# Integrated Biological and Behavioral Surveillance (IBBS) Survey among Male Labor Migrants (MLM) in Western and Mid to Far Western Region of Nepal, 2015

### Round V

**Final Report** 

December 2015



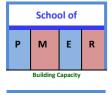
Ministry of Health and Population National Centre for AIDS and STD Control Teku, Kathmandu

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The IBBS Surveys are part of the National HIV Surveillance Plan, led by NCASC. The field work of the surveys was carried out by SPMER, quality assurance by National Public Health Laboratory and with financial assistance from the Global Fund managed by Save the Children International



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We believe that the findings from this survey will be useful to all the policy makers, program planners and implementing agencies to design the new programs of HIV response in the country. The information generated by this study will also be helpful in developing appropriate strategies for HIV vision 2020 for Nepal

Dr. Dipendra Raman Singh Director, NCASC

#### **ACRONYMS**

AIDS Acquired Immuno-Deficiency Syndrome

ART Anti-Retroviral Therapy

CHBC Community Home Based Care

DIC Drop-in-Centre

EQA External Quality Assessment

EQAS External Quality Assurance Scheme

FHI Family Health International

FP Family Planning

FPAN Family Planning Association of Nepal

FSW Female Sex Worker

GOs Governmental Organizations

HIV Human Immuno-Deficiency Virus

HTC HIV Testing and Counseling

IBBS Integrated Biological and Behavioral Surveillance

ID Identification Number

IEC Information, Education and Communication

KAP Key Affected Populations
MLM Male Labor Migrant

MLM Male Labor Migrant

MSM Men who have Sex with Men

NANGAN National NGOs Network Group Against AIDS Nepal

NCASC National Centre for AIDS and STD Control

NGO Non-Governmental Organization
NHRC Nepal Health Research Council
NPHL National Public Health Laboratory

OE Outreach Educator
PE Peer Educator

PHCC Primary Health Care Centre
PLHIV People living with HIV

PMTCT Prevention of Mother to Child Transmission

PPS Probability Proportional to Size

PWID People Who Inject Drugs

SACTS STD/AIDS Counseling and Training Services

SGS Second Generation Surveillance

SI Strategic Information

SITWG Strategic Information Technical Working Group

SLC School Leaving Certificate

SPSS Statistical Package for the Social Sciences

STI Sexually Transmitted Infection WHO World Health Organization

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#### **EXECUTIVE SUMMARY**

This is the fifth round of Integrated Biological and Behavioral Surveillance (IBBS)survey conducted among 720 Male Labor Migrants (MLM) (360 migrants of Western Region and 360 migrants of Mid to Far Western Region). Survey was conducted in 11 districts of both the Regions (Five districts: Kaski, Syangja, Palpa, Kapilvastu, Gulmi of Western Region and Six districts: Banke, Surkhet, Kailali, Kanchanpur, Doti and Achham of Mid to Far Western Region).

Field work for the survey was carried out during 9<sup>th</sup> July to 8<sup>th</sup> August, 2015. The survey was undertaken primarily to track the trend of HIV prevalence among MLMs and to understand risky sexual behaviors among MLMs of Western and Mid to Far Western Regions of Nepal. Information on the socio-demographic, history of migration, sexual behavior and condom use; knowledge on STI, HIV and AIDS; and exposure to STI, HIV and AIDS awareness programs; and stigma against HIV infected person were collected using a structured questionnaire. Prevalence of HIV was determined by testing blood samples using three different test kits: Determine HIV 1/2 test as a first test to detect antibodies against HIV, Uni-Gold test as a second test, and the STAT PAK test as a tie breaker test as per the HIV Testing and Counseling (HTC) guideline of National Centre for AIDS and STD Control (NCASC).

#### **KEY FINDINGS**

#### Comparison of the results of different IBBS surveys (2006-2015)

HIV prevalence among MLMs shows declining trend in survey clusters (1.1% in 2006, 1.4% in 2008, 1.1% in 2012 and 0.4 in 2015). The condom carrying practices of MLMs of Western Region has been improved (17.5% in 2012 to 24.4% in 2015) in the recent years. There was significant (P<0.01) decrease in the condom carrying practices of MLMs of Mid to Far Western Region (32.2% in 2010, 31.1% in 2012 and 17.5% in 2015). Proportion of the MLMs who had knowledge of ABC (23% to 36%) and BCDEF (13% to 21%) of the HIV prevention has been improved respectively from 2012 to 2015 in the Western region. Proportion of MLMs who had met or discussed with Outreach Educators/Peer Educators in this round of survey has been declined (7.8% in 2012 to 2.8% in 2015) in both the regions.

#### **HIV Prevalence**

Out of 720 MLMs who participated in this survey, 3 (0.4%) were found HIV positive. Prevalence of HIV infection among the MLMs of the Mid to Far Western Region (0.6%) was higher than the MLMs of the Western Region (0.3%).

#### **Socio-demographic Characteristics**

Mean age of the MLMs was 32.0±9.1 years. Two-fifths of the MLMs had 6-9 years of formal schooling while 12.2 percent of them were illiterate. Illiteracy was more frequently observed among the respondents of Mid to Far Western Region (20%) than the Western Region (4.4%). Brahmins/Chhetri accounted for the highest proportion of respondents in Western Region (44.7%) whereas Dalits accounted for 44 percent of the MLMs of Mid to Far Western Region.

#### **Migration history**

Maharastra (47.5%) and Delhi (36.8%) were the major destinations for migration among MLMs. Mean duration of stay in India was almost five years. Mean age at first migration was 23.6±7.7 years. Most of the MLMs (64.9%) used to work as laborer or factory workers in India.

#### Marriage and Sexual behavior

Nearly forty (39.5%) percent of MLMs had got marriage before 20 years of age and this proportion was considerably higher among the MLMs of Mid to Far Western Region (46.7%) than the MLMs of Western Region (28.5%). Almost 80 percent of the MLMs were living together with their wives. More than nine out of every ten MLMs (91.1%) had ever had sex with female. Almost 54 percent of the respondents had first sexual contact before 20 years of age. Mean age of the respondents at first sex was 19.7±3.5 years.

#### **Sexual Contact and Condom Use**

Almost 8 percent of the MLMs had ever had sex with FSWs in Nepal. Out of those MLMs who had ever had sex with FSWs in Nepal, more than four-fifths (80.4%) of them had contact with two or more FSWs. In an average, MLMs had sexual contact with 4.5±4 FSWs in Nepal. Slightly more than half (55.4%) of the MLMs who had sex with FSWs in Nepal had used condom and almost two-fifths (39.3%) of those who had sex with FSWs in the past one year had used condom consistently.

About 11 percent of the MLMs had ever had sex with FSWs in India. Three-quarters of the MLMs who had ever had sex with FSWs in India had sex with two or more FSWs in their lifetime. In an average, MLMs had sex with 5±6 FSWs; with range being 29. Almost 6 percent of the MLMs had sex with FSWs in India in the past year; out of them, only 45.2 percent had used condom during the last sex. Almost nine-tenth (89.5%) of the respondents who used condom in the last sex had used the same with their own decision. A total of 72.7 percent respondents had used condom consistently in the sex with FSWs in India in the last year.

#### **Availability of Condom**

A total of 21 percent MLMs always used to carry condoms when they attempt for sexual contact. Slightly more than seven out of every ten (71.4%) respondents availed condoms from the Health Post/PHCCs and 55.3 percent received the condoms from pharmacies. Less than one-fifth (18.2%) of the MLMs obtained condoms free of cost and 15.7 percent of them availed by purchasing from different sources.

#### Knowledge of STI, HIV and AIDS and Treatment of STIs Treatment

Nearly 82 percent of the MLMs had heard about HIV and AIDS. Major sources of information to get the knowledge about HIV and AIDS were Radio (47.6%). A total of 31.5 percent respondents had knowledge of all the three {A (abstinence from sex), B (being faithful to one partner or avoiding multiple sex partners), and C (consistent condom use or use of a condom during every sex act)} as HIV-preventive measures. Less than one-fifth (17.2%) of the respondents had knowledge of all the five components {D (a healthy looking person can be infected with HIV), 41 percent of them identified that E (a person cannot get HIV from a mosquito bite), and 16.5 percent knew that F (A person cannot get HIV by Sharing mean with an HIV infected persons)} BCDEF of HIV prevention and control. Commonly understood STIs or symptoms STIs among MLMs were; HIV and AIDS (50.4%), Syphilis (24%) and ulceration around the genitalia (16.1%). One percent of the MLM complained the presence of white discharge or pus from the genitals and 1.1 percent had burning urination. Out of 15 MLMs who experienced some symptoms of STIs in the past one year, one-third (33.3%) of them had received the treatment against these symptoms. Almost three- fifths (57.1%) of the respondents had received treatment from private clinics and two- fifths (42.9%) had received the treatment from hospitals; and 71.4 percent of them had received counseling services.

#### **Exposure to STI, HIV and AIDS Program**

Only 2.8 percent of the respondents had ever met or discussed or interacted with peer educators or outreach educators and 0.3 percent of them visited to the Drop in Centers in the last 12 months. Only 0.7 percent of the respondents had visited to the HIV testing and Counseling Centers within last 12 months. Similarly, 2.8 percent of the respondents had ever heard about PMTCT services. Out of those MLMs who had heard about PMTCT services, more than half of them (55.0%) were known about the availability of these services. A total of 10.7 percent respondents had heard about the Anti- retroviral Therapy services. Only 2.1 percent of the respondents had ever heard about the viral load testing services and 2.2 percent of them had heard about the Community and Home Based Care.

#### Conclusion

This fifth round of IBBS survey among the Male Labor Migrants has been conducted under the leadership of NCASC with support from The Global Fund and technical management of Save the Children. This survey provides an insight into the estimated prevalence of HIV infection among MLMs. It is also an assessment of sexual risk behaviors of those survey populations. A cross-sectional survey using both the behavior related structure questionnaire and biological laboratory examination was done to reveal the HIV prevalence and the risk behaviors among MLMs.

This survey identified that 3 MLMs had HIV infection. Prevalence of HIV infection was 0.4 percent among those respondents who were of 25 or more years old while none of the respondents below 25 years old had HIV infection. Ever married MLMs of Mid to Far Western Region and never married respondents of Western Region had higher prevalence HIV infection than the counterparts in never married and ever married respondents of respective regions. A total of 0.8 percent Janajati in Western Region and 1.2 percent of Dalits in the Mid to Far Western Region had HIV infection; and none of the respondents who belonged to the other caste had HIV infection. All those respondents who were HIV positives had ever had sex with FSWs in India.

#### Recommendation

Findings of this survey revealed that the coverage of program targeted for male labor migrants was very low in the survey districts. Although the HIV infection is in decreasing trend, its transmission is still continues Thus, there is need to organize awareness programs that focus on STI, HIV and AIDS among MLMs. In this case, organizers should track out the districts having high density of migrants that cover all possible migrants.

#### **CHAPTER 1: INTRODUCTION**

#### 1.1 Background

Nepal is one of the major source countries of migrant laborers, helping to fulfill the demand of the rapidly industrializing countries in Asia and abroad (ADB, 2009). Foreign employment provides an alternative livelihood for many young Nepalese populations (CARAM Asia, 2007). Top destination countries for migration are India. Migrant population have a greater risk for poor health in general and HIV infection in particular. This is due to the impact of sociocultural patterns of the migrant's situation on health, their economic transitions, reduced availability and accessibility of health services; and the difficulty of the host country's health care systems to cope with the traditions and practices of the immigrant" (NIDS, 2006).

When people migrate, they are exposed to behaviors and norms that tend to be different from those of their place of origin. Migration has been identified as an independent individual risk factor for the acquisition of Human Immuno-Deficiency Virus (HIV) (UNESCO/UNAIDS, 2000). As social control in migrant communities is limited, sexual relationships that are prohibited at home are often possible abroad. Besides continuing to belong to their home communities, migrants gradually adapt to their new communities abroad. In doing so, they adopt so called 'migrant identity' which can lead to a denial of certain sexual behaviors. Multiple kinds of sexual behaviors seem to be possible in abroad, as long as other people do not notice them (Gurung, 2004).

Nepal is categorized as a country facing concentrated HIV epidemic. National Centre for AIDS and STD Control (NCASC) has estimated that there were 39249 People Living with HIV (PLHIV) in Nepal in 2014 with the prevalence of HIV infection among adult population being 0.20 percent. The existing National HIV and AIDS Strategy (2011-2016) identifies that People who Inject Drugs (PWID), Female Sex Workers (FSWs) and their clients, Male Labor Migrants (MLM) and their spouses and Men who have Sex with Men (MSM) are the Key Affected Populations (KAP) (NCASC, 2012).

The National HIV and AIDS Strategy 2011-2016 has adopted the strengthening of Second Generation Surveillance (SGS) system as one of the key principles of strengthening surveillance of HIV and Sexually Transmitted Infections (STIs) in Nepal. Conducting Integrated Biological and Behavioral Surveillance (IBBS) Surveys among KAPs in selected high risk clusters at the regular intervals based on the National Plan on HIV and STI Surveillance is one of the key components of SGS and also strategic direction of the national strategy (NCASC, 2015). By 2015, four rounds of IBBS surveys (2006, 2008, 2010 and 2012) have already been carried out among MLMs in Western and Mid to Far Western Districts of Nepal and this constitutes the fifth round of survey.

#### 1.2 Rationale of the IBBS among Male Labor Migrants

Nepal's HIV and AIDS epidemic is concentrated amongst KAPs (NCASC, 2006). These groups include People Who Inject Drugs (PWID), FSWs and their clients; and MSMs. Migrant males, uniformed service and transport workers have also been identified as key populations at risk. However, the data demonstrates that in the case of the migrants this holds true only when they serve as the clients of sex workers both in the country and abroad. In Nepal, hundreds of migrant workers leave the country for overseas employment every day. They are vulnerable to HIV infection; which becomes more important when they return to Nepal and then they transmit the infection to their wives. An understanding of the association between perception of

risk of HIV infection and their risky sexual behaviors may facilitate the design of AIDS-preventive measures necessary to halt the transmission of HIV infection to the different groups and subgroups of population (Dahal et al, 2013). The present study attempted to identify the sexual behavior of Nepali migrant workers in India and their perceived risk of HIV infection.

IBBS survey, one of the key components of second generation HIV surveillance, have been used in many concentrated epidemic contexts. More recently, IBBS surveys have also been recommended in generalized epidemic settings (Akwara et al 1998). As the HIV incidence has declined up to 50% in 26 countries of the World over the last decade, there is a need for more focused and valid second generation surveillance approaches including community led IBBS surveys to understand the dynamics and drivers of micro-epidemics (UNAIDS, 2013). In 2012, the HIV prevalence among MLM was 1.3 percent (NCASC, 2012) zero.

In the early 1990s, a national HIV surveillance system was established in Nepal to monitor the HIV epidemic and to inform evidence-based HIV prevention efforts (NCASC, 2012). Since then, IBBS surveys have been conducted at the interval of two-three years among KAPs of epidemic zones. The epidemic zones are based on different distributions of key populations at risk, their mobility links and HIV risk behaviors.

The main objective of IBBS survey among MLMs is to track changes in risk behaviors such as sexual contact with FSWs, non-use of condoms and unsafe needle uses; HIV prevalence and other symptoms of STIs. This IBBS survey attempted to collect information about the different behavioral and biological outcomes. These include general information of the MLMs: place of birth, current place of residence, duration of stay at current place and previous place of residence. Personal information: age, ethnicity, educational status, marital status, age at marriage, current living situation; Information on sexual intercourse: age at first sex, type and number of sex partners. Use of condom; condom use with different episodes of sex such as last sex, past month and the last year, access to condoms, condom carrying practices, place to avail condoms, preferred place to buy condoms, use of oral and injecting drugs, use of alcohol, awareness of HIV and AIDS, knowledge of HIV and AIDS, promotion of condom, exposure to interventions programs, exposure to outreach and peer educators, visited Drop in Centers, visited HIV testing and counseling centers and STI services and participation on community awareness events, knowledge and use of services on sexually transmitted infections. Similarly, HIV test was performed for biological test.

#### 1.3 Objectives of the Survey

Primary objectives of this survey were to track the trends in the prevalence of HIV and to assess the sexual risk behaviors related to HIV and STI among the MLMs of Western and Mid to Far Western Region of Nepal.

Secondary objectives of the survey are:

- To collect information on various personal, social and demographic characteristics of MLMs,
- To assess the level of knowledge on STI, HIV and AIDS,
- To find out the exposure of MLMs to the various HIV and STI prevention and control programs.

#### **CHAPTER 2: METHODOLOGY**

#### 2.1 Implementation of the Study

School of Planning, Monitoring, Evaluation and Research (SPMER) carried out this survey in coordination with NCASC and Save the Children Nepal. SPMER was responsible for overall management of the survey including laboratory set up in the field sites, providing training to the researchers, counselors and lab technicians, supervising and collecting blood samples, and conducting HIV test. SPMER carried out mapping to estimate the population of MLMs followed by the data collection using preformed tools. Data analysis and report writing was done in close coordination with and support of NCASC and Save the Children Nepal.

The survey was conducted in close collaboration with many organizations working and advocating for MLMs like National NGOs Network Group against AIDS Nepal (NANGAN), Indreni Samaj Kendra (ISK) Nepal, Palpa; Prerana, Gulmi; Nava Kiran Plus, Kailali and Surkhet; Working for Access and Creation Nepal (WAC-Nepal), Achham; NAMUNA Integrated Development Council (Namuna-IDC), Kapilvastu; Community Support Group (CSG), Kaski; NDC-Syangja; Community Development Forum Nepal (CDF-Nepal), Doti; PLHIV Network, Doti; Nagarjun Development Community (NDC-Banke); Sustainable Development Facility (SDF- Surkhet); Nepal Red Cross Society (NRCS), Kaski and Nepal National Social Welfare Association (NNSWA) Kanchanpur.

External Quality Assurance (EQA) of all the HIV positive samples and 10 percent of all the negative samples was carried out at the National Public Health Laboratory (NPHL).

#### 2.2 Survey Populations and Survey Area

This survey was conducted among MLM who were returnee migrants; identified as one of the high-risk sub-groups. The definition of the MLMs used in the survey was "a male returnee migrant aged 18-49 years, having stayed continuously or with interruption for at least 3 months in India as a migrant worker and having returned to Nepal within three years prior to the date of the survey".

Five districts from the Western development region (Syangja, Kaski, Gulmi, Palpa, Kapilvastu) and six districts from the Mid to Far Western development regions (Banke, Surkhet, Doti, Achham, Kailali and Kanchanpur) were selected for this IBBS survey (Annex-3)

#### 2.3 Survey Design

This survey was a cross sectional study. Similar methods that were used in the previous rounds of survey were followed in this survey. Face to face interview was conducted to assess the risk behaviors of MLMs. Similarly, to estimate the prevalence of HIV, blood test was performed. HIV test was performed by using determine - HIV ½ as per NCASC guideline to detect HIV antibodies. All the first positive test results were subjected for Uni-Gold HIV 1/2 test. If there was a tie between the first two tests, a third test was performed was performed by using STAT PAK as a tie-breaker.

