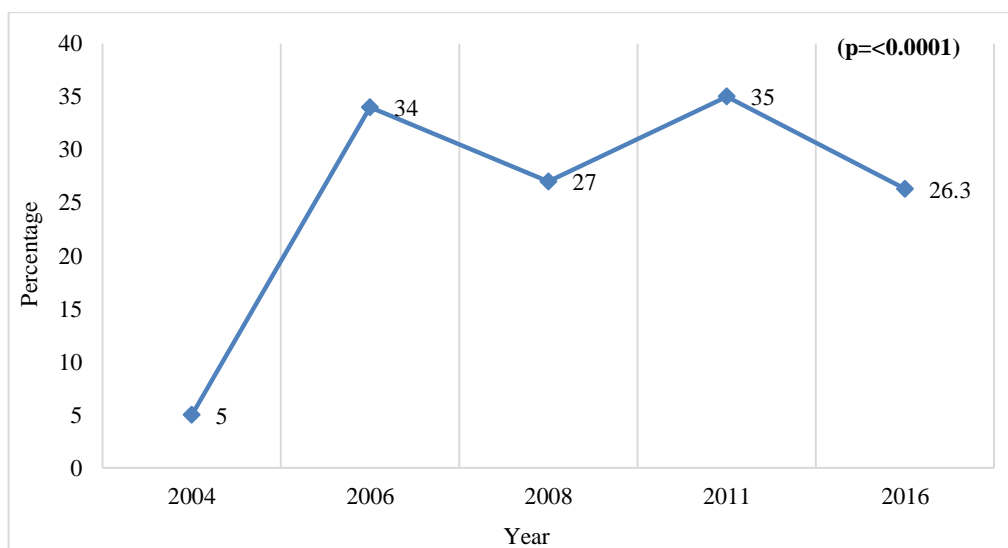
Knowledge of HIV status helps both HIV positive and negative individuals to make specific decision to increase the safer sexual practice which helps to reduce the risk for transmitting disease to others and among themselves. Figure 11.6 shows the trend in HIV testing among female sex workers in Pokhara valley. The percent of female sex worker who had been tested for HIV in the past 12 months has gradually increased over the period of 2006 to 2011 (29% to 70%) and then drop to 42.4% in 2016.



**Figure 11.6: Trend of FSWs who had HIV test prior to survey**

### 11.6 Condom carrying practice

As carrying condom ensures ease of access and promotes consistent use of condom, it was noteworthy to assess such pattern during the time. The survey result shows the trend of condom carrying practice gradually increasing from 5% in 2004 to 34% in 2006. Then there is slight decrease in carrying practice by 7% in 2008. There is noticeable decrease in condom carrying practice by 8.7% in 2016 (35% in 2011 to 26.3% in 2016).



**Figure 11.7: Trend of FSWs who usually carry condom**

## CHAPTER 12: SUMMARY CONCLUSION AND RECOMMENDATION

### 12.1 Summary and conclusion

This fifth round of IBBS survey in Pokhara valley was conducted with the purpose of exploring the prevalence of HIV and syphilis along with other sexually transmitted diseases among the female sex workers so that the findings from it could be importantly used for planning strategy for HIV/STIs prevention programs and reducing HIV/STIs transmission.

An integrated biological and behavioral surveillance (IBBS) survey administered to 342 female sex workers of Pokhara valley (232 establishment based and 110 street based). Biological samples provided by the sex workers were tested for HIV, syphilis, chlamydia and gonorrhoea.

Overall 0.3% (one out of 342) respondent was confirmed HIV positive and no one had active syphilis (RPR –ve or RPR titre <1:2). Similarly 0.3% respondent (one out of 342) was found positive for *Chlymadia Trachomatis* and no one was found positive for *Neisseria Gonorrhoea*. Both the conformed case was from street based FSW. The survey result showed that the HIV prevalence was relatively low in 2016 than in last four round of IBBS survey (2% in 2004 and 0.3% in 2016) . No history of Syphilis was found in this round of survey.

The median age of the respondents was 23 years with range varying from 16 to 48 years. The study area has a rich ethnic diversity; however, the representation of upper caste group is comparatively higher than any other caste. Out of 342 respondents, only 34 (9.9 %) were illiterate. More than half (52%) of the respondents were unmarried and the rest others were ever married. Few married as well as unmarried respondents (9% each) reported that they were living with their male friend. However, half of the married respondents (50%) were living with their husband at present.

More than one fifth of the respondents reported that they had started sexual intercourse before the age of 15 years. The mean age of first sexual intercourse was 17 years varying from 12 to 30 years.

The study revealed that the mean number of clients served by the type of sex work combined was 2.2 clients per day with range varying from 1 to 9 (2.22 for establishment based and 2.16 for street based).

Four types of sex partners such as paying clients, non-paying partners, regular partners and other partners, had been identified among the sex workers. Most of the respondents had been practicing vaginal sex. Only 13 out of 342 (10/232 from establishment based and 3/110 from street based) reported that besides vaginal, they also practiced anal sex, oral sex and masturbation. Although condom use is very low in these types of sex acts, these acts are highly risky indeed.

The average knowledge on risk factors of HIV/AIDS answering correctly to all the three ABC was 48.2 % and that of comprehensive knowledge of HIV/AIDS (BCDEF) was found 30.7%. The percentage of FSWs who had knowledge on all the three ABC and all the five BCDEF decreased by 6.3% from 2011 to 2016. Comprehensive knowledge of HIV/AIDS was found relatively low. This might be because of perceived thought of FSWs regarding the transmission of AIDS by mosquito bite and through sharing a meal with an HIV infected person. Therefore information, education, and communication (IEC) materials should be developed in such a way that can evict the misconceptions about HIV transmission.

FSWs in Pokhara have low HIV prevalence even with risky behaviors such as minimal condom use. Unsafe sex practice with multiple partners still remains as the most common mode of HIV transmission. Condom use is an important measure of protection against HIV, especially among people with multiple sexual partners.

Over 4/5<sup>th</sup> (76%) of respondents had used condoms during last sexual contact with their clients, and this seemed increasing in trend from 2008 to 2016 (64% in 2008 to 81.9% in

2016). Increase in consistent use of condom with client was observed throughout the time (35% in 2004 to 67% in 2016). The proportion of consistent use of condom by respondents with regular clients and non-paying partner was found lower than clients and other clients. The proportion of respondents who consistently use condom with regular client declined after an initial increase from 48% in 2004 to 72% in 2008 followed by a drop to 52.9% in 2016. It was observed that a gradient of use with nonpaying partner was maintained over time by 33.8% i.e., 8% in 2011 to 41.8% in 2016. Decrease in condom carrying practice by 8.7% was also observed in 2016 (35% in 2011 to 26.3% in 2016).