#### 2.4 Size Estimation/Mapping

The fieldwork of mapping was conducted by different groups of experienced researchers covering selected districts from the western part of Nepal. The researchers initially visited to different district level stakeholders including District Public Health Office (DPHO) and NGOs working in the areas of MLMs as part of preliminary mapping exercise. In addition to this, information about the estimated MLMs, HIV and AIDS and the organizations advocating for

MLMs was collected from local NGOs and CBOs working on MLMs. Furthermore, CBS 2011 census data was used to determine the population of MLMs in each of the districts of the study regions and these data were verified through preliminary mapping exercise by the team of School of PMER. Size estimation of MLMs was done by adjusting 1.35 incremental factors for the population of migration for the last four years since 2011.

Two days training program was organized in June (23<sup>rd</sup>-24<sup>th</sup> June) 2015 to plan and implement mapping exercise. Training program covered about techniques and process of estimation of population of male labor migrants in the selected districts. Mock mapping exercises were performed from all research participants.

#### 2.5 Sampling and Sample Size

This IBBS survey followed the similar sampling procedures, which were so utilized in previous rounds of IBBS surveys among MLMs in Western and Mid to Far Western Region of Nepal. 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 identified the locations and estimated the number of survey populations. A list of locations with the enumerated number of MLMs was prepared for the both the Western and Mid to Far Western Regions.

A two stage cluster sampling procedure was utilized to select number of MLMs from each of the clusters. In this first stage, probability proportional to size (PPS) method was used to select 30 clusters from the Western Region and other 30 clusters from the Mid to Far Western Region of Nepal. A Village Development Committee (VDC) consisting at least 20 returnee labor migrants was defined as a cluster. Based on the preliminary information collected prior to the field survey, a list of VDCs with an estimated number of returnee migrants was made through household enumeration. In the second stage, every 12 MLMs were selected from each of the selected clusters which were identified in the first stage through systematic random sampling method. As per survey guideline 360 labor migrants were selected from each of the Western and Mid to Far Western Region of Nepal. Thus, a total of 720 MLMs were selected for the interview and testing of blood samples.

#### 2.6 Stakeholder and Consultative Meeting

The School of PMER's core survey team organized meeting with concerned stakeholders. School of PMER presented survey implementation plan in details and sought support and recommendation from those stakeholders who participated in these consultative meetings. Survey team shared the findings of the preliminary mapping exercise and sought inputs from the participants on the locations identified through visits. The enumeration list was also shared with the stakeholders in the meeting. Additionally, the objectives of the survey, its methodologies, fieldwork dates, and location of the sites were also shared with all the stakeholders. The stakeholder meeting was organized in district level prior to field work.

#### 2.7 Identification and Recruitment Process of MLMs

Field researchers were trained about the survey area and methods for identification of survey populations. District maps with selected VDCs/clusters including work schedule was provided to each of the researchers to facilitate them to locate the survey sites and to identify the eligible participants of the study. A community level meeting was organized at each of the field sites of study districts with an aim to inform the community about the general objective and methods of the survey. Local leaders, health personnel, government representatives, and other key informants participated in the meeting.

Once the survey teams reached in the selected clusters, each of the teams conducted household listing and established an interview site with a temporary clinic and laboratory facilities in strategic locations of the selected clusters. The identified survey participants were further confirmed through the screening questions. If the researcher confirmed the participants as a MLM, then only they were listed as prospective respondents of the survey. Final selection of the respondents was made through the systematic random sampling methods.

Randomly selected respondents were brought in established sites for interviews, biological sample collection as well as for clinical examination and treatment of STIs in order to ensure that privacy during data collection was maintained. The interview sites were selected based on recommendation of the community people. The temporary mobile clinic and interview sites were operated at each location for one day.

Once the final selection of the respondents was made randomly, the respondents were requested to take part in the survey. Respondents who satisfactorily answered all the screening questions were briefed about the purpose, objectives, and methodology of the survey. Once the selected MLMs agreed to participate in the survey, the researchers invited them into the clinic and interview site for an interview and collection of a blood samples required for the testing of HIV.

#### 2.8 Refusals

People from local personnel and peer group were used as local motivators for this survey. This helped the study team to build good relationship with returnee migrants and played a facilitating role in motivating the randomly-selected respondents to participate in the survey. A short briefing was made to each of the respondents about the objective of the study, and the benefits and risks of participation in the survey. Every respondents had right to participate or refuse in this survey and survey team had respected their decisions throughout the survey. Altogether, 13 MLMs refused to take part in the survey. All these refusals were replaced randomly to full fill the required sample.

#### 2.9 Control of Duplication

To avoid repetition of the same MLM in the selected sites, counselors asked various questions before their recruitment. Questions related to their experiences of undertaking any blood test and having had an HIV test or test for other diseases, the meetings with the peer educators for the blood test, and the possession of an ID card with a survey number were meticulously discussed. Further, the lab technicians and clinical person who examined and treated the respondent at the survey site had also probed questions to avoid the repetition.

#### 2.10 Recruitment of and Training to the Research Team

A two days intensive training program was organized for the experienced researchers working at School of PMER. In the training, objectives and the purpose of the survey was explained along with the ways of mapping, tools used in mapping, possible key informants and ethical issues of this survey. Training also covered research protocol, rapport building and sharing of past experiences from the stakeholders. A mock mapping exercise was an integral part of the training. These activities were organized to enhance the capacity of researchers on mapping.

The experienced field researchers who had been involved in previous round of IBBS surveys and other similar types of sero-surveys were given priority to be selected in the research team. Training was provided to the field researchers at the School of PMER by trainers from NCASC, Save the Children, NPHL, FHI 360 and SPMER. The field researchers in lab team were given practical exposures and practices in accordance with the national algorithm. A six-day intensive

training program was organized from  $2^{nd}$  to  $7^{th}$  July, 2015 for the team to familiarize them about the study.

Training sections were based on the curriculum of IBBS surveys. It covered the basic knowledge of HIV and AIDS and STIs, introduction, objectives and the purpose of the IBBS survey, sampling and sample recruitment process, administration of the questionnaire, techniques of approaching MLMs, recording keeping, counseling, techniques of HIV test and kit used on IBBS survey, reporting and ethical issues.. The training session also focused on research protocol, informed consent, rapport building, sharing of previous experiences from the stakeholders. Mock interviews, role-play based on actual field situations, participatory class lectures and open discussion were the integral parts of the training sessions.

#### **2.11 Field Operation Procedures**

Field work for this survey was carried out during July to August 2015. Following procedures were carried out in the field to gather information about the sexual behaviors and biological samples of the MLMs for the testing of HIV.

#### 2.11.1 Clinic Set-up

The survey team used locally available shelters such as Health Posts, Schools and Private houses to operate the clinic and conduct interview among respondents. Hygiene and sanitation was strictly maintained at each of the clinics. There were separate rooms for waiting, counseling, laboratory process, physical examinations, and conducting interviews.

#### 2.11.2 Clinical Procedures

Interview was conducted only after taking informed consent from each of the respondents and the consent form was duly signed by interviewers and the personnel who witnessed the consent-taking procedures. After completion of the interview, a trained Health Assistant (HA) examined the respondent for any signs of STI or general health problems. All respondents with STI symptoms were referred to nearby DIC or hospital where STI, HIV and AIDS services were available. The clinical personnel provided Syndromic treatment according to the national guidelines. Some basic medicines were also provided to the treated respondents.

#### 2.11.3 Laboratory Procedures

After pre-test counseling, the lab technician briefly explained the respondents about the HIV testing process and offered for consent for drawing blood. Blood samples were drawn in 3milli-litertubes by disposal syringes. The samples were tested for HIV on the spot within an hour.

This survey was designed to provide test results with pre- and post-counseling in the shortest possible time. As the survey team has to move from one to another cluster reagents that can be stored at room temperature were chosen. Blood samples were tested using HIV1/2 as first test to detect antibodies against HIV. If the first test result was positive, a second test was performed using Uni-Gold HIV ½. In case of a tie between the first two tests, a third test was also performed using STAT PAK as a tie breaker.

#### 2.12 Survey and Laboratory ID Codes

Confidentiality was strictly maintained. Non identifying survey ID codes were used for all data components pertaining to the survey. The use of survey codes were prevented linking consent forms with actual surveys and referral history.

A separate laboratory code was maintained to identify participant results from rapid tests and to label all specimens for laboratory testing. Each of the respondents was assigned a laboratory

code that was linked to their ID code in order to link behavioral and biological data. Laboratory codes were pre-printed.

#### 2.13 HIV Rapid Testing

HIV rapid testing method was conducted at the survey site after completion of pre-test counseling by certified laboratory technicians. Rapid testing was conducted by using a serial testing scheme based on the NCASC national guideline algorithm and approved commercial test kits. All those participants who had given consent were tested using Allere Determine HIV-1/2 rapid test kits. Non-reactive results were considered negative, and reactive results were confirmed with Uni-Gold HIV rapid test. If Uni-Gold results were nonreactive, results were recorded as indeterminate. Thereafter, in case of tie exists between first and second tests, a third test STAT PAK was used as a tie breaker. All participants received post-test counseling, with specific messages tailored to their test result. Persons with any reactive result, or indeterminate result, were given referral to HIV care services and further counseling and testing.

#### **Interpretation of the Test Results**

- All samples negative by first test were reported as negatives.
- All samples positive by one test only subjected to the second test.
- All the positive tests by tiebreaker test were reported positive
- All negative tests by tiebreaker test were reported as negative.

Figure 2.1: HIV Testing Strategy II Algorithm

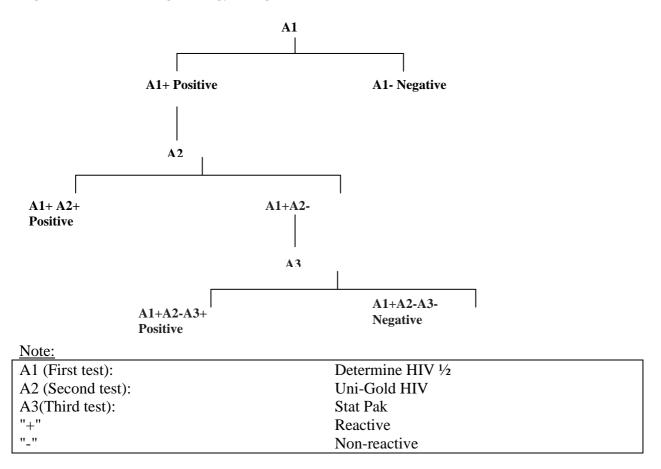


Table 2.1: Sensitivity and Specificity

Test Kits	Company	Initial	Confirm	Tie	Antigen	Spec.	Sens.
Determine	Allere	X		Recom HIV-		99.4%	100.0%
		Λ			1 and HIV-2	JJ. <del>4</del> /0	100.070
Uni-Gold	Trinity		v		HIV-1 and	100.0%	100.0%
	Biotech		X		HIV-2	100.0%	100.0%
STAT PAK	CHEM			X	HIV-1 (gp41;	99.3%	100.0%
SIAIPAK	BIO			Λ	HIV-1 (gp41; p24) -2	77.3%	100.0%

#### 2.14 Dried Blood Spots Creation

Creation of dried blood spots (DBS) specimens on Whatman filter paper for HIV surveillance testing in the National Public Health Laboratory (NPHL) was done with the explicit consent of the participants using a dried blood spot card prepared at the same time as the rapid tests. DBS specimens were labeled with cryogenic barcoded labels containing the participant's laboratory code. Prepared DBS were sent to the NPHL for EQAS. Specimens were stored in waterproof boxes on site and then these were sent to the NPHL on weekly basis.

#### 2.15 Internal and External Quality Assurance

Regular monitoring was an integral part of the quality assurance mechanism of School of PMER during the mapping. Survey core team members visited the field to support field researchers to make them more responsible for quality work and quick response. Besides this, the core team cross-verified the mapping data collected by researchers through interview with different key informants and various field visits. During data collection special measures were adopted to avoid repeated interviews with the same MLM. The researchers were instructed to ask about previous experiences of blood test, inspect the arm from where blood was drawn and possession of ID card issued by SPMER in case of any doubt about duplication. The confidentiality was maintained strictly throughout the study duration.

External Quality Assurance Scheme (EQAS) is the evaluation of the performance of a testing laboratory by an external agency. An EQAS is very essential in such studies to determine the quality of testing. All the HIV positive samples and 10 percent of all the HIV negative samples were retested at NPHL in this survey as an EQA of HIV testing. The EQA samples were sent to the NPHL with new code numbers in the DBS card. NPHL test results were similar to the results of the field research team. This indicates the validity and reliability of the laboratory process of the study.

#### 2.16 Research Instruments

A quantitative research approach was adopted in this survey. The same questionnaire used in the previous rounds was also used in this survey as survey tools. This tool was supplied by NCASC, Nepal. Additionally, to assess the exposure of MLMs to the STI, HIV and AIDS programs, series of questions on selected program activities were also collected in this round of the IBBS. The survey team provided syndromic treatment for STI problems to the study participants and a lab technician collected blood samples for HIV testing. Strict confidentiality was maintained throughout the survey period.

#### 2.17 Pretesting of Research Tools

The researchers from School of PMER conducted pretesting of the survey tools among study population. Altogether, 19 questionnaires were tested on different locations in Kavre district. Only minor grammatical changes were made after the pretesting.

#### 2.18 Plan for Data Management

All the completed questionnaires were peer reviewed on the day of the interview by interviewers and thoroughly checked by the field supervisors before bringing them into the office of School of PMER, based in Kathmandu for further checking, coding, processing, data entry, and analysis.

A double data entry system was used to detect, correct, and minimize errors in data entry. Authorized persons working with password-protected computers completed the data entry and data analysis. Simple statistical methods such as mean, frequency distribution, and cross tabulation were used to analyze the data. The CS-Pro database program was used for data entry, and the data was analyzed using SPSS 18.0.

#### 2.19 Monitoring and Supervision

The overall monitoring and supervision of the survey was done by SITWG members, NCASC, Save the Children and Saath-Saath Project and the technical consultant. Monitoring supports were provided at the data collection sites in the districts and provided feedbacks and suggestions to maintain the quality of work. Their feedbacks and suggestions were adopted by the study team.

Internally, School of PMER followed the result based participatory monitoring and supervision process for this survey. Since the beginning of the survey, team leader, co-team leader and coordinator made regular monitoring and supervision visits of the work in progress in the field. The site coordinators were responsible for day-to-day basis to ensure that the survey was implemented in the field according to the protocol. Team meetings were held every week to plan ahead and solve any field-level problems. The site coordinators in the field reported to the survey coordinator frequently to update the field operations.

#### 2.20 Ethical Consideration

Ethical approval was obtained from the Nepal Health Research Council (NHRC). The participants involved in the in-depth interviews and sample surveys were fully informed about the nature of the study. They were informed that their participation was voluntary and that they were free to refuse to answer any question or to withdraw from the interview at any time. They were also informed that such 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 was clearly read aloud to them (Annex). A specific ID card was provided to each of the respondents so that their names and addresses were not recorded anywhere. HIV test results along with post-test counseling were provided to the individual participants in a confidential manner. A travel allowance of NRs 200 and fruit juice/snack was provided to each of the respondents as compensation. The research team maintained the confidentiality of the data collected throughout the survey. The interviewers submitted the completed questionnaires to the field supervisor on the day of each interview. The supervisor reviewed and kept those questionnaires in separate locked bags where no one had access to those data except the researchers. The supervisor then transported the questionnaires to School of PMER. The collected data were kept in a locked room of School of PMER premises where only authorized personnel had access.

#### 2.20 HIV Pre and Post-test Counseling and Follow-Up

All the survey participants were informed that they could retrieve their test result at the same site after some time. They were also informed that they could collect their test results by showing the ID card with their survey number that was provided to them by the survey team. Pre- and post-HIV test counseling was provided to the survey participants. They were briefed about the importance of receiving the test result.

# CHAPTER 3: SOCIO-DEMOGRAPHIC CHARACTERISTICS

This chapter describes the socio-demographic characteristics of MLMs including both Western Region (n=360) and Mid to Far Western Region (n=360). Since this study include two clusters, the separate analysis was carried out for each of the clusters.

#### 3.1 Birth Place and Current Living Place

Table 3.1 shows the distribution of respondents according to their belongings. As per the protocol, equal numbers of respondents (84) were selected from each of the Syangja, Kaski and Gulmi. A total of 60 and 48 respondents were selected from Palpa and Kapilvastu of the Western Regions respectively. Out of 84 respondents selected from each of the Syangja, Kaski and Gulmi districts, 86.9 percent of the respondents of the Syangja, 95.2 percent of the Kaski and 97.6 percent of the respondents from Gulmi were born in their respective districts. Similarly, 95.8 percent of the respondents of Kapilvastu were born in the same district while cent percent of the respondents from Palpa were born in Palpa.

Similarly, a total of 360 respondents were selected from different selected districts of the Mid to Far Western Region. Number of selected respondents ranged from 36 in Banke to the maximum 108 from Kailali which is indicated in the table 3.1. There is wide variation in the birth place of the respondents where only 44.4 percent of the respondents of the Banke districts were born in the same district and the hundred percent respondents of the Achham districts were born in Achham.

3.1 Number of Respondents by Birth Districts

Description	Number of migrants interviewed	Migrants Born in the Interviewed district		
		N	%	
Western				
Syangja	84	73	86.9	
Kaski	84	80	95.2	
Gulmi	84	82	97.6	
Palpa	60	60	100	
Kapilvastu	48	46	95.8	
Total	360	341	94.7	
Mid to Far Western				
Banke	36	16	44.4	
Surkhet	48	31	64.6	
Achham	60	60	100	
Doti	36	35	97.2	
Kailali	108	60	55.6	
Kanchanpur	72	45	62.5	
Total	360	247	68.6	

#### 3.2 Socio-Demographic Characteristics

Table 3.2 describes the socio-demographic characteristics of the respondents. Age-wise distribution of the respondents indicate that the highest number of them (25.7%) belonged to age 40 or above, followed by 21 percent were in the early young age (20-24 years). Almost seven percent (6.8%) were adolescents and more than half (51.9%) of them were in the most

productive age of 20-39 years. Comparatively, male labor migrants of the adolescent (<19 years) and young age (20-24 years) represented in this study were more in Western Region (8.3% and 22.2%) than the Mid to Far Western Region (5.3% and 19.7%) respectively. On the contrary, slightly higher proportion of the respondents who had the age of 40 years or above were more in Mid to Far Western Region (26.7%) when it is compared with the Western Region (24.7%). Mean age of the respondent was 32.0±9.1years with the mean age of the respondents who belonged to the Mid to Far Western Region being 32.2±8.8 years as against the mean age 31.7±9.4 years of the respondents of Western Regions.