The exposure of the respondents to HIV/STIs related program decreases frenetically in 2016 from the preceding year. There is a vast decrease in trend in visiting HTC center by 45%, DIC by 40%, STI clinic by 35% and meeting with OE/PE by 40% in 2016. Only 60% respondents said that they had knowledge about the testing facility for HIV/AIDS. Though the exposure to HIV/STIs related program found in decreasing trend, more than 2/5<sup>th</sup> of respondents had been tested for HIV. However, among them 73.1% of respondents underwent HIV testing voluntarily. Further, the percent of female sex worker who had been tested for HIV has gradually increased over the period of 2006 to 2011 (29% to 70%) and then drop to 42.4% in 2016.

## **12.2. Recommendation**

FSWs in Pokhara have low HIV prevalence even with risky behaviors such as minimal condom use. The HIV prevalence was observed in the respondent who consistently use condom with their partners but not with their husband or male friend, thus it keeps their husbands are also at greater risk of HIV infection. Therefore, prevention programs should focus on the promotion of correct and consistent use of condom with all kinds of partners including non-paying regular partners such as husband and male friend. Prevention program should include the activities like negotiation skills for appropriate use of condoms and focus on the importance of condom in transmitting disease as well as the habit of carrying condom every time with them. Such programs should also focus on the high risk behavior associated with the clients of sex workers too.

The low prevalence of HIV among FSWs in Pokhara is a window of opportunity to make the most of as well as develop efficient intervention programs. Effective service delivery programs for all FSWs promoting regular health check-up for early diagnosis, safer sexual practice as well as voluntary counseling and testing for STIs and HIV should be whetted in this place.

In order to meet their necessities many underage people are entering into the sex job. Hence the program of research including the awareness raising program should be developed to address the issues related to underage sex workers as well.

It was observed that FSWs has had minimal exposure to HIV awareness program and other prevention activities including visiting PE/OE, DIC, STI clinic and HTC. It was also noticed that knowledge about the HIV prevention and testing services, like PMTCT, ART, viral load testing remained low. Therefore, in order to strengthen and expand the prevention of HIV/AIDS and STI, an inclusive package and intervention programs should be developed. These services should be made user-friendly and the significance of knowing ones HIV status should be intensified.

Since many FSWs do not admit their sex work so easily, any kind of intervention program will be difficult to plan targeting these groups. Hence, hotel and restaurant owner should be involved to sensitize the FSWs for behavior change intervention program.



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# ANNEX – 1

**CONFIDENTIAL**

**National Centre for AIDS and STD Control (NCASC)  
Ministry of Health (MOH), Government of Nepal**

## **Integrated Biological and Behavioral Surveillance Survey among Female Sex Workers in Pokhara Valley-2016**

### **FSW Questionnaire**

Namaste! My name is ....., I am here from to collect data for a research study. This study is being conducted by ..... for National Centre for AIDS and STD Control (NCASC), Ministry of Health and Population. As explained in the consent taking process during this data collection, I will ask you some questions that will be about sexual behavior, use and promotion of condoms, STI/HIV/AIDS, drugs and migration pattern. I believe that you will provide correct information. We will also draw a few drops of blood for HIV testing. If you have any STI symptoms, we will provide treatment for free of charge. The information given by you will be strictly treated as confidential. Nobody will know whatever we talk because your name will not be mentioned in this form and blood sample. It will take about 60 minutes to complete the interview and blood sample collection.

It depends on your willingness to participate in this survey or not. You are free to quit the survey any time you want to. You do not have to answer questions that you do not want to answer. But I hope, you will participate in this survey and make it success by providing correct answers of all the questions.

Would you be willing to participate?

1. Yes                                  2. No

Signature of Interviewer:.....

Date: /\_\_\_/\_\_\_\_\_/2072  
DD/ MM

Establishment based:

 1

Street based:

 2

### **Definition of Respondent**

*“Women aged 16 years and above reporting having been paid in cash or kind for sex with a male within the last 6 months.”*

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

1. Yes                                  2. No (Continue Interview)

↓  
When?

\_\_\_\_\_ Days ago (**STOP INTERVIEW**)

Name of interviewer: \_\_\_\_\_ Code No. of Interviewer:..

## 1.0 GENERAL INFORMATION

Q. N.	Questions and Filters	Coding Categories	Skip to
101	Respondent ID No.		
101.1	Write down how you contacted the respondent?	Met personally ..... 1 Through known FSW ..... 2 Through PE..... 3 Through OE/CM..... 4 Other (Specify)_ ..... 96	
102	Where is the respondent (sex worker) based?	Disco ..... 1 Dance Restaurant ..... 2 Cabin Restaurant..... 3 Call Girl ..... 4 Massage Parlor..... 5 House Settlement ..... 6 Bhatti Pasal ..... 7 Street ..... 8 Garment/Carpet Factory ..... 9 Squatter/Refugee..... 10 Restaurant/Tea shop..... 11 Dohori Restaurant..... 12 Hotel/Lodge ..... 13 Other (Specify)_ ..... 96	
103	Interview Starting Time Interview Completion Time (fill at the end of interview)	_____ _____	
104	Where were you born?	District _____ <input type="text"/> <input type="text"/> VDC/Municipality _____ <input type="text"/> <input type="text"/>	
105	Where do you live now?  (Name of Current Place of Residence)	District _____ <input type="text"/> <input type="text"/> VDC/Municipality _____ <input type="text"/> <input type="text"/>	
106	How long have you been living continuously at this location?	Month ..... <input type="text"/> <input type="text"/> Always (since birth) ..... 0 → 201 Since less than a month..... 995	
107	Before you moved here, where did you live?	District ..... <input type="text"/> <input type="text"/> VDC/Municipality <input type="text"/> <input type="text"/>	

## 2.0 PERSONAL INFORMATION

Q. N.	Questions and Filters	Coding Categories	Skip to
201	How old are you? <b>(If less than 16 years, stop interview)</b>	Age ..... <input type="text"/> <input type="text"/> <b>(Write the completed years)</b>	
202	What is your caste? <b>(Specify Ethnic Group/Caste)</b>	Ethnicity/Caste _____ (Specify) Code No ..... <input type="text"/> <input type="text"/>	
203	What is your educational status? <u>Code:</u> (Circle '00' if illiterate, '19' for the literate without attending the school, and write exact number of the completed grade)	Illiterate ..... 00 Literate ..... 19 Grade ..... <input type="text"/> <input type="text"/> <b>(Write the completed grade)</b>	
204	What is your present marital status?	Married ..... 1 → 204.2 Divorced/Permanently Separated ..... 2 Widow ..... 3 Never married ..... 4 → 204.2	
204.1	How old were you when you got divorced/separated/widowed?	Age ..... <b>(Write the completed years)</b>	
204.2	Who are you living with now? <b>(Multiple answers. DO NOT READ the possible answers)</b>	Husband ..... 1 Male friend ..... 2 Relatives ..... 3 Other females ..... 4 Children ..... 5 Alone ..... 6 Others (Specify) ..... 96	
<b>[Note: If answer in Q. 204 is 'never married' Go to Q. 205.13]</b>			
205	At what age were you married for the first time?	Years old ..... <b>(Write Complete Years)</b>	
205.1	Have you ever given birth to children? (Include all live births even those who died after sometime, and also still births)	Yes ..... 1 No ..... 2 → 205.3	
205.2	If yes, how many were live births? (Include all live births even those who died after sometime but don't include still births)	Sons ..... Daughters .....	
205.3	Have you had miscarriage during your any pregnancies?	Yes ..... 1 No ..... 2 → 205.5	
205.4	If yes, total number of miscarriage	# Terminations .....	
205.5	Have you done termination/abortion of your any pregnancies?	Yes ..... 1 No ..... 2 → 205.8	
205.6	If yes, total number of pregnancy terminated/aborted	# Terminations .....	