Table 3.2 Socio-Demographic Characteristics of Respondents

Description		Western	Mid to Far		Total	
	N	%	N	%	N	%
Age G ( in years)						
≤19	30	8.3	19	5.3	49	6.8
20-24	80	22.2	71	19.7	151	21.0
25-29	56	15.6	63	17.5	119	16.5
30-34	48	13.3	56	15.6	104	14.4
35-39	57	15.8	55	15.3	112	15.6
40 or above	89	24.7	96	26.7	185	25.7
Mean ±SD		31.7±9.4		32.2±8.8		$32.0 \pm 9.1$
Median ( IQR)		31.0(16.0)	3	31.5(16.0)		31.0(16)
Total	360	100.0	360	100.0	720	100.0
Education						
Illiterate	16	4.4	72	20.0	88	12.2
Literate but no schooling	15	4.2	16	4.4	31	4.3
Grade 1-5	83	23.1	89	24.7	172	23.9
Grade 6-9	158	43.9	130	36.1	288	40
SLC and above	88	24.4	53	14.7	141	19.6
Total	360	100.0	360	100.0	720	100.0
Caste/Ethnic						
Brahmin/Chhetri	161	44.7	126	35	287	39.9
Terai Madhesi	4	1.1	2	0.6	6	0.8
Dalit	71	19.7	160	44.4	231	32.1
Janajati	123	34.2	70	19.5	193	25.8
Muslim	1	0.3	2	0.6	3	0.4
Total	360	100.0	360	100.0	720	100.0
Marital Status						
Married	262	72.8	308	85.6	570	79.2
Divorced/Permanently/ Separated	4	1.1	6	1.7	10	1.4
Widower	2	0.6	3	0.8	5	0.7
Never married	92	25.6	43	11.9	135	18.8
Total	360	100.0	360	100.0	720	100.0
Age at first marriage ( in years)						
< 15	1	0.4	6	1.9	7	1.2
15-19	77	28.5	148	46.7	225	38.3
20-24	125	46.3	121	38.2	246	41.9
25-29	58	21.5	39	12.3	97	16.5
Age at first marriage (in years) < 15 15-19 20-24	1 77 125	0.4 28.5 46.3	6 148 121	1.9 46.7 38.2	7 225 246	

30-34	7	2.6	2	0.6	9	1.5
≥35	2	0.7	1	0.3	3	0.5
Mean± SD		21.8±3.6		20.2±3.3		20.9±3.5
Median ( IQR)		21(5)		20(4)		20(5)
Total	360	100.0	360	100.0	720	100.0
Currently living						
With wife	259	71.9	308	85.6	567	78.6
With male friends	2	0.6			2	0.3
Alone	3	0.8			3	0.4
With parents	245	68.1	209	58.1	454	63.1
With children	211	58.6	271	75.3	482	66.9
Relatives	6	1.7	1	0.3	7	1
Total	360	*	360	*	720	*

<sup>\*</sup> Percentages total may exceed 100 due to multiple responses

About two out of every five (40%) respondents had 6-9 years of formal schooling and another 23.9 percent of the respondents had primary education of 1-5 years of schooling. A total of 12.2 percent of the respondents were illiterate, 4.3 percent respondents were literate with no formal schooling and remaining 19.6 percent of the respondents were educated up to school leaving certificate (SLC) level or above. Considerably higher proportions of illiterate respondents (20.0%) were reported from Mid to Far Western Region when compared with the respondents who belongs to Western Region (4.4%). Proportions of the respondents who had 6-9 years of schooling and SLC or above were more in Western Region (43. 9% and 24.4%) than respondents of Mid to Far Western Region (36.1% and 14.7%) respectively. Almost two-fifths of the respondents were Brahmins and Chhetri (39.9%) and this population was more frequently reported from Western Region (44.7%) as against the Mid to Far Western Region (35.0%). Another almost one third (32.1%) of the respondents were Dalits. Proportion of Dalit respondents was more in Mid to Far Western Region than the Western Region (19.7%). Similarly, more than a quarter of the respondents were Janajatis (25.8%) and the proportion of Janajati respondents who belong to Western Region (34.2%) was higher than the respondents of Mid to Far Western Region (19.5%). Some other respondents belonged to other minorities such as Terai Madhesi (0.8%) and Muslim communities (0.4%). Almost four-fifths (79.2%) respondents were ever married whereas 18.8 percent of the respondents were never married. About 1.4 percent respondents were divorced or permanently separated and 0.7 percent was widowers. Proportions of married respondents of the Western Region (72.8%) were lesser than those of respondents who belong to Mid to Far Western Region (Table 3.2).

Slightly more than two- fifths (41.9%) of the respondents had their first marriage at the age of 20-24 years. Nearly two- fifth (38.3%) of the respondents entered into the marriade life at the age of 15- 19 years. Adolescent marriage was considerably high among the respondents of Mid to Far Western Region (46.7%) when it is compared with the respondents of Western Region (28.5%). Proportion of the respondents who had their first marriage at the age of 20-24 years and 25-29 years was numerically dominant in Western Region (46.3% and 21.5%) than the Mid to Far Western Region (38.2% and 12.3%) respectively. In the meantime, 1.2 percent of the respondents reported that they had got marriage before reaching 15 years of life and 0.5 percent had got marriage after the age of 35 or more years. Mean age of the respondents at their first marriage was 20.9±3.5years and this average age was slightly higher among the respondents of Western Region (21.8±3.6) years than the respondents of Mid to Far Western Region (20.2±3.3years) (Table 3.2).

Living relationship of the respondents indicate that almost four- fifths (78.6%) of them were living with their wives and this relationship was notably higher among the respondents of Mid to Far Western Region (85.6%) when it is compared with the respondents of Western Regions(71.9%). Similarly, 63.1 percent of the respondents reported that they were living with the parents and 66.9 percent of the respondents were living with the children. Living with parent was more common in Western Region (68.1%) while living with the children was more common in Mid to Far Western Region (75.3%). Some respondents were living with relatives (1.0%), with male friend (0.3%) and some (0.4%) others were living alone (Table 3.2).

#### 3.3 Migration History of the MLMs

Table 3.3 reveals the migration destinations of the male labor migrants in India. Nearly half (47.5%) of the respondents stated that Maharastra the major destination for migration. Other major destination for migration are Delhi (36.8%) followed by Himanchal Pradesh (15%), Gujarat (12.9%), Uttar Pradesh (11.9%), Punjab (10%). Other different destinations in India are enlisted in the table 3.3. Major destinations for the migration among the respondents of Western Region were Delhi (30.6%), Himanchal Pradesh (16.9%), Uttar Pradesh (11.95), Hariyana (10.6%), Maharastra (13.1%) and Punjab (10%). Similarly, major destination for migration among the migrants of the Mid to Far Western Region are Maharastra (81.9%), Delhi (43.1%), Gujarat (23.3%), Uttarakhanda (15%), Himanchal Pradesh (13.1%), Uttar Pradesh (11.9%) and Rajasthan (10. 8%). Almost one out of every ten (9.4%) respondents did not know about their destination for migration.

Table 3.3 Migration Destinations of Male Labor Migrants

Description		Vestern	Mid to Far	Western		Total
	N	%	N	%	N	%
Destination						
Hariyana	38	10.6	22	6.1	60	8.3
Madhya Pradesh	10	2.8	2	0.6	12	1.7
Uttarakhanda	5	1.4	54	15	59	8.2
Delhi	110	30.6	155	43.1	265	36.8
Uttar Pradesh (U.P.)	43	11.9	43	11.9	86	11.9
Kerala	6	1.7	8	2.2	14	1.9
Gujarat	9	2.5	84	23.3	93	12.9
Maharastra	47	13.1	295	81.9	342	47.5
Himanchal Pradesh	61	16.9	47	13.1	108	15
Panjab	36	10	36	10	72	10
West Bengal	12	3.3	9	2.5	21	2.9
Assam	8	2.2			8	1.1
Rajasthan	9	2.5	39	10.8	48	6.7
Andra Pradesh	29	8.1	13	3.6	42	591
Karnataka			32	8.9	32	4.4
Bihar	2	0.6	21	5.8	23	3.2
Meghalaya	7	1.9			7	1
Don't know	36	10	32	8.9	68	9.4
Total	360	*	360	*	720	*

<sup>\*</sup> Percentages total may exceed 100 due to multiple responses

A large proportion of the respondents (47.4%) stayed in India for more than 36 months. Slightly higher percentage of the respondents who belonged to the Mid to Far Western Region (49.4%) had 37 and more months stay in India when it is compared with the respondents of Western

Region (45.3%). More than one- fifth (21.2%) respondents stayed in India for less than one year, another almost equal (20.6%) had 12-24 months stay in India and 10.8 percent of them stay in India for 25-36 months. Average duration of stay in India by the MLMs was 58.7 months and the respondents of Western Region had longer period of stay (61.7 years) than that of the respondents of Mid to Far Western Region (55.8 years) (Figure 3.1).

Figure 3.1 Duration of Stay of Labor Migrants in India

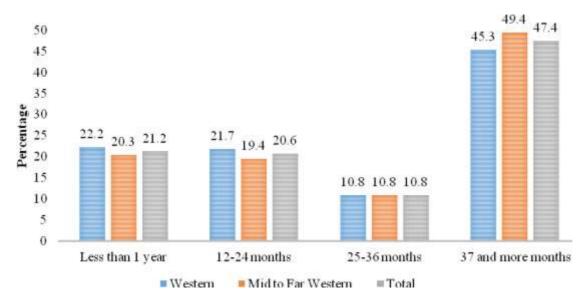


Table 3.4 depicts different characteristics of the male labor migrants like age at first migration, list of returned time, and plan for re-migrate to India, living partnership in India and their income in the last work. More than one-third (35.4%) of the respondents reported that they were migrated to India for the first time when they were of  $\leq$ 19 years old. This early migration practice was almost equal in both the Western Region (34.7%) and Mid to Far Western Region (36.1%). Similarly, 16.8 percent of the respondents had their first migration at the age of 25-29 years of age and 11.4 percent of them were of 35 or more years of age at the time of first migration. Mean age at first migration was 23.6±7.7 and the average age of respondents of Western Region (24.0±7.7 years) at first migration was slightly more than the respondents of Mid to Far Western Region (23.1 ± 7.7years).

Table 3.4 Male Labor Migrants by Migration Characteristics

		Western	Mid to Far Western			Total
Description	N	%	N	%	N	%
Age at first migration ( in	n years)					
< 20	125	34.7	130	36.1	255	35.4
20-24	91	25.3	106	29.4	197	27.4
25-29	63	17.5	58	16.1	121	16.8
30-34	38	10.6	27	7.5	65	9
35 or above	43	11.9	39	10.8	82	11.4
Mean ±SD		$24.0\pm7.7$		23.1±7.7		23.6±7.7
Median (IQR)		22.0(10.0)		21.0(9.0)		21.0(10.0)
Duration of last time retu	ırn to Nepal ( in mo	onths)				
<3	86	23.9	102	28.3	188	26.1
3 – 6	62	17.2	120	33.3	182	25.3
7 – 12	55	15.3	68	18.9	123	17.1

13 – 24	81	22.5	51	14.2	132	18.3
25-36	76	21.1	19	5.3	95	13.2
Mean ± SD		13.0±11.0		8.0±8.0		10.5±10.0
Median( IQR)		10.0(4.0)		14.0(10.0)		9.0(12.0)
Total	360	100.0	360	100.0	720	100.0
Planning to revisit India						
Yes	172	47.8	251	69.7	423	58.8
No	149	41.4	57	15.8	206	28.6
Don't know	39	10.8	52	14.4	91	12.6
Total	360	100.0	360	100.0	720	100.0
During last stay in India the respon	ident li	ved				
Alone	29	8.1	43	11.9	72	10
With wife	13	3.6	18	5	31	4.3
With other woman			1	0.3	1	0.1
With friends	247	68.6	243	67.5	490	68.1
With relative	71	19.7	55	15.3	126	17.5
Total	360	100.0	360	100.0	720	100.0
Monthly income during the last sta	y in In	dia (NRs)				
Up to 5000	32	8.9	22	6.1	54	7.5
5001-10000	136	37.8	127	35.3	263	36.5
10001-15000	103	28.6	105	29.2	208	28.9
More than 15000	89	24.7	106	29.4	195	27.1
Mean ± SD		12000.0±5400.0		8000.0±5350.0		12356.0±5400.0
Median( IQR)		11000.0(7000.0)		8000.0(7900.0)		12000.0(8000.0)
Total	360	100	360	100	720	100

Slightly more than half of the respondents (51.4%) reported that they had returned to Nepal within last 6 months. Nearly a quarter (23.9%) and more than one-quarter (28.3%) of the respondents in the Western Region and the Mid to Far Western Region respectively reported the period of their coming back home as less than 3 months prior to the survey. Similarly, (17.2 percent) of the respondents of Western Region and one-third of the respondents who belonged to the Mid to Far Western Region had come back to home during the 3-6 months prior to the survey. Almost three-fifths (58.8%) of the respondents opined that they were planning to revisit to India while 12.6 percent of them remained not determined about revisit to India. Substantially large proportion of the respondents of the Mid to Far Western Region (69.7%) had plan to revisit India when it is compared with the respondents of Western Region (47.8%) (Table 3.4).

This survey shows that majority (68.1%) of the MLMs used to live with friends in India and this living relationship was almost similar among the respondents of both the regions. Similarly, 17.5 percent of the respondents used to live with their relatives, 4.3 percent lived with their family and 10 percent of them used to live alone in India. One of the respondents who belong to the Mid to Far Western Region used to live with women other than their wives. A total of 36.5 percent respondents had monthly income of Nepalese Rupees 5001-10000 followed by another 28.9 percent had monthly earning of 10001- 15000 and 27.1 percent had more than 15000 income in a month. Some (7.5%) of the respondents had monthly income NRs 5000 or less with slight regional variations in the proportion of the respondents with different incomes (Table 3.4).

Table 3.5 Types of Work of Male Labor Migrants in India

		Western	Mid to Fa	ar Western		Total
Description	N	%	N	%	N	%
Types of work						
Laborer/factory labor	143	39.7	324	90	467	64.9
Technician/operator/mechanics	90	25	261	72.5	351	48.8
Hotel labor	134	37.2	191	53.1	325	45.1
Cook	69	19.2	58	16.1	127	17.6
Transport worker	9	2.5	24	6.7	33	4.6
Caretaker	23	6.4	10	2.8	33	4.6
Fishing			22	6.1	22	3.1
Business			1	0.3	1	0.1
Total	360	*	360	*	720	*

<sup>\*</sup> Percentages total may exceed 100 due to multiple responses

Most of the male labor migrants (64.9%) used to work as laborer or factory workers in India. About 48.8 percent of the MLMs worked as technician, operators or mechanics and 45.1 percent of them reported that they were the hotel labors. Other reported works done by the respondents in India were cook (17.6%), care taker (4.6%), transport worker (4.6%), Fishing (3.1%) and 0.1 percent were business workers. Sizably large proportion of the respondents who belong to the Mid to Far Western Region reported that they used to engage in aforementioned work except caretaker which is slightly more among the respondents of the Western Region (Table 3.5).

Table 3.6 District Visited and Types of Work Performed by Returnee Migrants in Nepal

	Western		Mid to Far	Western	-	Total
Description	N	%	N	%	N	%
Visited any district in Nepal after returning for	a					
Yes	4	1.1	9	2.5	13	1.8
No	356	98.9	351	97.5	705	98.2
Total	360	100.0	360	100.0	720	100.0
District migrated to						
Kathmandu			2	22.2	2	15.4
Kaski	1	25			1	7.7
Palpa			1	11.1	1	7.7
Rupandehi	2	50			2	15.4
Dang	1	25			1	7.7
Banke			1	11.1	1	7.7
Kailali			2	22.2	2	15.4
Kanchanpur			1	11.1	1	7.7
Dadeldhura			1	11.1	1	7.7
Darchula			2	22.2	2	15.4
Total	4	*	9	*	13	*
Duration of stay in the district migrated						
1-2 months			4	44.4	4	30.8
3-4 months	1	25	2	22.2	3	23.1
More than 4 months	3	75	3	33.3	6	46.2
Total	4	100	9	100	13	100
	1	7				

<b>Types</b>	ωf	work	in	Nenal
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Total	4	*	9	*	13	*
Carpenter			2	22.2	2	15.4
Small Business			2	22.2	2	15.4
Cook	2	50			2	15.4
Daily Labor	1	25	5	55.6	6	46.2
Hotel Labor	1	25	1	11.1	2	15.4

<sup>\*</sup> Percentages total may exceed 100 due to multiple responses

After returning back to Nepal, 1.8 percent of the respondents had visited to the different parts of Nepal and this movement was slightly higher among the respondents of Mid to Far Western Region (2.5%) than those respondents who belong to Western Region (1.1%). Out of those who visited in different parts of Nepal, 15.4 percent of them visited in each of the Kathmandu, Rupandehi, Kailali and Darchula. Movement of the returnee migrants who belong to the Mid to Far Western Region was more frequent than those of Western Region. Other places visited by returnee migrants including their respective frequencies are indicted in table 3.6. Out of those who had intra-country migration in Nepal, 46.2 percent of them stayed in the places of migration for more than 4 months followed by 30.8 percent had 1-2 months stay and 23.1 percent had 3-4 month's duration of stay (Table 3.6).

Hundred percent of the respondents of the Western Region had longer duration of stay for 3 or more months whereas (44.4%) of the respondents of the Mid to Far Western Region had short duration of 1-2 months stay while at the time of migration in Nepal. Amongst those who were internally migrated in Nepal for work, 46.2 percent of them were daily labors and others had worked as hotel labors, cook, small business workers and carpenters with equal proportion of respondents being in each of the worker's category (15.4%) (Table 3.6).

# CHAPTER 4: PREVALENCE OF HIV AND ITS ASSOCIATION WITH BACKGROUND CHARACTERISTICS OF MLMs

Prevalence of HIV infection along with the association between background characteristics of Male Labor Migrants and HIV has been presented in this chapter.

#### 4.1 Prevalence of HIV

HIV prevalence among MLMs was determined in this survey using standard diagnostic protocol of the NCASC. This survey revealed that prevalence of HIV infection among MLMs was 0.4 percent. A total of two MLMs in Mid to Far Western Region and one MLM in Western Region were diagnosed as having HIV infection. Although, the number of HIV positives identified in the Mid to Far Western Region were more than that was identified in Western Region, the difference was not statistically significant (p=1.0).