<i>Q. N.</i>	<i>Questions and Filters</i>	<i>Coding Categories</i>	<i>Skip to</i>
205.7	Who assisted you at last abortion?	Doctor.....1 Nurse.....2 Midwife.....3 TBA.....4 Traditional healer.....5 Friend.....6 Nobody.....7 Others (Specify) .....96 Don't know.....98	
205.8	Do you want to have a child in future?	in the next 6 months..... 1 in the next two years.....2 No .....3	
205.9	Were you pregnant in the last 12 months? (Include currently pregnant women too)	Yes .....1 No .....2	→ 205.13
205.10	(Don't ask 205.10, 205.11 and 205.12 to those who are currently pregnant and skip to 205.13 ) If Yes, What was the outcome of the last pregnancy? If the response is 3 or 4 check Q.N.205.6 or 205.7)	Live Birth.....1 Still Birth .....2 Spontaneous abortion.....3 Forced Abortion .....4	→ 205.13 → 205.13
205.11	Who assisted your last delivery?	Doctor .....1 Nurse.....2 Midwife .....3 TBA .....4 Traditional healer .....5 Friend.....6 Nobody .....7 Others (Specify) .....96 Don't know.....98	
205.12	Where did you deliver your last child?	Home .....1 Health Post (HP) .....2 Sub Health Post (SHP).....3 Primary Health Center (PHC).....4 District Hospital.....5 Other (Specify) .....96	
205.13	Now I would like to talk about family planning – the various ways or methods that a couple can use to delay or avoid a pregnancy  Which ways or methods have you heard about?  <i>(Lead the each Questions, Multiple answers Possible)</i>		
01	FEMALE STERILIZATION- women can have an operation to avoid having any more children	Yes ..... 1 No ..... 2	
02	MALE STERILIZATION- men can have an operation to avoid having any more children	Yes ..... 1 No ..... 2	
03	PILL- women can take a pill every day to avoid becoming pregnant	Yes ..... 1 No ..... 2	
04	IUD – women can have a loop or coil placed inside them by a doctor or a nurse	Yes ..... 1 No ..... 2	

<i>Q. N.</i>	<i>Questions and Filters</i>	<i>Coding Categories</i>	<i>Skip to</i>
05	INJECTABLES – women can have an injection by a health provider that stops them from becoming pregnant for one or more months	Yes ..... 1 No ..... 2	
06	IMPLANTS- women can have several small rods placed in their upper arm by a doctor or a nurse which can prevent pregnancy for one or more years Implants:	Yes ..... 1 No ..... 2	
07	CONDOM – men can put a rubber sheath on their penis before sexual intercourse	Yes ..... 1 No ..... 2	
08	RHYTHM METHOD – Every month that a woman is sexually active she can avoid pregnancy by not having sexual intercourse on the days of the month she is not likely to get pregnant Rhythm Method:	Yes ..... 1 No ..... 2	
09	WITHDRAWAL – Men can be careful and pull out before climax	Yes ..... 1 No ..... 2	
10	Have you heard any other ways or method that women or men can use to avoid pregnancy?	Yes ..... 1 (Specify) No ..... 2	
205.14	Are you currently doing something or using any method to delay or avoid getting pregnant?	Yes ..... 1 No ..... 2	→ 206
205.15	If yes, which method are you using currently? <b>(Multiple answers possible, Do NOT READ the Possible answers)</b>		
01	FEMALE STERILIZATION- women can have an operation to avoid having any more children	Yes ..... 1 No ..... 2	
02	MALE STERILIZATION- men can have an operation to avoid having any more children	Yes ..... 1 No ..... 2	
03	PILL- women can take a pill every day to avoid becoming pregnant	Yes ..... 1 No ..... 2	
04	IUD – women can have a loop or coil placed inside tem by a doctor or a nurse	Yes ..... 1 No ..... 2	
05	INJECTABLES – women can have an injection by a health provider that stops them from becoming pregnant for one or more months	Yes ..... 1 No ..... 2	
06	IMPLANTS- women can have several small rods placed in their upper arm by a doctor or a nurse which can prevent pregnancy for one or more years	Yes ..... 1 No ..... 2	
07	CONDOM – men can put a rubber sheath on their penis before sexual intercourse	Yes ..... 1 No ..... 2	
08	RHYTHM METHOD – Every month that a woman is sexually active she can avoid pregnancy by not having sexual intercourse on the days of the month	Yes ..... 1 No ..... 2	
09	WITHDRAWAL – Men can be careful and pull out before climax	Yes ..... 1 No ..... 2	
10	Are you currently using any method that women or men can use to avoid pregnancy?	Yes ..... 1 (Specify) No ..... 2	

Q. N.	Questions and Filters	Coding Categories	Skip to
	<b>Check Q. N. 204, if it is divorced/permanently/separated (2), widow (3) or never married (4), skip to Q.N. 207</b>		
206	Are there people who are dependent on your income?	Yes ..... 1 No ..... 2	→ 207
206.1	How many are dependent on your income? <b>(Adults are those who have completed 18 years)</b>	Adults ..... Children .....	
207	How long have you been exchanging sexual intercourse for money or other things? <b>(If answer is less than 6 months stop interview)</b>	Months ..... Don't know..... 98	
207.1	Did you have any sexual intercourse during past 12 months?	Yes.....1 No..... 2	<b>Stop Interview</b>
208	Have you ever been engaged in this profession in other locations too?	Yes..... 1 No..... 2	→ 209
208.1	Where did you work? <b>(List all the places mentioned by the respondent) Probe for places in Nepal as well as outside Nepal including India (Multiple answers possible)</b>	Country      District      City _____ _____ _____ _____ _____ _____	
209	Have you ever been trafficked (tricked or forced) into a job as an entertainer?	Yes .....1 No.....2	
210	What is your average income per sexual transaction ? <b>[Note: If there is '0' in both cash and gift equivalent, probe for the reasons]</b>	Cash.....Rs. Gift equivalent to.....Rs. Others (Specify) ..... 96 Total.....Rs.	
211	Do you have any other work besides sex work?	Yes ..... 1 No .....2	→ 212
211.1	What do you do?	Waiter .....1 Housemaid/restaurant employee (dish cleaner, cook, washerwoman, etc.) .....2 Wage laborer..... 3 Own restaurant/bhatti pasal ..... 4 Masseuse..... 5 Dancer..... 6 Business (retail store, fruit shop etc.) ...7 Knitting /tailoring ..... 8 Peer educator ..... 9 Job (teacher, peon etc) ..... 10 Others (Specify)..... 96	
211.2	What is your average weekly income from the above-mentioned sources?	_____ Rupees	
212	Have you ever encountered any client who refused to give money after having sex?	Yes ..... 1 No ..... 2	