Table 4.1 HIV Prevalence by study Regions

	W	estern*	Mid to Far		Total	P value	
Description	N	%	N	%	$\mathbf{N}$	%	
HIV status							
Positive	1	0.3	2	0.6	3	0.4	1.0
Negative	359	99.7	358	99.4	717	99.6	
Total	360	100	360	100	720	100	

<sup>\*</sup> Kapilvastu, Gulmi, Syangja, Palpa and Kaski Districts

#### 4.2 Relationship between Socio-Demographic Characteristics and HIV Infection

Relationship between HIV infection and socio-demographic and behavioral characteristics of Male Labor Migrants was examined in this survey (table 4.2). Prevalence of HIV infection proportion was higher among the respondents who were of 25 years or more (0.4%) than the respondents who were below 25 years old (0.0%) in Western Region. Similar kinds of differences were observed among the respondents of the Mid to Far Western Region. Higher proportion of the respondents who had formal education was diagnosed as having HIV infection (0.3%) in Western Region when it is compared with illiterate respondents of the same Region (0.0%). On the contrary, respondents who had no formal education or those who were illiterate had higher prevalence of HIV infection (2.3%) than that was observed among those respondents who had formal education in Mid to Far Western Region (0.0%). Never married respondents of the Western Region had higher proportion of HIV infection as against those ever married respondents of the same region. As against this, ever married MLMs had higher prevalence of HIV infection (0.6%) in the Mid to Far Western Region.

HIV infection was diagnosed among Janajati respondents (0.8%) of the Western Region as against the respondents of other castes who did not have HIV infection. On the other hand, HIV infection was reported among Dalit respondents (1.2%) of the Mid to Far Western Region whereas none of the respondents who belonged to other caste had HIV infection. All of those respondents who were identified as HIV positive, had ever had sex with FSWs in India and none of the respondents who had never had sex with FSWs did not have HIV infection (Table 4.2).

<sup>\*\*</sup> Achham, Doti, Kailali, Kanchanpur, Surkhet and Banke Districts

Table 4.2 Relationship between Socio-Demographic Characteristics and HIV Infection

			Western			Mid to Far V	Western	
Description	N	HIV+	%	P value	N	HIV+	%	P value
Age (in years)								
< 25	110	0	0	1.0	90	0	0	1.0
≥25	250	1	0.4		270	2	0.7	
Total	360	1	0.4		360	2	0.7	
Literacy								
Illiterate/no schooling	31	0	0	1.0	88	2	2.3	1.0
Formal schooling	329	1	0.3		272	0	0	
Total	360	1	0.4		360	2	0.7	
Marital status								
Ever married	268	0	0	1.0	317	2	0.6	1.0
Never married	92	1	1.1		43	0	0	
Caste/Ethnic								
Brahnmin/Chhetri	161	0	0		126	0	0	
TeraiMadhesi	4	0	0	NA	2	0	0	NA
Dalit	71	0	0		160	2	1.2	
Janajati	123	1	0.8		70	0	0	
Muslim	1	0	0		2	0	0	
Total	360	1	0.4		360	2	0.7	
Ever had sex with FSW in	India							
Yes	31	1	3.2	1.0	49	2	4.1	1.0
Never had sex with FSW in India	329	0	0		311	0	0	
Total	360	1	0.3		360	2	0.6	
Visited Sites								
Maharastra (Mumbai)	360	1	0.3	NA				NA
Uttar Pradesh (UP)					360	2	0.6	
Total	360							

# CHAPTER 5: SEXUAL BEHAVIORS AND CONDOM USE AMONG MALE LABOR MIGRANTS

This chapter describes the sexual behaviors of MLMs, including sexual contact with spouse, girlfriend and FSWs in Nepal and India. Male Labor Migrants were asked series of questions related to their sexual behaviors. This section presents the general findings of the study regarding sexual behaviors of the MLMs.

#### 5.1 Sexual Behavior of MLMs

More than nine out of every ten MLMs (91.1%) had ever had sex with female and this experience was slightly higher among the respondents of Mid to Far Western Region (93.9%) than those of respondents of Western Region (88.3%). More than half (54.3%) of the respondents had first sexual contact before 20 years of age with 3.4 percent of the respondents being less than 15 years old at the time of first sex. Early entry into the sexual life (15-19 years of age) is more frequent among the respondents of Mid to Far Western Region (56.2%) when it is compared with the respondents of Western Region (45.3%) (Table 5.1).

Table 5.1 Sexual Behavior of Male Labor Migrants

	Western		Mid to F	ar Western		Total
Description	$\mathbf{N}$	%	N	%	N	%
Ever had sex with a female						
Yes	318	88.3	338	93.9	656	91.1
No	42	11.7	22	6.1	64	8.9
Total	360	100	360	100	720	100
Age at first sex ( in years)						
<15	8	2.5	14	4.1	22	3.4
15-19	144	45.3	190	56.2	334	50.9
20-24	117	36.8	106	31.4	223	34
25-29	44	13.8	27	8	71	10.8
30 or above	5	1.6	1	0.3	6	0.9
Mean ± SD		20.3±4.0		19.2±3.0		19.7±3.5
Median( IQR)		20(4.0)		18.0(4.0)		19.0(4.0)
Total	318	100	338	100	656	100
Ever had sex with Female sex workers						
Yes	49	15.4	66	19.5	115	17.5
No	269	84.6	272	80.5	541	82.5
Total	318	100	338	100	656	100

More than one—third of the respondents (34%) had first sexual contact at the age of 20-24 years and another 10.8 percent had experience of first sexual contact at the age of 25-29 years. Mean age of the respondents at the sex was  $19.7\pm3.5$  years which was slightly lower among the respondents of Mid to Far Western Region (19.2  $\pm3.0$  years) than the respondents who belong to Western Region (20.3 $\pm4.0$  years). A total of 17.5 percent of the respondents had ever had sex with female sex workers and this proportion was slightly more among the respondents of Mid to Far Western Region (19.5%) than those respondents of the Western Region (15.4%) (Table 5.1).

#### 5.2 Sexual Practice of MLMs in Nepal

Almost 8.0 percent of the respondents had ever had sex with FSWs in Nepal and this proportion was slightly more among the respondents of Mid to Far Western Region (8.6%) as against the 6.9 percent of the respondents of the Western Region. Almost 36 percent of the respondents who had ever had sexual contact with FSWs in Nepal had this relationship with more than five FSWs and this practice was also equal among the respondents of both the regions (~36.0%). More than one- third (33.9%) of the respondents had sexual relation with 2-3 FSWs and almost one –fifth (19.6%) of them had sex with one FSW. More than a quarter of the respondents who belong to Mid to Far Western Region had sex with only one FSW whereas 12 percent of the respondents of Western Region had sex with one FSW. Mean number of FSWs with whom MLMs had sexual contact were 4.5±4.0. Average number of FSWs with whom MLMs had sexual contacts as reported by the respondents of Western Region (5.0±9.0) was considerably more than that was reported by the MLMs of Mid to Far Western Region (4.9±9.0) (Table 5.2).

Table 5.2 Sexual Behavior of Male Labor Migrations with FSWs in Nepal

	Western Mid to Far Western					Total
Description	N	%	N	%	N	%
Ever had sex with FSWs in Nepal						
Yes	25	6.9	31	8.6	56	7.8
No	24	6.7	35	9.7	59	8.2
Never had sex with sex worker	269	74.7	272	75.6	541	75.1
Never had sex with female	42	11.7	22	6.1	64	8.9
Total	360	100.0	360	100.0	720	100.0
Total number of FSWs visited in No	epal					
1	3	12	8	25.8	11	19.6
2 - 3	11	44	8	25.8	19	33.9
4 – 5	2	8	4	12.9	6	10.7
> 5	9	36	11	35.5	20	35.7
Mean		5.0±9.0		4.9±9.0		4.5±4.0
Total	25	100	31	100	56	100

#### 5.3 Condom Use with FSWs in Nepal

Information related to the condom use practices of MLMs during sex with FSWs in Nepal was assessed in this survey. It was reported that more than half (55.4%) of the respondents who had sex with FSWs had used condom during last sex. Almost two-third (64.0%) of the MLMs of Western Region and nearly half (48.4%) of the MLMs of Mid to Far Western Region who had sex with FSWs in Nepal had used condoms in the last sex. Hundred percent MLMs of Western Region and 80 percent MLMs of Mid to Far Western Region had used the condom in the last sexual intercourse with FSWs in their own decision.

Nearly two-fifths (39.3%) of the respondents had used condoms consistently when they had sex with FSWS in the past one year in Nepal and this practice was considerably higher among the respondents of Western Region (48.0%) than the respondents of Mid to Far Western Region (32.3%) (Table 5.3).

Table 5.3 Condom Use by MLMs with FSWs in Nepal

		Western	Mid to Fa	r Western		Total
Description	N	%	N	%	N	%
Use of condom during the last sex with	ı FSWs in Nep	al				
Yes	16	64.0	15	48.4	31	55.4
No	9	36.0	16	51.6	25	44.6
Total	25	100.0	31	100.0	56	100.0
Suggested to use condom during last s	ex					
Myself	16	100.0	12	80.0	28	90.3
FSW			3	20.0	3	9.7
Total	16	100.0	15	100.0	31	100.0
Reason for not using condom at last se	ex					
Not available	4	44.4	2	12.5	6	24.0
I didn't like to use it	4	44.4	11	68.8	15	60.0
Didn't think it was necessary	1	11.1	3	18.8	4	16.0
Didn't think of it	3	33.3			3	12.0
Total	9	100.0	16	100.0	25	100.0
Consistent use of condom in the past y	ear with FSW					
All the time	12	48.0	10	32.3	22	39.3
Most of the time	3	12.0			3	5.4
Sometimes	1	4.0	3	9.7	4	7.1
Rarely	3	12.0	9	29.0	12	21.4
Never	6	24.0	9	29.0	15	26.8
Total	25	100.0	31	100.0	56	100.0
Reason for not using condom always						
Not available	6	46.2	3	14.3	9	26.5
Too expensive	1	7.7			1	2.9
I didn't like to use it	5	38.5	11	52.4	16	47.1
Didn't think it was necessary	4	30.8	7	33.3	11	32.4
Didn't think of it	3	23.1			3	8.8
Total	13	100.0	21	100.0	34	100.0

#### 5.4 Sexual Contact with Spouse and Condom Use

More than three-quarters (75.7%) of the respondents reported that they had sexual relationship with their wives in the past one month and the proportion of respondents who had sex with wife in the past one months were higher in Mid to Far Western Region (83.3%) than those respondents of Western Region (68.1%). More than one-fifth of the respondents were unmarried or single; and the proportion of those who were single were more (27.2%) among the respondents of the Western Region than those of Mid to Far Western Regions (14.4%) (Table 5.4).

Only 12.7 percent of the respondents had used condom during the last sex with wife and this practice varied marginally between two regions (13.5% in Western Region and 12.0 percent in Mid to Far Western Region). Out of those who had used condom during the sex with wife in the last sex, 94.2 percent of them did so with their own efforts and 5.8 percent of the respondents used condom on the suggestion of their wives. Only 7.2 percent of the respondents used condom consistently during the sex with wife in the past year whereas majority of them

(65.6%) had never used condoms in same sexual relations. Consistent use of condom was slightly more common among the respondents of Western Region (9.9%) than those respondents of the Mid to Far Western Region (4.9%) (Table 5.4).

About three-quarters of the respondents (74.2%) had kept sexual contact with wife for more than five times in the past one month and this practice was more common among the respondents of Mid to Far Western Region (83.4%) than those of Western Region (63.4%). Similarly, 11.1 percent of the respondents had kept 4-5 times sexual contacts with wife in the past one month and 8.8 percent of them did so for 2-3 times. One percent of the respondents had single time sexual contact and 4.4 percent of them did not have sex with wife in the past one month. In the last one month, frequency of sexual contacts with the wife ranged from zero to as much as seventy times. The average numbers of episodes of sexual contacts were 15.6 times, which was lower than that was reported among the respondents of Mid to Far Western Region (18.9 times) and higher than that was reported by the respondents of Western Region (11.8 times) (Table 5.4).

Table 5.4 Sexual Behavior of MLMs and Condom Use by Them with their Spouses in Nepal

	West		Mid to Far		Total	
Description	N	%	N	%	N	%
Had sex with wife in the past one month						
Yes	245	68.1	300	83.3	545	75.7
No	17	4.7	8	2.2	25	3.5
Currently not married/single	98	27.2	52	14.4	150	20.8
Total	360	100	360	100	720	100
Use of condom during last sex with wife						
Yes	33	13.5	36	12	69	12.7
No	212	86.5	264	88	476	87.3
Total	245	100	300	100	545	100
Person to suggest the use of condom during la	ast sex					
Myself	32	97	33	91.7	65	94.2
My wife	1	3	3	8.3	4	5.8
Total	33	100	36	100	69	100
Consistent use of condom with wife in the pas	st year					
All the time	26	9.9	15	4.9	41	7.2
Most of the time	14	5.3	11	3.6	25	4.4
Some times	27	10.3	50	16.2	77	13.5
Rarely	32	12.2	21	6.8	53	9.3
Never	163	62.2	211	68.5	374	65.6
Total	262	100	308	100	570	100
Frequency of sex with wife in the past one mo	onths					
0	17	6.5	8	2.6	25	4.4
1	5	1.9	2	0.6	7	1.2
2-3	41	15.6	9	2.9	50	8.8
4 – 5	33	12.6	30	9.7	63	11.1
More than 5	166	63.4	257	83.4	423	74.2
Don't remember'			2	0.6	2	0.4
Mean		11.8		18.9		15.6
Range		0-60		0-70		0-70

Total 262 100 308 100 570 100

#### 5.5 Sexual Contact with Girlfriend and Condom Use in Nepal

Table 5.5 shows the sexual behavior of MLMs and their condom use practices during sex with girlfriend in Nepal. More than 11.0 percent of the respondents had sexual contact with the girlfriend in the past one year. Percentage of the respondents who had sex with girlfriend in the past one year were considerably higher in the Western Region (16%) than the Mid to Far Western Region (7.4%). About four out of every five (80.5%) respondents reported that they did not have any girlfriend in Nepal (Table 5.5).

Out of those MLMs who had sex with their girlfriends, more than three-fifths (61.3%) of them had used condom during the last sex. Condom use during last sex with girlfriend was higher among the respondents of Western Region (64.7%) than the respondents of the Mid to Far Western Region (54.2%). Out of those respondents who used condoms in the last sex with their girlfriend, a great majority of them did so with their conscience knowledge (95.7%) and remaining 4.3 used condom as suggested by their girlfriends.

Nearly 45 percent of the respondents had used condom consistently during all the sexual contacts with their girlfriends in the past one year and this practice was better among the respondents of Western Region (47.1%) when it is compared with the respondents of the Mid to Far Western Region (41.7%). On the other hand, 21.3 percent of the respondents had never used condom while at the time of sex with the girlfriend in the past one year. A total of 29.3 percent respondents had not kept any sexual contact with their girlfriends in the past one year (Table 5.5).

More than a quarter (26.7%) of the respondents had sexual contact with their girlfriends for 2-3 times in the past one year followed by 16 percent had sexual relationship for one time only. Almost 15 percent of the respondents had more than five times sexual contacts with their girlfriends in past one year where this practice was reported to be more frequently among respondents of Mid to Far Western Region (20.8%) than the Western Region (11.8%) (Table 5.5).

Proportion of the respondents who had two or more times sexual contact with girlfriend in the past one year was higher among those respondents who belonged to Mid to Far Western Region than those respondents of the Western Region (Table 5.5).

Table 5.5 Sexual Behavior of Male Migrants and Condom Use by them with Girlfriends in Nepal

		Western	Mid to Far	Western		Total			
Description	N	%	N	%	N	%			
Had sex with girlfriend in the past year									
Yes	51	16	24	7.1	75	11.4			
No	41	12.9	12	3.6	53	8.1			
Never had girlfriend in Nepal	226	71.1	302	89.3	528	80.5			
Total	318	100	338	100	656	100			
Use of condom during last sex with	th girl frien	d							
Yes	33	64.7	13	54.2	46	61.3			
No	18	35.3	11	45.8	29	38.7			
Total	51	100	24	100	75	100			

Person to suggest the use of condom during last sex

Myself	31	93.9	13	100	44	95.7				
My girlfriend	2	6.1			2	4.3				
Total	33	100	13	100	46	100				
Consistent use of condom with girlfriend in the past year										
All the time	24	47.1	10	41.7	34	45.3.7				
Most of the time	12	23.5	2	8.3	14	18.7				
Sometimes	8	15.7	3	12.5	11	14.7				
Never	7	13.7	9	37.5	16	21.3				
Total	51	100	24	100	75	100				
Frequency of sex with girlfriend	in the past on	e year								
0	16	31.4	6	25	22	29.3				
1	12	23.5			12	16				
2 - 3	11	21.6	9	37.5	20	26.7				
4 - 5	6	11.8	4	16.7	10	13.3				
More than 5	6	11.8	5	20.8	11	14.7				
Mean		2.3		4		2.8				
Ranges		0-12		0-17		0-17				
Total	51	100	24	100	75	100				

#### 5.6 Sexual Contact with FSWs in India

Table 5.6 describes the sexual involvement of MLMs with the FSWs while they were in India. More than 11 percent of the respondents had ever had sex with FSWs in India. Three- quarters (75.1%) of the respondents had never had sex with FSWs and 8.9 percent of them had never had sex with female. Sexual involvement of the respondents with FSWs who belonged to the Mid to Far Western Region was comparatively higher (13.6%) than that that was prevalent among the respondents of the Western Region (8.6%). Among those respondents who had sex with FSWs in India, 36.2 percent of them had sex with more than 5 FSWs and this involvement was remarkably higher among the respondents of Western Region (48.4%) as against those respondents of Mid to Far Western Region (28.6%). A quarter of the respondents (25.0%) had sex with one female sex worker, 27.5 percent had sex with 2-3 FSWs and 11.2 percent of them had sex with 4-5 FSWs in India. In an average, MLMs had sex with 5.7±6.0 FSWs while they were in India. MLMs who belonged to the Western Region had sexual contact with the 8.5±8.0 FSWs in India, which is considerably higher than that was reported among the respondents of the Mid to Far Western Region (4.0±3.0).

Table 5.6 Sexual Behavior of Male Labor Migrants with FSWs in India

		Western	Mid to Far	Western		Total
Description	N	%	N	%	N	%
Ever had sex with FSWs						
Yes	31	8.6	49	13.6	80	11.1
No	18	5	17	4.7	35	4.9
Never had sex with sex worker	269	74.7	272	75.6	541	75.1
Never had sex with female	42	11.7	22	6.1	64	8.9
Total	360	100	360	100	720	100
Total number of FSWs visited in I	Lifetime					
1	3	9.7	17	34.7	20	25
2 - 3	9	29	13	26.5	22	27.5
4 - 5	4	12.9	5	10.2	9	11.2

Total	31	100	49	100	80	100
Median (IQR)		5.0(9.0)		3.0(5.0)		3.0(7.0)
Mean±SD		$8.5 \pm 8.0$		$4.0\pm3.0$		$5.7 \pm 6.0$
More than 5	15	48.4	14	28.6	29	36.2

#### 5.7 Sexual Contact with FSWs and Condom Use in India

As indicated in the table 5.7, 5.8 percent of the respondents had sex with FSWs in the past one year and this involvement was almost similar among the respondents of Western Region (6.1%) and Mid to Far Western Region (5.6%). Less than half (45.2%) of the MLMs had used condom during the last sex with FSWs in India while 75.1 percent of the respondents had never had sex with FSWs in India. Use of condom while at the time of sex with FSWs was considerably higher among the respondents of Western Region (63.6%) when it is compared with the respondents of the Mid to Far Western Region (25.0%). Almost nine out of every ten respondents (89.5%) who used condom in the last sex had done the same through their own conscience knowledge and another 10.5 percent of the respondents used condom with the suggestion of FSWs. Condom use in the last episode of sex with FSW was higher among those respondents of the Western Region (92.9%) who had made decision to use condom themselves than those respondents of Mid to Far Western Region who did so (80%). A total of 72.7 percent of the respondents had used condom consistently in all the episodes of sex with FSWs in the past one year and this practice was more prevalent among the respondents of Western Region (80%) than the respondents of Mid to Far Western Region (57.1%). Out of those who did not use condom at the time of sex with FSWs, 83.3 percent did not use the same due to unavailability of condoms and 50 percent of them did not think of using condom.

Table 5.7 Sexual Behavior of Male Labor Migrants and Condom Use by them with FSWs in India

		Western	Mid to Far	Western		Total
Description	N	%	N	%	N	%
Had sex with FSW in the past year						
Yes	22	6.1	20	5.6	42	5.8
No	9	2.5	29	8.1	38	5.3
Never had sex workers in India	18	5	17	4.7	35	4.9
Never had sex with sex worker	269	74.7	272	75.6	541	75.1
Never had sex with female	42	11.7	22	6.1	64	8.9
Total	360	100	360	100	720	100
Use of condom during the last sex wi	ith FSW					
Yes	14	63.6	5	25	19	45.2
No	1	4.5	2	10	3	7.1
Never used condom	7	31.8	13	65	20	47.6
Total	22	100	20	100	42	100
Person to suggest the use of condom	during la	st sex				
Myself	13	92.9	4	80	17	89.5
FSW	1	7.1	1	20	2	10.5
Total	14	100	5	100	19	100
Consistent use of condom with FSW	in the pa	st year				
All the time	12	80	4	57.1	16	72.7
Most of the time	3	20			3	13.6
Rarely			1	14.3	1	4.5
Never			2	28.6	2	9.1

Total	15	100	7	100	22	100
Reasons for not using condom always						
Not available	2	66.7	3	100	5	83.3
Didn't think of it	3	100			3	50.0
Total	3	*	3	*	6	*

<sup>\*</sup> Percentages total may exceed 100 due to multiple responses

#### 5.8 Sexual Contact with Girlfriends and Condom Use in India

In total, 4.3 percent of the MLMs had sex with their girlfriends in the past one year in India. Proportion of the respondents of Western Region who had sex with girlfriend (6.0%) was higher than that of Mid to Far Western Region (2.7%). A total of 71.4 percent respondents who had sex with girlfriend had used condom during the last sexual intercourse. This condom use practice was better among the respondents of Mid to Far Western Region (77.8%) than the Western Region (68.4%). In the past one year's sexual contact with girlfriend, nine out of every ten respondents had used condom being self-conscious about the utility of condom and rest one out of every ten respondents used condom with the suggestion of girlfriend. Consistent condom use was slightly higher (55.6%) among the respondents of Mid to Far Western Region when it is compared with the practices prevalent among the respondents of Western Region (52.6%). More than 14 percent of respondents had never used a condom while having sex with girlfriend in the past year. Reasons for the not using condom and the respective proportion of the respondents are as shown below in the table 5.8.

Table 5.8 Sexual Contact with Girlfriends and Condom Use in India

		Western	Mid to Far	Western		Total
Description	N	%	N	%	N	%
Had sex with girlfriend in the past y	ear					
Yes	19	6.0	9	2.7	28	4.3
No	21	6.6	22	6.5	43	6.6
Never had girlfriend in India	278	87.4	307	90.8	585	89.2
Total	318	100.0	338	100.0	656	100.0
Use of condom during last sex with	girl friend					
Yes	13	68.4	7	77.8	20	71.4
No	6	31.6	2	22.2	8	28.6
Total	19	100.0	9	100.0	28	100.0
Person to suggest the use of condom	during last se	X				
Myself	13	100.0	5	71.4	18	90.0
Girlfriend			2	28.6	2	10.0
Total	13	100.0	7	100.0	20	100.0
Consistent use of condom with girlfn	riend in the pa	st year				
All the time	10	52.6	5	55.6	15	53.6
Most of the time	2	10.5	1	11.1	3	10.7
Sometimes	3	15.8	2	22.2	5	17.9
Rarely	1	5.3			1	3.6
Never	3	15.8	1	11.1	4	14.3
Total	19	100.0	9	100.0	28	100.0
Reason for not using condom always	S					
Not available	3	33.3	2	50.0	5	38.5
Partner objected	1	11.1			1	7.7

Total	9	100.0	4	100.0	13	100.0
Didn't think of it	2	22.2	1	25.0	3	23.1
Didn't think it was necessary	3	33.3			3	23.1
I didn't like to use it	2	22.2	1	25.0	3	23.1

#### 5.9 Availability of Condom

As indicated in table 5.9, 21 percent of the respondents always used to carry condoms for each of the sexual relationship. Condom carrying practice was slightly higher among the respondents of Western Region (24.4%) than those respondents of the Mid to Far Western Region (17.5%). More than seven out of every ten (71.4%) respondents availed condoms from Health Post/Primary Health Care Centre and 55.3 percent of them accessed from pharmacy. Other different sources of availability of condom were Hospital (22.4%), Private Clinic (15.6%), Female Community Health Volunteers (14%), General Retail Store (7.6%), Health workers (5%), Clinic of Family Planning Association of Nepal (4%), Pan Shop (1%), Hotel (0.7%), NGO (0.7%) and Brothel (0.6%).

Altogether, 18.2 percent of the respondents obtained condom free of cost, 15.7 percent purchased the condom and another 19.4 percent of them availed condom through both by purchasing and free of cost. A large number of respondents (46.7%) had never used the condom. More than nine out of every ten respondents had accessed condoms from Health Post/Primary Health Care Centre (90.4%), 15.9 percent get the same from peers/friends, 15.1 percent get condoms from FCHVs, 12.2 percent got it from hospitals, 3.3 percent availed from FPAN clinic and 1.5 percent received form health workers.

Amongst those who accessed condoms, four-fifths of them (81.9%) opined that Health Post/Primary Health Care Centre (PHCC) is the most convenient to them to avail condoms. Other convenient places to avail condoms are FCHVs (22.9%), Hospital (18.1%), Peers/friends (15.5%), Health workers (2.2%), FPAN clinic (1.5%) and community programs (1.1%). Comparatively, higher proportion of respondents of the Western Region opined that Health Post/PHCC (93.9%) are convenient place to access condom when it is compared with the respondents of the Mid to Far Western Region (67.7%). On the other hand, FCHVs are reported as convenient source of condom distribution in Mid to Far Western Region (32.3%) whereas 15 percent of the respondents of Western Region reported that FCHVs are convenient to them (Table 5.9).

Altogether 68 percent of the respondents mostly used to obtain condoms from Pharmacy followed by 16.4 percent from obtained it from Private Clinic. Other sources of condom availability were General Retail Store (2.6%) and Paan Shop (0.5%). More than one-tenth (12.5%) of the respondents had never bought the condom. More than seven out of every ten (70.6%) respondents reported that pharmacies are the most convenient place to obtain condom free of cost. Other convenient places to access condom free of cost were General Retail Store (3.9%), Private Clinic (14.6%), Paan Shop (1%) and the Health Post/PHCC (9.9%) (Table 5.9).

Table 3.14 Availability of Condoms as Reported by Male Labor Migrants

		Western	Mid to Far	Western		Total
Description	N	%	$\mathbf{N}$	%	N	%
Usually carry condoms						
Yes	88	24.4	63	17.5	151	21
No	272	75.6	297	82.5	569	79
Total	360	100	360	100	720	100

Places where condoms are available						
Health Post / PHCC	283	78.6	231	64.2	514	71.4
Pharmacy	218	60.6	180	50	398	55.3
Hospital	73	20.3	88	24.4	161	22.4
Private Clinic	62	17.2	50	13.9	112	15.6
FCHVs	18	5	83	23.1	101	14
General Retail Store (Kirana Pasal)	44	12.2	11	3.1	55	7.6
Health Workers/Volunteers	18	5	18	5	36	5
FPAN Clinic	19	5.3	10	2.8	29	4
Paan Shop	3	0.8	4	1.1	7	1
NGO			5	1.4	5	0.7
Hotel /Lodge	4	1.1	1	0.3	5	0.7
Brothel			4	1.1	4	0.6
Don't know	12	3.3	20	5.6	32	4.4
Total	360	*	360	*	720	*
Usually obtain condom						
I get it free of cost	66	18.3	65	18.1	131	18.2
I buy	64	17.8	49	13.6	113	15.7
Both	81	22.5	59	16.4	140	19.4
Never used condom	149	41.4	187	51.9	336	46.7
Total	360	100	360	100	720	100
Usually obtain free condom from						
Health Post/ PHCC	135	91.8	110	88.7	245	90.4
Peer/Friends	31	21.1	12	9.7	43	15.9
FCHVs	7	4.8	34	27.4	41	15.1
Hospital	19	12.9	14	11.3	33	12.2
FPAN Clinic	2	1.4	7	5.6	9	3.3
Health Workers/Volunteers	1	0.7	3	2.4	4	1.5
Total	147	*	124	*	271	*
Most convenient place to obtain free c	ondom					
Health Post/ PHCC	138	93.9	84	67.7	222	81.9
FCHVs	22	15	40	32.3	62	22.9
Hospital	29	19.7	20	16.1	49	18.1
Peer/Friends	29	19.7	13	10.5	42	15.5
Health Workers/Volunteers	1	0.7	5	4	6	2.2
FPAN Clinic	1	0.7	3	2.4	4	1.5
During Community Program	2	1.4	1	0.8	3	1.1
Total	147	*	124	*	271	*
Usually obtain condom from						
Pharmacy	142	67.3	119	68.8	261	68
Private Clinic	43	20.4	20	11.6	63	16.4
General Retail Store (Kirana Pasal)	5	2.4	5	2.9	10	2.6
Paan Shop	2	0.9			2	0.5
Never bought condom	19	9	29	16.8	48	12.5
Total	211	100	173	100	384	100
Most convenient place to obtain free c	ondom					
Pharmacy	147	69.7	124	71.7	271	70.6
		20				

Total	211	100	173	100	384	100
Paan Shop	2	0.9	2	1.2	4	1
General Retail Store (Kirana Pasal)	7	3.3	8	4.6	15	3.9
Health Post/PHCC	11	5.2	27	15.6	38	9.9
Private Clinic	44	20.9	12	6.9	56	14.6

<sup>\*</sup> Percentages total may exceed 100 due to multiple responses

#### 5.10 Use of Alcohol and Drugs by MLMs

More than two- third of the respondents (67.6%) had drunk alcohol in the past one month while 32.4 percent of the respondents did not consume alcohol in the past one month. Out of those alcohol consumers, 11 percent of them consumed alcohol daily, 17.4 percent consumed in 2-3 times in a week, 17.6 percent consumed at least once in a week and 21.7 percent consumed in less than once in a week. In the same way, 2.8 percent of the respondents had ever tried to consume any type of illicit drugs in the past one month and 0.4 percent of the respondents had ever injected drugs in the past one month. A total of 7.9 percent of the respondents used to drink alcohol every day during their last stay in India. About 13.5 percent of the respondents had taken alcohol for 2-3 times in every week, 20.8 percent had taken alcohol at least one time in a week and 24.2 percent had taken occasionally with less than once in a week (Table 5.10).

Table 5.10 Use of Alcohol and Drugs among Male Labor Migrants

Tubic 5.10 Osc of Theories and Dings and	0	Western	Mid to Far	Western		Total
Description	N	%	N	%	N	%
Consumption of alcohol during past one month						
Everyday	49	13.6	30	8.3	79	11
2-3 times a week	62	17.2	63	17.5	125	17.4
At least once a week	45	12.5	82	22.8	127	17.6
Less than once a week	79	21.9	77	21.4	156	21.7
Never	125	34.7	108	30	233	32.4
Total	360	100	360	100	720	100
Tried to take any types of drugs during past on	e month					
Yes	9	2.5	11	3.1	20	2.8
No	351	97.5	349	96.9	700	97.2
Total	360	100	360	100	720	100
Ever injected drugs						
Yes	3	0.8			3	0.4
No	357	99.2	360	100	717	99.6
Total	360	100	360	100	720	100
Consumption of alcohol during last stay in India	a					
Every day	36	10	21	5.8	57	7.9
2-3 times a week	54	15	43	11.9	97	13.5
At least once a week	52	14.4	98	27.2	150	20.8
Less than once a week	92	25.6	82	22.8	174	24.2
Never	126	35	116	32.2	242	33.6
Total	360	100	360	100	720	100

## **CHAPTER 6: KNOWLEDGE OF STIs, HIV and AIDS**

HIV and AIDS awareness along with knowledge about STIs is crucial to reduce the risk of HIV transmission. This chapter deals with the level of knowledge among MLMs regarding STI, HIV and AIDS.

#### 6.1 Knowledge of HIV and AIDS among MLMs

Knowledge of the HIV and AIDS among the respondents is one of the most important determinants for the adoption of safe behaviors. As indicated in the table 6.1, four-fifths (81.7%) of the respondents had heard about the AIDS; however, almost one-fifth (18.3%) had never heard about the AIDS. Slightly higher proportion of the respondents who belong to the Western Region (88.1%) had ever heard about AIDS than those respondents of Mid to Far Western Region (75.3%). Out of those respondents who had some sorts of knowledge about AIDS, they received the information from different sources such as Radio (47.6%), Friends (40.8%), Television (27.6%), Teachers/School (25.7%), Internet (19.7%), Street drama (11.6%), Billboard/signboard (7.7%), Health Post/Hospital (5.1%) and NGO personnel (0.7%).

Table 6.1 Source of Knowledge of HIV and AIDS among Male Labor Migrants

		Western	Mid to Far	Iid to Far Western			
Description	N	%	N	%	N	%	
Ever heard about HIV and AIDS	S						
Yes	317	88.1	271	75.3	588	81.7	
No	43	11.9	89	24.7	132	18.3	
Total	360	100	360	100	720	100	
Sources of information of HIV ar	nd AIDS						
Radio	154	48.6	126	46.5	280	47.6	
Friends	108	34.1	132	48.7	240	40.8	
TV	99	31.2	63	23.2	162	27.6	
Teacher/School	101	31.9	50	18.5	151	25.7	
Internet	83	26.2	33	12.2	116	19.7	
Street drama	39	12.3	29	10.7	68	11.6	
Billboard/signboard	26	8.2	19	7	45	7.7	
Hospital/Health Post	19	6	11	4.1	30	5.1	
NGOs Personnel	2	0.6	2	0.7	4	0.7	
Don't know	10	3.2	5	1.8	15	2.6	
Total	317	*	271	*	588	*	

<sup>\*</sup> Percentages total may exceed 100 due to multiple responses

Table 6.2 explains about the knowledge of different kinds of messages pertinent to the HIV and AIDS among the respondents. Only 1.7 percent of the respondents reported that HIV is not transmitted through kissing and another equal proportion of the respondents opined that HIV is not transmitted through hand shaking. More than four- fifths of the respondents (83%) opined that avoiding unsafe sex and the use condom is one of the key practices to prevent from getting HIV infection. Nearly one-fifth (19.4%) of the respondents reported that HIV is transmitted through blood, 17.2 percent opined that HIV is transmitted through blade/injection and 0.3 percent of the them reported that infected mother can transmit HIV to her unborn child. More than one-fifth (21.8%) of the respondents stated that AIDS is communicable disease. About 3 percent of the respondents opined that person infected with HIV should not be hated.

Table 6.2 Knowledge of HIV and AIDS among Male Labor Migrants

	V	Vestern	Mid to Far Western			Total
Description	N	%	N	%	N	%
Heard messages regarding HIV and AIDS						
HIV is not transmitted thought kissing	9	2.8	1	0.4	10	1.7
Avoid unsafe sex and use condom	256	80.8	232	85.6	488	83
HIV is transmitted through blood	72	22.7	42	15.5	114	19.4
HIV is transmitted though blade/injection	64	20.2	37	13.7	101	17.2
AIDS is communicable disease	75	23.7	53	19.6	128	21.8
Infected mother can transmit HIV to her child	2	0.6			2	0.3
HIV is not transmitted through hand shaking	9	2.8	1	0.4	10	1.7
Person with HIV and AIDS should not be hated	11	3.5	7	2.6	18	3.1
Don't remember'	2	0.6	7	2.6	9	1.5
Total	317	*	271	*	588	*

<sup>\*</sup> Percentages total may exceed 100 due to multiple responses

Table 6.3 reveals the knowledge of HIV transmission and preventive methods among the MLMs. Slightly more than half (52.7%) of the respondents opined that HIV transmission can be prevented through abstinence and this understanding was evident among almost equal proportion of the respondents of both the regions. Similarly, improved understanding was observed in regards to the faithful partnership as a measure of HIV prevention (70.1%) and consistent use of condom (81%). In the meantime, two-third (66.2%) of the respondents opined that a person looking healthy can be infected with HIV and this perception was higher among the respondents of Western Region (71.6%) than those respondents of Mid to Far Western Region (59.8%). More than two-fifths (41.2%) of the respondents opined that a person can get HIV infection from mosquito bite. More than one-fifth (22.3%) of the respondents stated that HIV is transmitted by sharing the meal. Respondents who belonged to the Western Region had better understanding of all the A, B and Cs of the HIV prevention (36.1%) than that was evident among the respondents of Mid to Far Western Region (26.9%). Only 31.5 percent of the respondents had knowledge of all the three ABCs of the HIV prevention and 17.2 percent of them had knowledge of all the five components (BCDEF) of HIV prevention. Similarly, knowledge of BCDEF was also evident among the higher proportion of the respondents of Western Region (20.6%) when it is compared with those respondents of Mid to Far Western Region (13.9%) (Table 6.3).