### 3.0 INFORMATION ON SEXUAL INTERCOURSE

Q. N.	Questions and Filters	Coding Categories	Skip to
301	How old were you at your first sexual intercourse?	Year's old ..... Don't know/Can't recall .....98	
302	With how many different sexual partners in total have you had sex during the past week?	Number ..... Don't know.....98	
303	Usually, how many clients visit you in a day?	Number .....	
303.1	With how many clients did you have sexual intercourse yesterday?	Number .....	
303.2	With how many clients did you have sexual intercourse in the past week?	Number .....	
304	In the past month, with which profession's client did you mostly have sex?  <b>(Encircle three most reported types of client. DO NOT READ the possible answers)</b>	Bus, truck or tanker worker ..... 1 Taxi, jeep, microbus or minibus worker .....2 Industrial/wage worker .....3 Police.....4 Soldier/Army .....5 Student .....6 Rickshawala .....7 Service holder.....8 Businessmen.....9 Mobile Businessmen.....10 Migrant worker/lahurey .....11 Contractor .....12 Foreigner (Indian and other Nationals) ..... 14 Farmer.....15 Others (Specify) .....96 Don't know .....98	

304.1	What was the professional background of your last client?	Bus, truck or tanker worker .....1 Taxi, jeep, microbus or minibus worker .....2 Industrial/wage worker .....3 Police.....4 Soldier/Army .....5 Student .....6 Rickshawala .....7 Service holder .....8 Businessmen.....9 Mobile Businessmen.....10 Migrant worker/lahurey .....11 Contractor .....12 Foreigner (Indian and other Nationals.....14 Farmer.....15 Others (Specify) .....96 Don't know.....98	
305	How many days in a week (on an average) do you work as a sex worker?	Days .....	

#### 4.0 USE OF CONDOM AND INFORMATION ON SEX PARTNERS

##### *Condom use with Clients*

Q. N.	Questions and Filters	Coding Categories	Skip to
401	The last time you had sex with your client, did he use a condom?	Yes ..... 1 No .....2	→ 401.2
401.1	Who suggested condom use at that time?	Myself.....1 My Partner ..... 2 Don't know..... 98	→ 402
401.2	Why didn't your client use a condom at that time?  <b>(Multiple answers. DO NOT READ the possible answers)</b>	Not available..... 1 Too expensive..... 2 Partner objected ..... 3 I didn't like to use it..... 4 Used other contraceptive..... 5 Didn't think it was necessary ..... 6 Didn't think of it..... 7 Client offered more money ..... 8 Didn't know / not aware about condom.....9 Other (Specify) ..... 96 Don't know .....;98	
402	How often did your clients use condom over the past 12 months?	All of the time..... 1 Most of the time.....2 Some of the time ..... 3 Rarely ..... 4 Never..... 5	→ 403

402.1	Why didn't your client use condom always?  <b>(Multiple answers. DO NOT READ the possible answers)</b>	Not available..... 1 Too expensive..... 2 Partner objected ..... 3 I didn't like to use it..... 4 Used other contraceptive..... 5 Didn't think it was necessary ..... 6 Didn't think of it..... 7 Client offered more money ..... 8 Didn't know / not aware about Condom ..... 9 Other (Specify) ..... 96 Don't know .....98	
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***Condom use with Regular Client***

Q. N.	Questions and Filters	Coding Categories	Skip to
403	Do you have any client who visits you on regular basis?	Yes ..... 1 No .....2	→ 405.
404	Did your regular client use condom in the last sexual contact with you?	Yes ..... 1 No .....2	→ 404.2
404.1	Who suggested condom use at that time?	Myself .....1 My Partner ..... 2 Don't know ..... 98	→ 405
404.2	Why didn't your regular client use a condom at that time?	Not available.....1 Too expensive.....2 Partner objected .....3 I didn't like to use it.....4 Used other contraceptive.....5 Didn't think it was necessary .....6 Didn't think of it.....7 Client offered more money .....8 Didn't know / not aware about condom.....9 Other (Specify) .....96 Don't know .....98	
405	How often did your regular clients use condom with you over the past 12 months?	All of the time..... 1 Most of the time .....2 Some of the time ..... 3 Rarely ..... 4 Never..... 5	→ 405.1.3
405.1	Why didn't they use condom always?  <b>(Multiple answers. DO NOT READ the possible answers)</b>	Not available..... 1 Too expensive.....2 Partner objected .....3 I didn't like to use it..... 4 Used other contraceptive..... 5 Didn't think it was necessary ..... 6 Didn't think of it..... 7 Client offered more money ..... 8 Other (Specify) .....96 Don't know .....98	

Q. N.	Questions and Filters	Coding Categories	Skip to
405.1.1	If a client (regular or casual) refuses to use a condom, what do you usually do?	Refuses to have sex with the client...1 Forces the client to use a condom.....2 Explains the advantages of condoms..3 Still has sex with the client.....4 Only takes medication/treatment after sex.....5 Other (Specify) .....96 Don't know.....98	
405.1.2	Whether this happened in the past 30 days?	Yes.....1 No.....2	
405.1.3	How often do you have sex with regular and casual clients without condoms to make more money within 6 months?	Always.....1 Most of the time.....2 Sometimes.....3 Never.....4	

***Condom use with Non-paying regular Cohabiting Partner (Husband or Male Friend)***

Q. N.	Questions and Filters	Coding Categories	Skip to
406	Did you have sexual intercourse with your husband or a male friend in past six months?	Yes .....1 No .....2	→ 409
407	Think about your most recent sexual intercourse with your husband or male partner. How many times did you have sexual intercourse with this person over the last 30 days? <b>(Write '00' for none intercourse in past one month)</b>	Number of times..... Don't know..... 98	
408	The last time you had sex with your husband or male friend staying to gather, did your sex partner use a condom?	Yes .....1 No .....2	→ 408.2
408.1	Who suggested condom use that time?	Myself.....1 My Partner .....2 Don't know.....98	→ 409
408.2	Why didn't your partner use a condom that time?	Not available.....1 Too expensive.....2 Partner objected .....3 I didn't like to use it.....4 Used other contraceptive.....5 Didn't think it was necessary .....6 Didn't think of it.....7 Trust partner .....8 Wish to have child .....9 Other (Specify) .....96 Don't know .....98	

Q. N.	Questions and Filters	Coding Categories	Skip to
409	How often did all of your non-paying regular partners use condoms over the last 12 months?	All of the time .....1 Most of the time .....2 Some of the time .....3 Rarely .....4 Never.....5 Did not have sexual intercourse in the last 12 months .....6	→ 410      → 410
409.1	Why didn't they use condom always?  (Multiple answers. DO NOT READ the possible answers)	Not available..... 1 Too expensive..... 2 Partner objected .....3 I didn't like to use it..... 4 Used other contraceptive..... 5 Didn't think it was necessary .....6 Didn't think of it..... 7 Trust partner .....8 Wish to have child .....9 Other (Specify) .....96 Don't know .....98	