Table 6.3 Knowledge of HIV and AIDS Transmission\*

	Western		Mid to Far Western		To	tal
Description	N	%	N	%	N	%
Abstinence from sex (A)	168	53	142	52.4	310	52.7
Being faithful to one partner (B)	241	76	171	63.1	412	70.1
Consistent condom use (C)	271	85.5	205	75.6	476	81
Healthy looking person can be infected (D)	227	71.6	162	59.8	389	66.2
Get HIV from mosquito bite (E)'	134	42.3	108	39.9	242	41.2
Get HIV by sharing meal (F)'	63	19.9	68	25.1	131	22.3
Knowledge of all three ABC	130	36.1	97	26.9	227	31.5
Knowledge of all five BCDEF	74	20.6	50	13.9	124	17.2

<sup>\*</sup> Percentages total may exceed 100 due to multiple responses

A total of 30.5 percent of respondents reported that some of their relatives had HIV infection or died due to AIDS and another 26.2 percent respondents reported that their close friends had HIV infection or they died of AIDS. A total of 47.1 percent of the respondents stated that a woman who gets infected with HIV can transmit the virus to her newborn child through the breast milk whereas 28.2 percent reported that HIV cannot be transmitted through breast feeding. Almost one out of every ten respondents (9.5%) opined that a person can get HIV by holding with HIV infected person; More than nine out of every ten (93.4%) respondents opined that HIV can be transmitted by the use of already used needle/syringes and such perceptions was quite high among the respondents of both the Western Region (94.6%) and Mid to Far Western Regions (91.9%). Almost all (96.1%) the respondents were known that HIV infection can be transmitted through the transfusion of HIV infected blood to others. Similarly, 70.6 percent of the respondents stated that a pregnant woman infected with HIV can transmit the virus to her unborn fetus. In response to the question "What can a pregnant woman do to reduce the risk of transmission of HIV to her unborn child?", 26.7 percent of the MLMs opined that medication could reduce the HIV transmission, one percent opined that advice and counseling can reduce the risk of transmission while most of the respondents (72.3%) did not know about the risk reduction methods of HIV transmission to the fetus in utero (Table 6.4).

Table 6.4 Knowledge on HIV Infected People and Ways of its Transmission

		Western	Mid to Far	Western		Total
Description	N	%	N	%	N	%
Know anyone infected with HIV or died of AIDS	64	17.8	77	21.4	141	19.6
A close relatives or close friend						
Close relative	16	25	27	35.1	43	30.5
Close friend	13	20.3	24	31.2	37	26.2
No relation	35	54.7	26	33.8	61	43.3
Total	64	100	77	100	141	100
Awareness on HIV*						
A woman with HIV transmits the virus to her newborn child	144	45.4	133	49.1	277	47.1
A person gets HIV by holding on with HIV infected person	31	9.8	25	9.2	56	9.5
A person gets HIV by using previously used needle/syringe	300	94.6	249	91.9	549	93.4
Blood transfusion from an infected person transmits HIV	311	98.1	254	93.7	565	96.1
A pregnant woman infected with HIV transmits the virus to her fetus	226	71.3	189	69.7	415	70.6
A pregnant woman can reduce the risk of trai	nsmission	of HIV to	her unborn cl	nild		
Take medication	39	17.3	72	38.1	111	26.7
Take advice and counseling	3	1.3	1	0.5	4	1
Don't know	184	81.4	116	61.4	300	72.3
Total	226	100	189	100	415	100

<sup>\*</sup> Percentages total may exceed 100 due to multiple responses

#### **6.2** Knowledge and Treatment of STIs

Male labor migrants working in outstations who have more than one sex partners are vulnerable to acquire STIs. To assess the extent and prevalence of STIs among the migrant labors, series of questions related to the STI infection, including their experiences of STI symptoms were asked to the respondents.

Table 6.5 shows the understanding of respondents in regards to STIs and the different kinds of symptoms experienced by them in the past one year. They understood that white discharge/discharge of pus/Dhatu flow (6.5%), painful urination (3.6%); and burning sensation while at the time of urination (4%), ulceration around the genitalia (16.1%), syphilis (24%), HIV and AIDS (50.4%) are the common presenting STI symptoms. Respondents of the Western Region had better understanding of all the symptoms and conditions of STIs than those respondents who belong to the Mid to Far Western Region except syphilis; which is reported by slightly higher proportion of respondents of Mid to Far Western Region (26.4%) than those respondents of Western Region (21.7%). Surprisingly, almost two out of every five (39.9%) respondents did not have understanding of STI related symptoms and the proportion of those who did not understand about these STI are considerably more in the Mid to Far Western Region (49.2%) than the Western Region(30.6%). In the meantime, several kinds of STI related symptoms were experienced by the respondents in the past one year. Reported symptoms were White discharge/pus (0.6%), pain during urination (0.4%); and burning sensation while at the time of urination (1.1%), genital ulcers (1%) and others (0.3%).

*Table 6.5 Understanding of STIs and Reported Symptoms (Past Year)* 

1 doie 0.5 Onderstanding 0j 511s d	1	Western Mid to Far Western				Total
Description	N	%	N	%	N	%
Understanding of STI						
White Discharge/Discharge of Pus/Dhatu flow	30	8.3	17	4.7	47	6.5
Pain during urination	17	4.7	9	2.5	26	3.6
Burning Sensation while Urinating	17	4.7	12	3.3	29	4
Ulcer or sore around genital area	65	18.1	51	14.2	116	16.1
Syphilis (Bhiringi)	78	21.7	95	26.4	173	24
HIV/AIDS	210	58.3	153	42.5	363	50.4
Don't know	110	30.6	177	49.2	287	39.9
Total	360	*	360	*	720	*
Types of STI symptoms experienced in	the past y	ear				
White Discharge/Discharge of pus	2	0.6	2	0.6	4	0.6
Pain during urination	2	0.6	1	0.3	3	0.4
Burning sensation while urinating	7	1.9	1	0.3	8	1.1
Ulcer or sore around genital area	5	1.4	2	0.6	7	1
Other	1	0.3	1	0.3	2	0.3
Non above the symptoms	345	95.8	354	98.3	699	97.1
Total	360	*	360	*	720	*

<sup>\*</sup> Percentages total may exceed 100 due to multiple responses

Out of those respondents who reported some kinds of STIs in the past one year, only one-third (33.3%) of them had received the treatment against these symptoms. Among those respondents who were treated against the STIs, 57.1 percent had got the treatment from private clinics followed by 42.9 percent from hospital and only 14.3 percent of them had received care from Health Post/Health Center. Two-fifths respondents of the Western Region who were treated against STIs had received treatment from private clinics as against the hundred percent respondents of the Mid to Far Western Region. Similarly, 71.4 percent of the respondents who had treatment against STIs, had received counseling services and the proportion of those counseling recipients were noticeably higher in Western Region (80%) than the Mid to Far Western Region (50%). Among those respondents who received counseling services, hundred

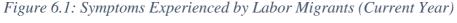
percent of them reported that they were suggested to use condom at all the sexual contacts and 16.7 percent were advised to reduce the number of sexual partners (Table 6.6).

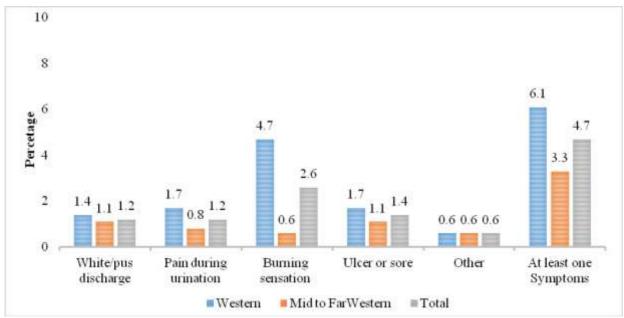
Table 6.6 Reported Treatment of STIs among Male Labor Migrants (in Past Year)

Tuote 6.6 Reported Treatment of 511.		Western	Mid to Far		,	Total
Description	N	%	N	%	N	%
Received treatment for any of the above s	ymptoms					
Yes	5	33.3	2	33.3	7	33.3
No	10	66.7	4	66.7	14	66.7
Total	15	100	6	100	21	100
Places of treatment of STI symptoms in th	e past yea	ar				
Private Clinic	2	40.0	2	100.0	4	57.1
Health Post/PHCC			1	50.0	1	14.3
Hospital	3	60.0			3	42.9
Total	5	100.0	2	100.0	7	100.0
Received counseling						
Yes	4	80.0	1	50.0	5	71.4
No	1	20.0	1	50.0	2	28.6
Total	5	100.0	2	100.0	7	100.0
Counseling provided						
Told me to use condom	4	100.0	2	100.0	5	100.0
Told me to reduce number of sexual partners	1	20.0			1	16.7
Total	5	*	1	*	6	100

<sup>\*</sup> Percentages total may exceed 100 due to multiple responses

Figure 6.1 shows the symptoms experienced by MLMs at the time of survey. A total of 1.2 percent respondents reported that they had white discharge or the discharge of pus from genital organs and another equal proportion of the respondents reported painful urination. Similarly, 2.6 percent of the respondents had burning sensation at the time of urination, 1.4 percent had genital ulcers and 0.6 percent of them had some other symptoms. In the meantime, 4.7 percent of the respondents had at least one symptom of STI at the time of survey.





Among those respondents who reported some kinds of symptoms of STI, 17.6 percent of them had received the treatment against recent STI symptoms where all these symptoms were experienced by the respondents of Western Region only. Fifty percent of the respondents who had received treatment against the current symptoms of STIs within one week and another equivalent proportion (16.7%) of the respondents had received treatment in each of the second, third and fourth or more weeks respectively after the diagnosis of STIs. Out of those who had received treatment, 16.7 percent of them availed the care from Private Clinic and another equal proportion of them availed care from Health Post/PHCC; and two- third of them (66.7%) had taken care from Hospitals. A total of 83.3 percent respondents who had treatment had availed the prescription for medication and hundred percent of them obtained all the prescribed medicine for the treatment of reported symptoms of STIs. All the treatment recipients had taken treatment as prescribed. Respondents who had treatment had paid paid NRs 100, 400, 3500, 4000 and 6000 for the treatment respectively (Table 6.7).

Table 6.7 Reported STI Treatment among Male Labor Migrants

		Western	Mid to Far	Western		Total
Description	N	%	N	%	N	%
Received treatment for above symptoms	S					
Yes	6	27.3			6	17.6
No	16	72.7	12	100	28	82.4
Total	22	100	12	100	34	100
Treatment received						
Within one week	3	50.0			3	50.0
Two weeks	1	16.7			1	16.7
Three weeks	1	16.7			1	16.7
Four weeks and more	1	16.7			1	16.7
Total	6	100			6	100
Places visited for treatment of STI symp	toms					
Private Clinic	1	16.7			1	16.7
Health Post/ PHCC	1	16.7			1	16.7

Hospital	4	66.7	4	66.7
Total	6	100	6	100
Received prescription for medicine				
Yes	5	83.3	5	83.3
No	1	16.7	1	16.7
Total	6	100	6	100
Obtained all the medicine prescribed				
Yes I obtained all of it	5	100	5	100
Total	5	100	5	100
Took all the prescribed medicine				
Yes	5	100	5	100
Total	5	100	5	100
Amount paid for the medicine ( Nepalese 1	Rupees)			
Rs 100	1	20.0	1	20.0
Rs 400	1	20.0	1	20.0
Rs 3500	1	20.0	1	20.0
Rs 4000	1	20.0	1	20.0
Rs 6000	1	20.0	1	20.0
Total	5	100.0	5	100.0

<sup>\*</sup> Percentages total may exceed 100 due to multiple responses

#### **6.3** Perception on HIV Test

Almost half (49.8%) of the respondents were known about the availability of confidential HIV testing facility in the community and this awareness was prevalent among higher proportion of the respondents of Western Region (58%) that the respondents of Mid to Far Western Region (40.2%). Nearly 15 percent of the respondents had done testing for HIV infection and this testing practice was reported more frequently among the respondents of Mid to Far Western Region (21%) than those respondents of Western Region (9.5%). Out of those respondents who had ever had HIV testing, 77.0 percent of them had done HIV testing voluntarily and 23 percent did so because it was required for other purposes (Table 6.8).

Almost all respondents who were tested against HIV infection (98.9%) had received the result of HIV testing. One respondent did not know about the result of HIV testing because he was afraid of the result. Almost three-fourth of respondents who were tested against HIV infection had done the testing within last four years with 28.7 percent being tested within the last 12 months, 27.6 percent tested between 1-2 years and 17.2 percent were tested between 2-4 years. Remaining 26.4 percent had done HIV testing before four or more years from the date of survey (Table 6.8).

Table 6.8 Knowledge about HIV Testing Facilities among MLMs and History of HIV Test

		Western	Mid to Far	Western		Total			
Description	N	%	N	<b>%</b>	N	%			
Confidential HIV test facility available in the community									
Yes	184	58	109	40.2	293	49.8			
No	109	34.4	120	44.3	229	38.9			
Don't know	24	7.6	42	15.5	66	11.2			
Total	317	100	271	100	588	100			
Ever had HIV test									
Yes	30	9.5	57	21	87	14.8			
No	287	90.5	214	79	501	85.2			

Total	317	100	271	100	588	100
Voluntarily underwent the test or because it	was requir	red				
Voluntarily	19	63.3	48	84.2	67	77
Required	11	36.7	9	15.8	20	23
Total	30	100	57	100	87	100
Obtained the test result						
Yes	30	100	56	98.2	86	98.9
No			1	1.8	1	1.1
Total	30	100	57	100	87	100
Reason for not receiving the test result						
Afraid of result			1	100	1	100
Total			1	100	1	100
Most recent HIV test						
Within last 12 months	8	26.7	17	29.8	25	28.7
Between 1-2 years	10	33.3	14	24.6	24	27.6
Between 2-4 years	4	13.3	11	19.3	15	17.2
More than 4 years ago	8	26.7	15	26.3	23	26.4
Total	30	100	57	100	87	100

# CHAPTER 7: EXPOSURE TO STI, HIV AND AIDS AWARENESS PROGRAMS

This chapter discusses and explores the exposures of the MLMS to ongoing STI, HIV and AIDS awareness programs and their participation in those activities. The respondents in the survey were asked several questions relating to some of the most important components of current HIV and AIDS related programs implemented by several organizations. Information provided by them has been analyzed in this section.

#### 7.1 Exposure to Peer/Outreach Educators

STI, HIV and AIDS awareness interventions through outreach and peer educators (OEs and PEs) is one of the most popular interventions. OEs and PEs mobilization to educate the target most risk key population on STI, HIV and AIDS is a vital approach for HIV prevention. Table 7.1 elaborates the exposures and knowledge of MLMs in regards to the programs related to STIs, HIV and AIDS. Only 2.8 percent of the respondents had ever met or discussed or interacted with peer educators or outreach educators in the last 12 months. Outreach educators/peer educators with whom the respondents had an interaction belonged to different NGOs enlisted in the table 7.1.

Table 7.1 Meeting/Interaction of MLMs with Peer/Outreach Educators

	,	Western	Mid to Fa	r Western		Total
Description	N	%	N	%	N	%
Met or discussed or interacted with	Peer Educato	ors (PE) or	Outreach E	ducators (OE)	in the Last 1	2 months
Yes	10	2.8	10	2.8	20	2.8
No	350	97.2	348	96.7	698	96.9
No response			2	0.6	2	0.3
Total	360	100	360	100	720	100
Organizations represented by OE/Pl	E					
Digo Bikas			1	10	1	5
SACT			1	10	1	5
Nawakiran Plus			1	10	1	5
WAC Nepal			1	10	1	5
Sahara			1	10	1	5
Indreni Samaj Kendra	1	10			1	5
Don't remember/Don't know	10	100	7	70	17	85
Total	10	*	10	*	20	*

<sup>\*</sup> Percentages total may exceed 100 due to multiple responses

#### **7.2 Drop-in-**Centers Visiting Practice

Drop-in-Center (DIC) is another vital component of HIV prevention programs. These DICs not only provide a safe space for the target communities to socialize but are also the site for educational and counseling activities. Only 0.4 percent of the respondents had visited to Drop in Center (DIC). Out of those who had ever visited to DICs, 33.3 percent of them visited to the DIC run by Nepal Red Cross Society, 33.3 percent visited to the DIC of WAC- Nepal and 33.3 percent visited to the DIC of Indreni Samaj Kendra (Table 7.2).

Table 7.2 DIC visiting Practice of MLMs

		Western	Western Mid to Far Western				
Description	N	%	N	%	N	%	
Visited DIC in the last 12 months							
Yes	2	0.6	1	0.3	3	0.4	
No	358	99.4	359	99.7	717	99.6	
Total	360	100	360	100	720	100	
Name of organizations that run DIC	C/s visited by t	hem					
Red Cross	1	50			1	33.3	
WAC Nepal			1	100	1	33.3	
Indreni Samaj Kendra	1	50			1	33.3	
Total	2	100	1	100	3	100	

#### 7.3 STI Clinic and HTC Center Visiting Practices

The STI Clinics are being run by different organizations in survey districts or nearby locations for the prompt detection and treatment of STIs. As indicated in the table 7.3, only 0.4 percent of the respondents visited to the STI clinics in the last 12 months. Amongst those STI clinic visitors, 33.3 percent of them visited to the clinic run by government of Nepal and another 33.3 percent of them visited to the STI clinics run by medical college. About one-third (33.3%) of the respondents who had visited to STI clinics did not know the name of organization where they get the treatment.

Table 7.3 Visits to the HTC and Clinics by Male Labor Migrants

		Western	Mid to Far	Western		Total
Description	N	%	N	%	N	%
Visited any STI Clinic in the last 12 months						
Yes			3	0.8	3	0.4
No	360	100	357	99.2	717	99.6
Total	360	100	360	100	720	100
Name of organizations that run STI clinic visited	l by tl	hem				
Government hospitals			1	33.3	1	33.3
Medical colleges			1	33.3	1	33.3
Don't remember/Don't know			1	33.3	1	33.3
Total			3	100	3	100
Visited HTC in the last 12 months						
Yes	1	0.3	4	1.1	5	0.7
No	359	99.7	356	98.9	715	99.3
Total	360	100	360	100	720	100
Name of organizations that run the HTCs visited	l by tl	hem				
WAC- Nepal			2	50	2	40
Indreni Samaj Kendra	1	100			1	20
Don't remember/Don't know			2	50	2	40
Total	1	100	4	100	5	100

In response to the question on whether they had visited any HIV testing and counselling (HTC) centers in the past year, only 0.7 percent of the respondents reported that they had visited to HTC clinics in the last 12 months. Out of those HTC visitors, 40 percent of them visited to the HTC run by WAC-Nepal, 20 percent visited to the HTC run by Indreni Samaj Kendra while

remaining 40 percent of the respondents did not know about the places for availability of HTC services (Table 7.3).

#### 7.4 Knowledge about PMTCT

Table 7.4 reflects the knowledge of respondents about the Prevention of Mother to Child Transmission (PMTCT) services. Only 2.8 percent of the respondents had heard about the PMTCT services. Out of those who had ever heard about PMTCT services, 55 percent of them knew about the places for the availability of PMTCT services. Seven out of every ten respondents reported that PMTCT services are available from Government hospital and other service centers are Health Post (10%), Medical college (10%), HTC centers (10%) and Indreni Samaj Kendra(10%)

Table 7.4 Knowledge about Prevention of Mother to Child Transmission

Tuble 7.4 Knowledge about 1 reve	<i>J</i>	Western	Mid to Far			Total
Description	N	%	N	%	N	%
Heard about PMTCT						
Yes	12	3.3	8	2.2	20	2.8
No	183	50.8	205	56.9	388	53.9
Don't know	165	45.8	145	40.3	310	43.1
No response			2	0.6	2	0.3
Total	360	100	360	100	720	100
Knowledge about PMTCT services ava	ailable					
Yes	4	33.3	7	87.5	11	55
No	6	50.0			6	30
Don't know	2	16.7	1	12.5	3	15
Total	12	*	8	*	20	*
Name of organizations that provide PM	ATCT servic	ees				
Government hospitals	2	50	5	83.3	7	70
Health Post	1	25			1	10
Medical colleges			1	16.7	1	10
HTC centers			1	16.7	1	10
Indreni Samaj Kendra	1	25			1	10
Don't remember/Don't know			1	16.7	1	10
Total	4	*	6	*	10	*

<sup>\*</sup> Percentages total may exceed 100 due to multiple responses\

#### 7.5 Knowledge about Anti-retroviral Therapy (ART)

A total of 10.7 percent respondents had heard about the ART services while majority of them were not known about the ART services. Similarly, 50.6 percent of the respondents knew about the place of availability of ART services. Different places from where ART services available as reported by the respondents were Government hospitals (61.5%), Health Post (17.9%) HTC centers (2.6%), Nawakiran Plus (5.1%), Dhangadi (2.6%) and Indreni Samaj Kendra (2.6%) (Table 7.5).

Table 7.5 Knowledge about ART Services

		Western	Mid to Fa	ar Western		Total
Description	N	%	N	%	N	%
Heard about ART services						
Yes	47	13.1	30	8.3	77	10.7
No	244	67.8	219	60.8	463	64.3
Don't know	69	19.2	110	30.6	179	24.9
No response			1	0.3	1	0.1
Total	360	100	360	100	720	100
Know from where people can get ART	services					
Yes	20	42.6	19	63.3	39	50.6
No	21	44.7	3	10	24	31.2
Don't know	5	10.6	8	26.7	13	16.9
No response	1	2.1			1	1.3
Total	47	100	30	100	77	100
Name of organizations that provide AR	T services					
Government hospitals	15	75	9	47.4	24	61.5
Health post	2	10	5	26.3	7	17.9
HTC centers			1	5.3	1	2.6
Nawakiran Plus			2	10.5	2	5.1
Dhangadi Nepal			1	5.3	1	2.6
Indreni Samaj Kendra	1	5			1	2.6
Don't remember/Don't know	2	10	1	5.3	3	7.7
Total	20	100	19	100	39	100

#### 7.6 Knowledge about Viral Load Testing Service and Community and Home Based Care

As indicated in the table 7.6, 2.1 percent of the respondents had ever heard about the viral load testing services and this awareness was slightly higher among the respondents of Western Region (3.3%) than the respondents of Mid to Far Western Region (0.8%). About 53.3 percent of the respondents were known about the viral load testing centers. Out of those who had heard about viral load testing services, 62.5 percent of them stated that ART service is available at Government hospital followed by each of the 12.5 percent respondents reported that ART service is available at Medical College, Nawakiran Plus, and Mission Hospital respectively.

Table 7.6 Knowledge about Viral Load Testing and CHBC

		Western	Mid to Fa	ır Western		Total
Description	N	%	N	%	N	%
Heard about viral load testin	g services					
Yes	12	3.3	3	0.8	15	2.1
No	275	76.4	235	65.3	510	70.8
Don't know	73	20.3	121	33.6	194	26.9
No response			1	0.3	1	0.1
Total	360	100	360	100	720	100
Know from where can get vi	ral load testing	services				
Yes	5	41.7	3	100	8	53.3
No	6	50			6	40
Don't know	1	8.3			1	6.7
Total	12	100	3	100	15	100

Name of organizations that provide viral load testing services											
Government hospitals	3	60	2	66.7	5	62.5					
Medical Colleges	1	20			1	12.5					
Nawakiran Plus			1	33.3	1	12.5					
Mission Hospital	1	20			1	12.5					
Total	5	100	3	100	8	100					
Heard about CHBC											
Yes	8	2.2	8	2.2	16	2.2					
No	319	88.6	279	77.5	598	83.1					
Don't know	33	9.2	73	20.3	106	14.7					
Total	360	100	360	100	720	100					
<b>Ever Met with CHBC health w</b>	orkers in the h	ouse in the la	st 12 months								
Yes	2	0.6	5	1.4	7	1					
No	358	99.4	355	98.6	713	99					
Total	360	100	360	100	720	100					
Organization represented by O	E/PEs										
Health Post	2	100	1	20	3	42.9					
Nepal Red Cross Society	1	50			1	14.3					
Digo Bikas			1	20	1	14.3					
SACT			1	20	1	14.3					
Don't remember/Don't know	1	50	3	60	4	57.1					
Total	2	*	5	*	7	*					

Table 7.6 further shows the percentage of the respondents who had heard about any Community Home Based Care (CHBC) services that are provided for HIV positive people. Knowledge of respondents about the community and home based care for HIV infected person. Only a few respondents (2.2%) had heard about the CHBC and one percent of them had ever met with CHBC health workers in the house in the last 12 months. As reported by the respondents different organizations provide CHBC services through OEs or PEs include Health Post (30%), Red Cross Society (10%), Digo Bikash (10%) and SACT (10%) while 40 percent respondents did not know about any organizations providing CHBC service.

#### 7.7 Stigma against HIV and AIDS among MLMs

Table 7.7 shows the different kinds of stigma prevalent against HIV and AIDS among MLMs. Majority of the MLMs (83.3%) expressed their willingness to take care of HIV positive male relatives in the household and it was almost equal among the MLMs of both the regions. Similarly, 82.8 percent of the MLMs expressed the willingness to take care of HIV positive female relatives in the household. Almost 54 percent of the MLMs were willing to maintain confidentiality of a HIV positive member of a family and this attitude was expressed by almost equal proportion of the respondents of both the regions. More than three-quarters (76.7%) of the MLMs expressed their willingness to buy food from HIV infected shopkeeper. Slightly more than two-fifths (41.0%) of the MLMs opined that HIV infected person should get the same kinds of health care like other non- infected people, 40.8 percent of them reported that HIV infected person require more health care than others chronic diseases and 4.3 percent stated that HIV infected person required less care than others who have chronic diseases (Table 7.7). Almost 70.0 percent respondents opined that HIV infected person should be allowed to work together with others and this kind of opinion was expressed by more than three-quarters of the respondents of Western Region (76.7%) as against the 61.7 percent of the respondents of Mid to Far Western Region. Almost four-fifths (78.8%) of the respondents stated that the children living with HIV infection should be allowed to attend the classes in schools along with HIV negative students (Table 7.7).

Table 7.7 Stigma against HIV and AIDS among Male Labor Migrants

Table 7.7 Sugma against HIV and AIDS an		Vestern	Mid to Far V	Western		Total
Description	N	%	N	%	N	%
Respondent willing to take care of HIV positive r	nale relati	ve in the	household			
Yes	302	83.9	298	82.8	600	83.3
No	52	14.4	21	5.8	73	10.1
Don't know	6	1.7	41	11.4	47	6.5
Total	360	100	360	100	720	100
Respondent willing to take care of HIV positive f	emale rela	tive in th	ne household			
Yes	298	82.8	298	82.8	596	82.8
No	58	16.1	19	5.3	77	10.7
Don't know	4	1.1	43	11.9	47	6.5
Total	360	100	360	100	720	100
Respondent willing to maintain confidentiality of	f a HIV po	sitive far	nily member			
Yes	199	55.3	188	52.2	387	53.8
No	156	43.3	136	37.8	292	40.6
Don't know	5	1.4	36	10	41	5.7
Total	360	100	360	100	720	100
Respondent willing to buy food from HIV infected	ed shopkee	per				
Yes	276	76.7	276	76.7	552	76.7
No	68	18.9	51	14.2	119	16.5
Don't know	15	4.2	32	8.9	47	6.5
No response	1	0.3	1	0.3	2	0.3
Total	360	100	360	100	720	100
HIV infected person should get the same, more o	r less care	than son	neone with an	y other chr	onic dise	ase
Same	174	48.3	121	33.6	295	41
More	139	38.6	155	43.1	294	40.8
Less	22	6.1	9	2.5	31	4.3
Don't know	25	6.9	69	19.2	94	13.1
No response			6	1.7	6	0.8
Total	360	100	360	100	720	100
HIV infected person should be allowed to contin		0				
Yes	276	76.7	222	61.7	498	69.2
No	64	17.8	75	20.8	139	19.3
Don't know	20	5.6	55	15.3	75	10.4
No response			8	2.2	8	1.1
Total	360	100	360	100	720	100
Children living with HIV should be able to attend	d school w	ith child	ren who are H	IV negativ	e	
Yes	295	81.9	272	75.6	567	78.8
No	41	11.4	35	9.7	76	10.6
Don't know	23	6.4	52	14.4	75	10.4
No response	1	0.3	1	0.3	2	0.3
Total	360	100	360	100	720	100

#### CHAPTER 8: COMPARATIVE ANALYSIS

This chapter analyzes the trends in the prevalence of HIV infection reported in different rounds of IBBS surveys carried out among MLMs. The selected indicators like prevalence of HIV, socio-demographic characteristics, migration history, condom using practices, comprehensive knowledge on HIV and exposure to HIV and AIDS prevention or awareness programs among MLM have been chosen for the comparison of all rounds of IBBS surveys. Since all the rounds of IBBS surveys among MLMs were conducted using same sampling design and sampling procedures; comparison have been made among the results of various rounds of key findings. It is customary to note that IBBS survey among MLMs -2010 was carried out only in the Mid to Far Western Region using 500 samples populations.

#### 8.1 **Prevalence of HIV among MLMs**

Table 8.1 shows the trends in the prevalence of HIV infection among male labor migrants. There was increase in the prevalence of HIV among MLMs from 1.1 percent in 2006 to the 1.4 percent in 2008 in Western Region. Thereafter, its prevalence shows declining trend (1.1% in 2012 to 0.3% in 2015) in the same Region (p=0.01). Similarly, HIV prevalence among MLMs of the Mid to Far Western Region was 2.7 percent in 2006; which was reduced drastically to 0.8 percent in 2008. Again, its prevalence increased to 1.5 percent in 2010. prevalence decreased to 1.4 percent in 2012 and it further declined to 0.6 percent in 2015 (p=0.001).

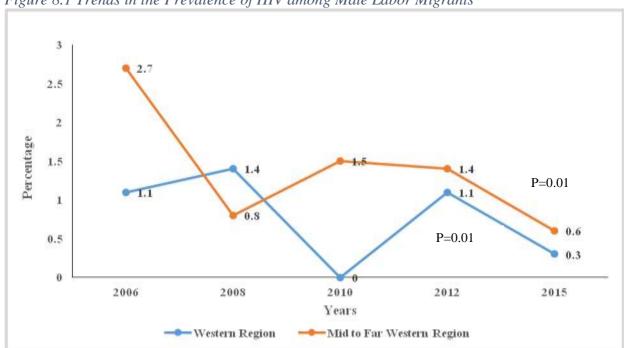


Figure 8.1 Trends in the Prevalence of HIV among Male Labor Migrants

Source: IBBS surveys (2006, 2008, 2012 and 2015 Surveys N=720 (Western = 360, Mid to Far western t=360), 2010 Survey N=550 (Only Mid to Far Western)

#### 8.2 **Socio-Demographic Characteristics of MLMs**

Majority of respondents were of 25 years or above in all the previous rounds of surveys in the both Western and Mid to Far Western Regions and IBBS 2015 followed the similar trend. Previous rounds of surveys showed the decreasing trend (46.3% in 2006, 38.7% in 2008 and 26.4% in 2012) in the representation of respondents less than 25 years of age in Western Region. Unlike this, the representation of MLMs less than 25 years of age was slightly

increased (26.4% in 2012 to 30.5% in 2015) in Western Region in this round of survey. Proportion of respondents aged 25 years or above has been increased (54.7% in 2012 to 72.2 percent in 2015) in Mid to Far Western Region. Mean age of the respondents remained between 27 to 32 years of age over the five rounds of surveys. The gap of median age of MLM of Western and Mid to Far Western Region participated in the survey has been decreased (≥1 in previous rounds of surveys; 0.5 in 2015). Percentage of ever-married respondents participating in this survey has been decreased (80.6% in 2012 to 72.8% in 2015) in the Western Region whereas increasing trend (71.7% in 2012 to 85.6% in 2015) was observed in the Mid to Far Western Region of the same attributes (Table 8.1).

Proportion of Illiterate participants was 4.4 percent in the western region in this (2015) survey. This proportion was the lowest among all rounds of surveys. On the other hand, percentage of illiterate MLMs (20%) who participated in this year has been the highest ever represented from illiterate in Mid to Far Western Region. The proportion of respondents who had some years of schooling has been increased so far in the recent years. In all the previous rounds of surveys, there was the highest representation from Brahmin/Chetrri/Thakuri; Nonetheless, earlier trend has been changed in this year (2015) in Mid to Far Western Region where representation of Dalit respondents has been increased from 26.7 percent in 2012 to 44.4 percent in 2015 (Table 8.1).

This round of survey reveals that the respondents who had their first marriage at the age of  $\leq$ 20 years was higher in Mid to Far Western Region (48.6%) than that of Western Region (28.9%). Majority of respondents were living with their wife in all rounds of surveys. Proportion of MLMs who had their first sex at the age less than 20 years was in decreasing trend in Western Region (63.4% in 2006, 54.7 % in 2008, 42% in 2012); however, there was the slight increase in the proportion of MLMs who had their sex at the age less than 20 years in Western Region (47.3% in 2015) from42.0 percent in 2012. Meanwhile, there was slight decrease in the proportion of MLMs of the Mid to Far Western Region who had first sexual contact at the age of less than 20 years (66.8% in 2012 to 60.8% in 2015) (Table 8.1).

Table 8.1 Trend Analysis of Socio-Demographic Characteristics of MLMs

	•	2006		2008		2010	-	2012		2015
Socio-Demographic Characteristics	Weste rn	Mid to Far Weste rn								
Age of Respondents(	in vears)			111		111		- 111		
< 25	46.3	45.5	38.7	33.8	NA	27.45	26.4	45.3	30.5	27.8
≥25	53.7	54.4	61.4	66.1	NA	72.55	73.6	54.7	69.5	72.2
Mean	27.8	27.7	29.6	29.2	NTA	30.2	31.6	27.4	31.7	32.2
Median age	25	26	27	28	NA	33.5	31	25	31	31.5
Marital Status										
Ever Married	71.9	84.2	78.1	88.1	NA	86.7	80.6	71.7	72.8	85.6
Divorced/separated/ Widowed	2.2	3.1	1.4	1.6	NA	3	1.1	1.4	1.7	2.5
Never married	25.8	12.8	20.6	10.3	NA	10.3	18.3	26.9	25.6	11.9
Education										
Illiterate	7.5	14.2	10.6	18.6	NA	19.27	7.8	6.7	4.4	20
Literate/no schooling	4.7	2.7	5.3	4.2	NA	11.64	30.3	6.4	4.2	4.4
Grade 1-5	36.7	33.9	38.9	36.4	NA	32.18	20	25.8	23.1	24.7

Grade 6-9	43.3	41.1	31.1	35.6	NA	25.45	24.7	38.1	43.9	36.1
SLC and above	7.8	8.1	14.2	5.3	NA	11.64	17.2	23.1	24.4	14.7
Caste/Ethnicity										
Brahmin/Chettri/Th akuri	36.9	46.7	36.6	49.5	NA	42.2	38.1	41.1	44.7	35
Dalit	20.3	28.9	22.8	28.3	NA	33.1	30.3	26.7	19.7	44.4
Terai Madhesi	11.4	3.3	7	2	NA	0.7	5.3	7.8	1.1	0.6
Muslim	5.8	0.8	3.9	1.1	NA	1.9	3.1	1.1	0.3	0.6
Janajati	25.7	20.3	29.7	19.3	NA	22.1	23.4	23.3	34.2	19.5
Age at first marriage	(in years)	)								
< 20 years	42	58.3	46.5	56.3	NA	2.73	36.4	53.2	28.9	48.6
<b>Currently living Witl</b>	n*									
With Wife	71.4	84.2	76.4	87.8	NA	NA	65.6	57.8	71.9	85.6
With Parents	26.1	15	20.8	11.1	NA	NA	65.6	44.2	68.1	58.1
With Others (children, male										
friends, alone,	2.5	0.9	3.4	1.1	NA	NA	65.6	47.8	61.7	75.6
relatives and no response)										
Age at first sex (< 20 years)	63.4	74.9	54.7	67.8	NA	64	42	66.8	47.3	60.8

Source: 2006, 2008, 2012 and 2015 IBBS Surveys N=720 (Western =360, Mid to Far western t=360), 2010 Survey N=550 (Only Mid to Far Western)

NA: not available

#### 8.3 Migration History of MLMs

As reported in all rounds of IBBS surveys, majority of the MLMs of both the Western and Mid to Far Western Regions were below 25 years old at the time of first migration. There was the noticeable decrease (Western Region 75.8% in 2012 to 60% in 2015 and Mid to Far Western Region 86.1% in 2012 to 65.5% in 2015) in percentage of MLMs who had their first migration at the age of less than 25 years in this round of survey. Most of the migrants of both the Western (56.1%) and Mid to Far Western (60.2%) Regions in this round of survey reported that they stayed in India for two or more years. This proportion of MLMs who stayed there in India for two or more years was higher than that was reported in all rounds of IBBS surveys (Table 8.2).