***Condom use with sex partners other than clients, husbands and male friends living together***

Q. N.	Questions and Filters	Coding Categories	Skip to
410	During the past one year, did you have sexual intercourse with a person other than your client, husband/ male friend?	Yes ..... 1 No .....2	→ 412.2
411	Did he use condom when he had last sexual contact with you?	Yes ..... 1 No .....2	→ 411.2
411.1	Who suggested condom use at that time?	Myself..... 1 My Partner .....2 Don't know.....98	→ 412
411.2	Why didn't he use condom at that time?	Not available..... 1 Too expensive.....2 Partner objected .....3 I didn't like to use.....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	

Q. N.	Questions and Filters	Coding Categories	Skip to
412	How often did your other partners use condom with you over the past 12 months?	All of the time..... 1 Most of the time ..... 2 Some of the time ..... 3 Rarely.....4 Never .....5	→ 412.2
412.1	Why did your other partners not use condom regularly?  (Multiple answers. DO NOT READ the possible answers)	Not available..... 1 Too expensive.....2 Partner objected ..... 3 I didn't like to use..... 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	

### Condom Accessibility

Q. N.	Questions and Filters	Coding Categories	Skip to
413	Do you usually carry condoms with you?	Yes ..... 1 No .....2	→ 415
413.1	At this moment, how many condoms do you have at-hand with you? ( <b>Observe and write</b> )	Number .....	
414	How do you usually obtain condoms?  (Buy, obtain free of cost or both ways)	Always free of cost ..... 1 Purchase.....2 Obtain both ways ..... 3 Condom never used .....4	→ 414.3 → 415
414.1	From where do you often obtain free condoms?  (Multiple answers. DO NOT READ the possible answers)	Health Post/Health Center ..... 1 Hospital..... 2 NGOs clinics..... 3 Peers/friends.. ..... 4 Community events ..... 5 NGO/Health Workers/Volunteers..... 6 Client/other sex partner ..... 7 Massage parlor..... 8 Hotel/lodge/restaurant..... 9 Bhatti pasal.....10 Others (Specify)..... 96	
414.2	Which would be the most convenient place/s for you to obtain free condoms?  (Multiple answers. DO NOT READ the possible answers)	Health Post/Health Center ..... 1 Hospital..... 2 NGOs clinics..... 3 Peers/friends.. ..... 4 Community events ..... 5 NGO/Health Workers/Volunteers..... 6 Client/other sex partner ..... 7 Massage parlor..... 8 Hotel/lodge/restaurant..... 9 Bhatti pasal .....10 Others (Specify)_ .....96	

414.3	In the last 12 months, have you been given condoms by any organizations?	Yes - free ..... 1 Yes – on cash ..... 2 No .....3	
<b>Note: If response is '1' in Q414 Go to Q415 after 414.3</b>			

### *Type of Sex Practice*

Q. N.	Questions and Filters	Coding Categories	Skip to
415	In the past year, did you have other type of sexual intercourse other than vaginal? (INSTRUCTION TO INTERVIEWER: Explain the other types of sexual intercourse besides vaginal (such as oral, anal)	Yes ..... 1 No .....2	→501
415.1	If yes, what type of sexual act/s were they? (Multiple answers. DO NOT READ the possible answers)	Oral ..... 1 Anal .....2 Masturbation ..... 3 Other (Specify) .....96	
415.2	What type of sexual contact did you have with your last client?  (Multiple answers. DO NOT READ the possible answers)	Oral ..... 1 Anal .....2 Masturbation ..... 3 Vaginal..... 4 Other (Specify) .....96	

### **Violence**

Questions	Client	Non paying partner (Husband or boyfriends)	Police personnel
	Past 12 months	Past 12 months	Past 12 months
<b>416 Has your current husband/partner, client or any other partner ever...</b>	1	1	1
a) Insulted you or made you feel bad about yourself?	1	1	1
b) Belittled or humiliated you in front of other people?	1	1	1
c) Done things to scare or intimidate you on purpose (e.g. by the way he looked at you, by yelling and smashing things)?	1	1	1
d) Threatened to hurt you or someone you care about?	1	1	1
<b>417 Has your current husband/partner, client or any other partner ever....</b>	1	1	1
a) Slapped you or thrown something at you that could hurt you?	1	1	1
b) Pushed you or shoved you or pulled your hair?	1	1	1
c) Hit you with his fist or with something else that could hurt you?	1	1	1
d) Kicked you, dragged you or beat you up?	1	1	1
e) Choked or burnt you on purpose?	1	1	1
f) Use or actually used a gun, knife or other weapon against you?	1	1	1
<b>418 Has your current husband / partner, client or any other partner ever</b>	1	1	1
a) Physically force you to have sexual intercourse when you did not want to?	1	1	1
b) Have sexual intercourse you did not want to because you were afraid of	1	1	1

what your partner or any other partner or client might do?			
c) Force you to do something sexual that you found degrading or humiliating?	1	1	1
d) Forced you to have sexual intercourse with more clients than the previous understanding.	1	1	1

## 5.0 AWARENESS OF HIV/AIDS

### *Knowledge, Opinion and Misconception about HIV/AIDS*

Q. N.	Questions and Filters	Coding Categories	Skip to
501	Can people protect themselves from HIV by keeping sexual contact with only one uninfected faithful sex partner?	Yes ..... 1 No .....2 Don't know..... 98	
502	Can people protect themselves from HIV, virus-causing AIDS, by using condom correctly in each sexual contact?	Yes ..... 1 No .....2 Don't know..... 98	
503	Do you think a healthy-looking person can be infected with HIV?	Yes ..... 1 No .....2 Don't know..... 98	
504	Can a person get the HIV virus from mosquito bite?	Yes ..... 1 No .....2 Don't know..... 98	
505	Can a person get HIV by sharing a meal with an HIV infected person?	Yes ..... 1 No .....2 Don't know..... 98	
506	Can a pregnant woman infected with HIV/AIDS transmit the virus to her unborn child?	Yes ..... 1 No .....2 Don't know..... 98	→ 508
507	What can a pregnant woman do to protect herchild from HIV transmission?	Cannot do anything/cannot protect the child ..... 0 Take Medication ..... 1 Abort the child ..... 2 Other (Specify)..... 96 Don't know.....98	
508	Can a woman with HIV/AIDS transmit the virus to her new-born child through breastfeeding?	Yes ..... 1 No .....2 Don't know..... 98	
509	Can people protect themselves from HIV virus by abstaining from sexual intercourse?	Yes ..... 1 No .....2 Don't know..... 98	
510	Can a person get HIV by holding an HIV infected person's hand?	Yes ..... 1 No .....2 Don't know..... 98	
511	Can a person get HIV, by using previously used needle/syringe?	Yes ..... 1 No .....2 Don't know..... 98	
512	Can blood transfusion from an infected person to the other transmit HIV?	Yes ..... 1 No .....2 Don't know..... 98	