Table 8.2: Trend Analysis of Migration History of MLMs

Descriptio		2006		2008		2010		2012		2015
n	Wester n	Mid to Far Wester								
		n		n		n		n		n
Age at first r	nigration (	(in Years)								
<25	88.6	86.2	88.6	80.5	NA	80.9	75.8	86.1	60	65.5
$\geq$ 25 years	11.5	14	11.3	19.5	NA	19.1	24.2	13.9	40	34.5
Mean/medi	18.6/18	19.8/1	18.7/18	19.8/1	NA	19.9/2	21.20/1	19.69/1	24/22	23.1/2
an		9		9		0	9	9		1
<b>Duration of </b>	stay in Ind	lia (in Mo	nths)							
<12	9.2	18.4	10.6	19.5	NA	24.1	38.3	63.1	22.2	20.3
13-24	11.9	16.7	11.4	14.7	NA	12.1	44.2	23.6	21.7	19.4
>24 months	78.9	65	78.1	65.8	NA	63.8	17.5	13.3	56.1	60.2

Source: 2006, 2008, 2012 and 2015 Surveys N=720 (Western =360, Mid to Far western t=360), 2010 Survey N=550 (Only Mid to Far Western)

#### 8.4 Condom Carrying Practice and HIV Testing

The condom carrying practices of MLMs of Western Region has been improved (17.5% in 2012 to 24.4% in 2015) in the recent years. There was significantly (P=<0.01) decrease in the condom carrying practices of MLMs of Mid to Far Western Region and continuing the decreasing trend since 2012 (32.2% in 2010 to 31.1 in 2012 and 17.5% in 2015). Percentage of respondents who had ever had HIV test has been declined in both the Western (66.4% in 2012 to 9.5% in 2015) and Mid to Far Western Regions (63.1% in 2012 to 21% in 2015) in this round of survey (Table 8.3).

Table 8.3 Trend analysis of Condom Carrying Practice and HIV Test among MLMs

Description	2006	2008	2010	2012	2015	P value
Respondents carry condom usually						
Western	16.4	6.7	NA	17.5	24.4	< 0.01
Mid-Far Western	15.6	16.4	32.2	31.1	17.5	< 0.01
Ever had an HIV Test						
Western	12.2	8.1	NA	66.4	9.5	< 0.01
Mid- Far Western	8.6	11.7	8.9	63.1	21	< 0.01

Source: 2006, 2008, 2012 and 2015 Surveys N=720 (Western =360, Mid to Far western t=360), 2010 Survey N=550 (Only Mid to Far Western)

#### 8.5 Condom Use with Different Sex Partners

Majority of the respondents (64%) of Western Region had used condom during their last sex with FSWs in Nepal whereas only 48.4 percent of respondents of Mid to Far Western Region had used condom in their last sex with FSWs. Condom using practices with FSWs was in the increasing trend (35.3% to 64% in Western and 36% to 48.4% in Mid to Far western) among respondents of both clusters in 2012 to 2015 respectively. The respondents using condoms in the last sex with their wives has been decreased among both the Western (18.3% in 2012 to 13.5% in 2015) and Mid to Far Western Region (23% in 2012 to 12% in 2015). However, the condom using practices in last sex with girlfriend in Nepal has been increased (6.9% to 64.7% in Western Region and 19.6% to 56% in Mid to Far Western Region) in 2012 and this round of survey in both the regions. Similarly, the condom using practice with girlfriend in the last sex in India has also been increased enormously (3.9% to 68.4% in Western and 9% to 77.8% in Mid to Far Western Region) in 2012 and this round of survey. The condom using practices of migrants of Mid to Far Western Region with FSWs in India was lowest (25%) in this round of survey. Although, the proportion of migrants who used condoms in their last sex with FSWs in India has been 87.5 percent and 77.8 percent respectively in both the Western and Mid to Far Western Region in 2012, there was noticeable decrease in this (2015) round of IBBS survey. This proportion was 63 percent in Western Region and 25 percent in Mid to Far Western Region. Condom use practices among the MLMs during sex with girlfriend in India increased in 2015 than 2012 IBBS survey in both the Regions (Table 8.4).

Table 8.4 Trend analysis of Condom Use with Different Sex Partners in the Past Year

Description	2006	2008	2010	2012	2015	P value
Condom use with FSW in the last sex in Nepal						
Western	12.5	75	NA	35.3	64	0.01
Mid-Far Western	50	50	6.9	36	48.4	0.35
Condom use with wife in the last sex in Nepal						
Western	12.9	11.3	NA	18.3	13.5	0.1
Mid-Far Western	12	14.6	18.3	23	12	0.01
Condom use with girlfriend in the last sex in Ne	epal					
Western	47.1	41.7	NA	6.9	64.7	0.12

Mid-Far Western	41.4	64	8.9	19.6	56	0.4
Condom use with FSW in the last sex in India						
Western	63.6	80	NA	87.5	63.6	0.21
Mid-Far Western	71	66.7	68.4	77.8	25.0	0.1
Condom use with Girlfriend in the last sex in In	ndia					
Western	62.5	87.5	NA	3.9	68.4	0.1
Mid-Far Western	57.1	58.3	9	9	77.8	0.7

2006, 2008, 2012 and 2015 Surveys N=720 (Western =360, Mid to Far western t=360), 2010 Survey N=550 (Only Mid to Far Western)

#### 8.6 Comprehensive Knowledge of HIV and AIDS

The overall knowledge level of MLMs on almost all indicators has been increased than that of the previous survey of 2012. Around half of the respondents from both the Regions (53% in Western and 52.4% in Mid to Far Western) had knowledge on abstinence from sexual contact (A). Majority of respondents from Western Region than that of Mid to Far Western Region (76% Vs 63.4%) had knowledge on protecting themselves through monogamous sexual contact. Similarly, MLMs of Western Region had surpassed MLMs of the Mid to Far Western Region in the indicators of comprehensive knowledge namely; consistent use of condom during every sex (85.5% Vs 75.6%), a healthy looking person might have been infected with HIV (71.6% Vs 59.8%) and a person cannot get HIV by sharing meal with infected person (19.9% vs 25.1%). However, similar proportion (42.3% and 39.9% of respondents of Mid to Far Western and Western Regions had knowledge that HIV cannot be transmitted through mosquito bite. The respondents of Western Region had more comprehensive knowledge of ABC and BCDEF than that of Mid to Far Western Region. This round of survey revealed that the knowledge of ABC (23% Vs 36%) and BCDEF (13% Vs 21%) has been improved in Western Region from the previous IBBS survey of 2012.

Table 8.4 Comprehensive Knowledge on HIV/AIDS

Descriptio	2006		2008		2010		2012		2015
n West	n Fai Wester	n	Far Wester	Wester n	Mid to Far Wester	Wester n	Mid to Far Wester	Wester n	Mid to Far Wester
A. Can protect them	selves throi		n nce from sexu	ıal conta	n et		n		<u> </u>
66		Ū	64.2		NA	42.5	50.2	53	52.4
B. Can protect them	selves throu	igh monoga	mous sexual	contact					
71	.4 71.1	71.9	71.7	NA	NA	52.1	70.4	76	63.1
C. Can protect them	selves throu	igh condom	use every tir	ne during	g sex				
78	.9 77.8	82.8	77.5	NA	NA	62.1	77.5	85.5	75.6
D. A healthy lookin	g person car	n be infected	d with HIV						
76	.9 79.4	86.9	78.3	NA	46	44.3	47.9	71.6	59.8
E. A person cannot	get HIV vir	us from mos	quito bite						
26	.1 31.4	29.7	33.6	NA	NA	46.1	50.2	42.3	39.9
F. A person cannot	get HIV by	sharing mea	l with an HI	V infecte	d person				
;	61.1	56.4	60.8	NA	NA	59.4	74.3	19.9	25.1
Knowledge of ABC									
48	.9 44.7	46.4	47.8	NA	NA	22.8	30.9	36.1	26.9
Knowledge of BCD	EF								
16	.1 22.2	17.2	15.8	NA	NA	12.8	12.5	20.6	13.9

2006, 2008, 2012 and 2015 Surveys N=720 (Western =360, Mid to Far western t=360), 2010 Survey N=550 (Only Mid to Far Western)

#### 8.7 Exposure to HIV and AIDS Related Program

Proportion of MLMs who had met or discussed with OEs /PEs in this round of survey has been declined (7.8% in 2012 to 2.8%) in both the regions in 2015. Similarly, the percentage of migrants visiting DIC has been decreased to 0.6 percent in Western and 0.3 percent in Mid to Far Western Region. None of the respondents in this round of IBBS had visited STI clinic in Western Region whereas 0.8 percent had visited in Mid to Far Western Region. The respondents who had visited HTC center have been dropped to 0.3 percent in Western and 1.1 percent in Mid to Far Western Region .Proportion of the MLMs who had ever met with CHBC workers in the house has been decreased in both Western (1.7% in 2012 to 0.6% in 2015) and Mid to Far Western (5.6% in 2012 to 1.4% in 2015) (Table 8.5).

Table 8.5 Comprehensive Knowledge on HIV and AIDS

Description	2006	2008	2010	2012	2015	P value
Met or discussed with OEs/PEs						
Western	NA	1.9	NA	7.8	2.8	0.01
Mid to Far western	NA	15	9.6	9.2	2.8	0.01
Visited DIC						
Western	NA	0.3	NA	3.9	0.6	0.01
Mid to Far western	NA	0.6	NA	0.8	0.3	0.62
Visited STI Clinic						
Western	NA	1.7	NA	1.1	0	0.13
Mid to Far western	NA	4.2	NA	2.2	0.8	0.22
Visited HTC centre						
Western	NA	0.3	NA	1.1	0.3	0.37
Mid to Far western	NA	2.8	NA	2.2	1.1	0.27
<b>Ever met with CHBC workers in the</b>	house					
Western	NA	0	NA	1.7	0.6	0.22
Mid to Far western	NA	3.6	NA	5.6	1.4	0.27

2006, 2008, 2012 and 2015 Surveys N=720 (Western =360, Mid to Far western t=360), 2010 Survey N=550 (Only Mid to Far Western)

## CHAPTER 9: SUMMARY OF MAJOR FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

#### 9.1 Summary of Major Findings

#### **HIV** prevalence

Out of 720 Male Labor Migrants (MLM) who participated in this survey, 3(0.4%) were identified as HIV positive. Prevalence of HIV infection among the MLMs of Mid to Far Western Region (0.6%) was higher than the respondents of the Western Region (0.3%).

#### **Socio-demographic characteristics**

Mean age of the respondent was  $32.0 \pm 9.1$  years. Two-fifths of the MLMs had 6-9 years of formal schooling while 12.2 percent of them were illiterate. Illiteracy was more frequently observed among the respondents of Mid to Far Western Region (20%) than the Western Region (4.4%). Brahmins/Chhetri accounted for the highest proportion of respondents in Western Region (44.7%) whereas Dalits accounted for 44 percent of the MLMs of Mid to Far Western Region.

#### **Migration history**

Maharastra (47.5%) and Delhi (36.8%) were the major destination for migration among MLMs. Mean duration of stay in India was 58.7 months and the respondents of Western Region had longer period of stay (61.7 months) than that of the respondents of Mid to Far Western Region (55.8 months). Mean age at first migration was 23.6±7.7 years. Most of the MLMs (64.9%) used to work as laborer or factory workers in India. Nearly half (46.2%) of the MLMs were stayed in the places of migration for more than 4 months when they were migrated with in Nepal. Among those internal migrants in Nepal, 46.2 percent of them worked as daily labors.

#### Marriage and Sexual behavior

Nearly forty (39.5%) percent of MLMs had got marriage before completing 20 years of age and this proportion was considerably higher among the MLMs of Mid to Far Western Region (46.7%) than the MLMs of Western Region (28.5%). Almost 80 percent MLMs were living together with their wives. More than nine out of every ten MLMs (91.1%) had ever had sex with female. Almost 54 percent of the respondents had first sexual contact before 20 years of age. Mean age of the respondents at the first sex was 19.7±3.5 years.

#### **Sexual Contact and Condom Use in Nepal**

Almost eight percent of the MLMs had ever had sex with FSWs in Nepal. Out of those MLMs who had ever had sex with FSWs in Nepal, more than four-fifths (80.4%) of them had contact with two or more FSWs. In an average, MLMs had sexual contact with 4.5±4 FSWs in Nepal. Slightly more than half (55.4%) of the MLMs who had sex with FSWs in Nepal had used condom and almost two-fifths (39.3%) of those who had sex with FSWs in the past one year had used condom consistently.

#### **Sexual Contact and Condom Use in India**

About 11 percent of the MLMs had ever had sex with FSWs in India. Three- quarters of the MLMs who had ever had sex with FSWs in India had sex with two or more FSWs in their lifetime. In an average, MLMs had sex with 4.5±4 FSWs; with range being 29. Almost 6 percent of the MLMs had sex with FSWs in India in the past year; out of them, only 45.2 percent had used condom during the last sex. Almost nine-tenth (89.5%) of the respondents

who used condom in the last sex had used the same with their own decision. A total of 72.7 percent respondents had used condom consistently in the sex with FSWs in India in the last year.

#### **Availability of Condom**

A total of 21 percent MLMs always used to carry condoms when attempt for sex. Slightly more than seven out of every ten (71.4%) respondents availed condoms from the Health Post/Primary Health Care Centre and 55.3 percent received the condoms from pharmacies. Less than one-fifth (18.2%) of the MLMs obtained condoms free of cost and 15.7 percent of them availed by purchasing from different sources.

#### Knowledge of STI, HIV and AIDS and Treatment of STIs Treatment

Nearly 82 percent of the MLMs had heard about HIV and AIDS. Major sources of information to get the knowledge about HIV and AIDS were Radio (47.6%), Friends (40.8%), Television (27.6%), Teachers/School (25.7%) and the Internet (19.7%). A total of 31.5 percent respondents had knowledge of all the three ABCs of HIV and AIDS. Less than one-fifth (17.2%) of the respondents had knowledge of all the five components (BCDEF) of HIV prevention and control. Commonly understood conditions/symptoms of STIs among MLMs were; HIV and AIDS (50.4%), Syphilis (24%) and ulceration around the genitalia (16.1%). One percent of the MLM complained the presence of white discharge or pus from the genitalia and 1.1 percent had burning urination. Out of 15 MLMs who experienced some symptoms of STIs in the past one year, one-third (33.3%) of them had received the treatment against these symptoms of STIs. Almost three-fifths (57.1%) of the respondents had received treatment from private clinics and two- fifths (42.9%) had received the treatment from hospitals. A total of 71.4 percent respondents had received counseling services.

#### Use of Alcohol and Drugs

More than two- thirds of the respondents (67.6%) had drunk alcohol in the past one month. Out of those alcohol consumers, 11 percent of them were daily consumers and 17.4 percent were intermittent consumers (2-3 times/ week). About 2.8 percent of the respondents had ever tried to consume any type of illicit drugs in the past one month. Almost 8 percent of the respondents used to drink alcohol every day during their last stay in India.

#### **Exposure to STI, HIV and AIDS Program**

Only 2.8 percent of the respondents had ever met or discussed or interacted with peer educators or outreach educators and 0.3 percent of them visited to the Drop in Centers in the last 12 months. Only 0.7 percent of the respondents had visited to the HIV testing and Counseling Centers within last 12 months. Similarly, 2.8 percent of the respondents had ever heard about PMTCT services. Out of those MLMs who had heard about PMTCT services, more than half of them (55.0%) were known about the availability of these services. Nearly 11 percent of the respondents had heard about the Anti-retroviral Therapy services. Only 2.1 percent of the respondents had ever heard about the viral load testing services and 2.2 percent of them had heard about the Community and Home Based Care.

#### Stigma against HIV and AIDS

Majority of the respondents (83.3%) had willingness to take care of male HIV positive and 82.8 percent of the respondents expressed their willingness to take care of HIV positive female relatives in the household. About 54 percent of the MLMs were willing to maintain confidentiality of HIV infection of their family member and nearly 77 percent of the MLMs expressed their willingness to buy food from HIV infected Shopkeeper. About 41 percent of the respondents opined that HIV infected person should get the same kinds of health care as other

HIV negative people. Almost seventy percent respondents opined that HIV infected person should be allowed to work together with non-infected people. Almost four-fifths (78.8%) of the respondents stated that the children living with HIV infection should be allowed to attend the classes in schools along with HIV negative students.

#### 9.2 Conclusions

Series of IBBS surveys among MLMs have been conducted under the leadership of NCASC since last decade. This survey provides an insight into the estimated prevalence of HIV among these vulnerable groups and is also an assessment of sexual risk behaviors prevalent among the survey populations. A cross-sectional quantitative survey method was utilized in this study. In this survey, both the behavior related structure questionnaire and biological laboratory examination were performed to gather data.

Out of 720, 3 MLMs (0.4%) had HIV infection. Prevalence of HIV infection among the MLMs of the Mid to Far Western Region (0.6%) was higher than that was identified among the respondents of the Western Region (0.3%). MLM mean age was 32.0 years. Two-fifths of the MLMs had 6-9 years of formal schooling while 12.2 percent respondents were illiterate. Dalits accounted for 44 percent of the respondents of the Mid to Far Western Region. Maharastra (47.5%) and Delhi (36.8%) were major destination for migration; 35.4% of the MLMs were migrated to India for the first time before 20 years of age. Mean age at first migration was 23.6 years. Nearly 80 of the respondents were married and living together. Mean age of the respondents at first marriage was 20.9 years. More than ninety percent of the MLMs had ever had sex with female and more than half of the respondents who had ever had sex with female had first sexual contact before 20 years of age. About 8 percent and 11 percent of the MLMs had ever had sex with FSWs in Nepal and India respectively. About 45 percent and 73 percent of the respondents used condom consistently in Nepal and India respectively. A total of 21 percent respondents always used to carry condoms for every sexual attempt. Only 18 percent of the respondents obtained condom free of cost.

A total of 81.7 percent of the respondents had ever heard about AIDS. Major sources of information to get the knowledge about HIV were Radio (47.6%) and Friends (40.8%). Ulceration around the genitalia (16.1%), syphilis (24%) and HIV and AIDS (50.4%) were the common Conditions/symptoms of STIs reported by MLMs. Only one-third (33.3%) of those who had symptoms of STIs had received the treatment against these conditions and 71.4 percent of them had received counseling services. Only 31.5 percent of the respondents had knowledge of all the three ABCs of the HIV prevention and 17.2 percent of them had knowledge of all the five components (BCDEF) of HIV prevention.

#### 9.3 Recommendations

Eight and Eleven percent MLMs had sex with FSWs in Nepal and India respectively. This is considered as a high-risk behavior in the context of the high prevalence of HIV among the female sex workers in India and Nepal. The labor migrants should therefore be made aware about the risk of acquiring HIV and its transmission to their spouses. Thus, the community-focused HIV prevention programs should be implemented to address unsafe sexual behavior and behavior change communication through interpersonal communication and mass media.

Nearly 30 percent MLMs did not use condom during sexual intercourse with FSWs in India, similarly, 93 percent of the MLMs did not use condom with their wives. Most of them stated that they 'didn't think it was necessary/didn't think of it' as the reason for not using condoms. Such behavior not only exposes the labor migrant to the risk of HIV infection, but it also possesses the elevated risk of HIV transmission to their wives. To address this issue, an

intensive educational program that focuses not only the labor migrants but also their wives should be implemented in areas where the migration is quite high