513	Is it possible in your community for someone to have a confidential HIV test?	Yes ..... 1 No .....2 Don't know..... 98	
513.1	Do you know where can you go for HIV testing?	Yes ..... 1 No .....2	→ 601
514	Have you ever had an HIV test?	Yes ..... 1 No .....2	→ 601
514.1	When did you have your most recent HIV test?	Within the past year.....1 Between 1-2 years.....2 Between 2-4 years.....3 More than 4 years ago.....4	
515	Did you voluntarily undergo the HIV test or because it was required?	Voluntarily..... 1 Required.....2 No Response.....99	
516	What was the result of your last test?	Positive.....1 Negative.....2 unclear / neither positive or negative..3 Did not receive result.....,4 Don't know..... 98 Refuse to answer .....99	
517	After you tested HIV positive, were you linked with HIV care by HTC service?	Yes..... 1 No..... 2 Don't know ..... 9997 refuse to answer..... 9998	→ 519
518	What is the main reason you have never enrolled or registered for HIV care or treatment?	Feel healthy..... 1 Stigma, don't want others to know... 2 Cost.....3 Poor attitude of health care workers...4 Waiting time or clinic hours not good .5 Other .....9996 Don't know..... 9997 Refuse to answer..... 9998	
519	Why did you not receive the test result?	Sure of not being infected.....1 Afraid of result.....2 Felt unnecessary.....3 Forgot it .....4 Other (Specify)_ .....96	

## 6.0 PROMOTION OF CONDOM

### *Knowledge of and Participation in STI and HIV/AIDS Programs*

Q. N.	Questions and Filters	Coding Categories	Skip to
601	Have you met or discussed or interacted with peer educators (PE) or outreach educators (OE) in the last 12 months?	Yes ..... 1 No .....2 No response ..... 99	→ 605

Q. N.	Questions and Filters	Coding Categories	Skip to
602	When you met/discussed/interacted with PE or OE, what activities did they involve you in?  <b>(Multiple answers. DO NOT READ the possible answers)</b>	Discussion on how HIV/AIDS is/isn't transmitted .....1 Discussion on how STI is/isn't transmitted .....2 Regular/non-regular use of condom ...3 Demonstration on using condom correctly .....4 STI treatment/cure after treatment .....5 Counseling on reducing number of sex partner.....6 Training on HIV and STI, Condom day, AIDS day, participation in discussions and interaction programs .....7 Others (Specify)_____..... 96	
603	How many times have you been visited by PE and/or OE in the last 12 months?	Once .....1 2-3 times ..... 2 4-6 times ..... 3 7-12 times .....4 More than 12 times ..... 5	
604	Have you visited or been to any drop in center (DIC) in the last 12 months?	Yes ..... 1 No .....2	→ 609
605	What did you do at DIC?  <b>(Multiple answers. do not read the possible answers)</b>	Went to collect condoms .....1 Went to learn the correct way of using condom. ....2 Went to watch film on HIV/AIDS....3 Participated in discussion on HIV transmission... ..4 Participated in discussion on STI transmission... ..5 Participated in training, interaction and discussion programs on HIV/AIDS and STI.....6 Went to collect IEC materials .....7 Went for STI treatment ..... 8 Took friend with me ..... 9 Other (Specify)_ .....96	
606	How many times have you visited such DICs in the last 12 months?	Once .....1 2-3 times ..... 2 4-6 times ..... 3 7-12 times .....4 More than 12 times ..... 5	
607	Have you visited any STI clinic in the last 12 months?	Yes ..... 1 No .....2	→ 613

Q. N.	Questions and Filters	Coding Categories	Skip to
608	What did you do at such STI clinics?  <b>(Multiple answers. do not read the possible answers given below)</b>	Blood tested for STI.....1 Physical examination conducted for STI identification .....2 Was advised to use condom in each sexual intercourse .....3 Was advised to take complete and regular medicine.....4 Was suggested to reduce number of sexual partners .....5 Took friend with me ..... 6 Other (Specify)_ ..... 96	
609	How many times have you visited such 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	
610	Have you visited any voluntary counseling and testing (HTC) centers in the last 12 months?	Yes ..... 1 No .....2	→ 616.1
611	What did you do at such HTC centers?  <b>(Multiple answers. DO NOT READ the possible answers)</b>	Received pre-HIV/AIDS test counseling ..... 1 Blood sample taken for HIV/AIDS test .....2 Received post HIV/AIDS test counseling .....3 Got information on HIV/AIDS window period .....4 Received HIV/AIDS test result ..... 5 Received counseling on using Condom correctly in each sexual intercourse ..... 6 Took a friend with me..... 7 Other (Specify)_____ ..... 96	
612	For how many times have you visited HTC center in the last 12 months?	Once .....1 2-3 times ..... 2 4-6 times ..... 3 7-12 times ..... 4 More than 12 times ..... 5	→ 616.2
612.1	If not visited HTC in the last 12 months, what is the reason for this?  <b>(Multiple answers. DO NOT READ the possible answers)</b>	Do not know about VCT center.....1 I do not think I need to be tested ..... 2 I have no symptoms of HIV ..... 3 No VCT near by..... 4 I have already tested and know my status ..... 5 No money to go to VCT center .....6 Fear that people will see me visiting VCT ..... 7 Fear that family members/friend/clients will know it..... 8 Others (Specify) _____ ..... 96	

Q. N.	Questions and Filters	Coding Categories	Skip to
612.2	Have you ever been approached by HIV/AIDS related health workers/ outreach workers to explain you about the need of VCT?	Yes ..... 1 No ..... 2	→ 617
612.3	If you were approached by health workers/outreach workers, what did they advise you?  <b>(Multiple answers. DO NOT READ the possible answers)</b>	Talked about my sex partners .....1 Advised to visit VCT if I have some problems ..... 2 Advised me to visit VCT once in a month in any case .....3 Did not talk about HIV testing..... 4 Others (Specify) ..... 96	
613	Have you ever heard about prevention of mother to child transmission services (PMTCT) for pregnant women?	Yes .....1 No .....2 No response .....99	} 618
613.1	Do you know from where pregnant women can get PMTCT services?	Yes ..... 1 No .....2 No response .....99	} 618
614	Have you ever heard about anti-retroviral therapy (ART) services for HIV positive individuals?	Yes .....1 No .....2 No response .....99	} 619
614.1	Do you know from where HIV positive individuals can get ART services?	Yes .....1 No .....2 No response .....99	} 619
615	Have you heard of viral load testing services for HIV positive individuals?	Yes .....1 No .....2 No response .....99	} 620
615.1	Do you know from where HIV positive individuals can get viral load testing services?	Yes .....1 No .....2 No response .....99	} 620
616	Have you heard of any Community Home Based Care (CHBC) services that are provided for HIV Positive people?	Yes .....1 No .....2	

## 7.0 STI (SEXUALLY TRANSMITTED INFECTION)

Q. N.	Questions and Filters	Coding Categories	Skip to
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01	Which diseases do you understand by STI?  <b>(Multiple answers. DO NOT READ the possible answers)</b>	White discharge/discharge of Pus/dhatu flow .....1 Itching around vagina .....2 Lower abdominal pain .....3 Syphilis (Bhiringi)/gonorrhea .....4 HIV/AIDS .....5 Painful urination .....6 Swelling of vagina .....7 Pain in vagina .....8 Unusual bleeding from vagina .....9 Ulcer or sore around vagina .....10 Fever .....11 Burning during urination .....12 Weight loss/ get thinner .....13 Don't know .....98 Other (Specify) .....96																																						
702	Do you currently have any of the following symptoms? <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:60%; text-align:center;">Symptoms</th> <th style="width:20%; text-align:center;">Yes</th> <th style="width:20%; text-align:center;">No</th> </tr> </thead> <tbody> <tr><td>1. Pain in the lower abdomen</td><td style="text-align:center;">1</td><td style="text-align:center;">2</td></tr> <tr><td>2. Pain during urination</td><td style="text-align:center;">1</td><td style="text-align:center;">2</td></tr> <tr><td>3. Frequent urination</td><td style="text-align:center;">1</td><td style="text-align:center;">2</td></tr> <tr><td>4. Pain during sex</td><td style="text-align:center;">1</td><td style="text-align:center;">2</td></tr> <tr><td>5. Ulcer or sore in the genital area</td><td style="text-align:center;">1</td><td style="text-align:center;">2</td></tr> <tr><td>6. Itching in or around the vagina</td><td style="text-align:center;">1</td><td style="text-align:center;">2</td></tr> <tr><td>7. Vaginal odor or smell</td><td style="text-align:center;">1</td><td style="text-align:center;">2</td></tr> <tr><td>8. Vaginal bleeding (unusual)</td><td style="text-align:center;">1</td><td style="text-align:center;">2</td></tr> <tr><td>9. Unusual heavy, foul smelling vaginal discharge</td><td style="text-align:center;">1</td><td style="text-align:center;">2</td></tr> <tr><td>10. Genital Warts</td><td style="text-align:center;">1</td><td style="text-align:center;">2</td></tr> <tr><td>96. Others (Specify) _____</td><td style="text-align:center;">1</td><td style="text-align:center;">2</td></tr> </tbody> </table> <p style="text-align:center;"><b>(If answer is 'No' to all in the Q. No. 702 Go to Q. 709)</b></p>			Symptoms	Yes	No	1. Pain in the lower abdomen	1	2	2. Pain during urination	1	2	3. Frequent urination	1	2	4. Pain during sex	1	2	5. Ulcer or sore in the genital area	1	2	6. Itching in or around the vagina	1	2	7. Vaginal odor or smell	1	2	8. Vaginal bleeding (unusual)	1	2	9. Unusual heavy, foul smelling vaginal discharge	1	2	10. Genital Warts	1	2	96. Others (Specify) _____	1	2	
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96. Others (Specify) _____	1	2																																						
703	Have you gone through medical treatment for any of these symptoms?	Yes ..... 1 No .....2	→ 709																																					
703.1	If yes, for how long did you wait to go for the treatment? <b>(Write '00' if less than a week)</b>	Week .....																																						
704	<b>For which symptoms did you get treatment? Specify the treatment.</b> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:60%; text-align:center;">Symptoms</th> <th style="width:40%; text-align:center;">Treatment</th> </tr> </thead> <tbody> <tr><td>1. Pain in the lower abdomen</td><td></td></tr> <tr><td>2. Pain during urination</td><td></td></tr> <tr><td>3. Frequent urination</td><td></td></tr> <tr><td>4. Pain during sex</td><td></td></tr> <tr><td>5. Ulcer or sore in the genital area</td><td></td></tr> <tr><td>6. Itching in or around the vagina</td><td></td></tr> <tr><td>7. Vaginal odor or smell</td><td></td></tr> <tr><td>8. Vaginal bleeding (unusual)</td><td></td></tr> <tr><td>9. Unusual heavy, foul smelling vaginal discharge</td><td></td></tr> <tr><td>10. Genital Warts</td><td></td></tr> <tr><td>96. Others (Specify) _____</td><td></td></tr> </tbody> </table>			Symptoms	Treatment	1. Pain in the lower abdomen		2. Pain during urination		3. Frequent urination		4. Pain during sex		5. Ulcer or sore in the genital area		6. Itching in or around the vagina		7. Vaginal odor or smell		8. Vaginal bleeding (unusual)		9. Unusual heavy, foul smelling vaginal discharge		10. Genital Warts		96. Others (Specify) _____														
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96. Others (Specify) _____																																								
705	Did you receive a prescription for medicine?	Yes .....1 No .....2	709																																					



706	Did you obtain all the medicine prescribed?	Yes I obtained all of it .....1 I obtained some but not all.....2 I obtained none .....3	→ 709
707	Did you take all of the medicine prescribed?	Yes .....1 No .....2	→ 708
707.1	If not, why did you not take all of the medicine prescribed?	Forgot to take .....1 Felt cured .....2 Medicine did not help .....3 Others (Specify)..... 96	
708	How much did you pay for the medicine that you took? [If not paid mention the reasons]	Rs. _____ Reason _____	
709	Did you have any of the following symptoms in the past year?		
	<b>Symptoms</b>	<b>Y</b>	<b>No</b>
	1. Pain in the lower abdomen	1	2
	2. Pain during urination	1	2
	3. Frequent urination	1	2
	4. Pain during sex	1	2
	5. Ulcer or sore in the genital area	1	2
	6. Itching in or around the vagina	1	2
	7. Vaginal odor or smell	1	2
	8. Vaginal bleeding (unusual)	1	2
	9. Unusual heavy, foul smelling vaginal discharge	1	2
	10. Genital Warts	1	2
96. Others (Specify)	1	2	
<b>(If answer is 'No' to all in Q. No. 709, Go to Q. No. 801)</b>			
710	Have you gone through medical treatment for any of these symptoms in the past year?		
	<b>Symptoms</b>	<b>Yes</b>	<b>No</b>
	1. Pain in the lower abdomen	1	2
	2. Pain during urination	1	2
	3. Frequent urination	1	2
	4. Pain during sex	1	2
	5. Ulcer or sore in the genital area	1	2
	6. Itching in or around the vagina	1	2
	7. Vaginal odor or smell	1	2
	8. Vaginal bleeding (unusual)	1	2
	9. Unusual heavy vaginal discharge and foul vaginal discharge	1	2
	10. Genital Warts	1	2
96. Others (Specify)	1	2	
<b>(If answer is 'No' to all in Q. No. 710, Go to Q. No. 801)</b>			
711	Did anyone from the place where you went for treatment counsel you about how to avoid the problem?	Yes ..... 1 No .....2	→ 801

711.1	What did he/she tell you?  <b>(Multiple answers, DONOT READ the possible answers)</b>	Told me to use condom..... 1 Told me to reduce number of sexual partners ..... 2 Told me to take medicine regularly 3 Told me not to have sexual contact during medicine taking period ..... 4 Advised me to come for regular checkup ..... 5 Others (Specify) _____..... 96	
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*Use of alcohol, Illicit Drugs and Injection*

Q. N.	Questions and Filters	Coding Categories	Skip to
801	During the last 30 days how often did you have drinks containing alcohol?	Everyday .....1 2-3 times a week .....2 At least once a week .....3 Less than once in a week .....4 Never ..... 5 Don't know..... 98	
801.1	How often are you drunk when you have sex (anal/vaginal) with clients in last 6 months?	Always.....1 Most of the time .....2 Sometimes.....3 Never.....4 Don't know .....98 No answer .....99	
801.2	How often are your clients drunk or high on illicit drugs (Ganja, Bhang) when they have sex with you in last 6 months?	Always.....1 Most of the time .....2 Sometimes.....3 Never.....4 don't know .....98 no answer .....99	
802	Some people take different types of drugs. Have you also tried any of those drugs in the past 30 days? <b>(Ganja, Bhang, Nitroson, Nitrovet E.)</b>	Yes ..... 1 No .....2 Don't know..... 98	
803	Some people inject drugs using a syringe. Have you ever-injected drugs? <b>(Do not count drugs injected for medical purpose or treatment of an illness)</b>	Yes ..... 1 No .....2 Don't know..... 98	→ 805 → 805
803.1	How long have you been injecting drug? (inject by others or yourself)	Year ..... Months ..... No response .....99	
804	Are you currently injecting drugs?	Yes ..... 1 No .....2	
805	Have you ever exchanged sex for drugs?	Yes ..... 1 No .....2	
806	Have you ever exchanged sex for money so that you can buy drug?	Yes ..... 1 No .....2	

807	To your knowledge, have any of your sex partners injected drugs?	Yes ..... 1 No .....2	
808	Remember the last event that your partner inject the drug. At that time does he use the syringe that has been already used by others?	Yes ..... 1 No..... 2 Don't know ..... 98	
809	From where did your partner often obtain syringe?	My friend/Relatives which has been already used by them.....1 Unknown person.....2 Syringe placed by other person in public places.....3 Syringe placed in public place by myself.....4 New Syringe given by NGO workers/ volunteers.....5 Syringe purchase by myself.....6 Any other .....96 (Specify)	

## 9.0 STIGMA AND DISCRIMINATION

Q. N.	Questions and Filters	Coding Categories	Skip to
901	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	
902	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	
903	If a member of your family gets HIV, would you want it to remain a secret?	Yes ..... 1 No .....2 Don't know..... 98	
904	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	
905	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	
906	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	

**\*\*Thank to you very much for your active participation\*\***

IBBS survey among FSWs in Pokhara Valley-2015, Round -V



## ANNEX – 2

### Confidential INTEGRATED BIO - BEHAVIORAL SURVEY (IBBS) AMONG FEMALE SEX WORKERS (FSWs) IN POKHARA VALLEY – 2016

#### Female Clinical/Lab Checklist Respondent

**ID Number:**

<b>F</b>	<b>S</b>	<b>W</b>	<b>P</b>			
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Name of Clinician: \_\_\_\_\_ Date: 2072/\_\_\_\_/\_\_\_\_

Name of Lab Technician: \_\_\_\_\_

**(A) Clinical Information**

**(B) Specimen collection**

**Yes**

**No**

Weight: _____ Kg	Pre-test counseled	1	2
B.P.: _____ mm of Hg	Blood collected for HIV & Syphilis	1	2
Pulse: _____	Date & place for post-test results given	1	2
Temperature : _____ o F	Condom given	1	2
	Vitamins given	1	2
	Gift given	1	2
	IEC materials given	1	2

**1.0 Syndromic Treatment Information**

101. Has any of your sexual partners had urethral discharge in the past 3 months?

1. Yes

2. No

98. Don't Know

102. Do you now have or have you had any of the following symptoms in the past month?

	Now		In the Past Symptoms Month	
	Yes	No	Yes	No
1. Pain in the lower abdomen	1	2	1	2
2. Pain during urination	1	2	1	2
3. Frequent urination	1	2	1	2

4. Pain during sex	1	2	1	2
5. Ulcer or sore in the genital area	1	2	1	2
6. Itching in or around the vagina	1	2	1	2
7. Vaginal odor or smell	1	2	1	2
8. Vaginal bleeding (unusual)	1	2	1	2
9. Unusual heavy, foul smelling vaginal discharge	1	2	1	2
11. Others (Specify).....	1	2	1	2

(If yes to any of above, give vaginal discharge syndrome treatment)

103. Do you now have or have you had in the past month any sores or ulcer on or near your genitals?

1. Yes (If yes, Refer)

2. No

104. Has any of your sexual partners had sore around genital areas in the past 3 months?

1. Yes (If yes, Refer)

2. No

98. Don't know

## 2.0. Biological Test Results

Test Name	Positive	Negative
1.HIV	1	2
2.Syphilis	1	2
3.Gonorrhoea	1	2
4. Chlamydia	1	2

## ANNEX – 3

**Oral Informed and witnessed Consent Form for Female Sex Workers (FSWs) involving in**  
IBBS survey among FSWs in Pokhara Valley-2015, Round -V

## **Integrated Biological and Behavioral (IBBS) surveillance survey**

### **Subject: Bio-behavioral survey on FSWs, Pokhara Valley-2016**

#### ***Introduction of Survey***

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

#### ***Information about the Research and Your Role***

This study selects its study participants from the Pokhara valley who are female sex workers using a random process from Pokhara Valley. You are in the pool of possible candidates, but the final selection would be based on your choice. In total 340 women like you will be selected for this study from Pokhara Valley. If you agree to participate in the study we will interview you using a structured questionnaire and then ask you to provide about 5-7 ml blood sample for HIV and Syphilis test. We will draw blood from the vein. If you have any STI symptom, we will provide free treatment. You will be provided your confirmatory HIV test results and RPR titer test result on the same day if you want to receive it. A qualified counselor will provide test results. If you are RPR reactive, a confirmatory test result for syphilis will be provided at the nearest VCT clinic in Pokhara and you will be informed about the time and clinic where you need to obtain those results.

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

#### **Possible Risks**

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

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

#### **Possible Benefits**

You will be provided with free treatment, if currently you have any STI symptoms. Further, if you are tested positive for Syphilis and provide consent for treatment, we will provide you Penicillin

IBBS survey among FSWs in Pokhara Valley-2015, Round -V

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

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

### **If You Decide Not to Be in the Research**

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

### **Confidentiality**

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

### **Payment**

We will not pay you for your participation but you will be given condom and reading materials about STI/HIV/AIDS as compensation for your participation in the research. We will provide some refreshment and local transportation fare for coming to study center for interview and test result collection.

### **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**

#### **Principal Investigator...**

**Address:** Government of Nepal, Ministry of Health, National Centre for AIDS and STD Control (NCASC), Teku Kathmandu, Nepal

Phone: +01426153,4262753, 4258219, Fax: +014261406

Email: [ncasc@ncasc.gov.np](mailto:ncasc@ncasc.gov.np)

### **Your Rights as a Participant**

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

### **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.

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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.

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Signature of Person Who Obtained Consent

Date: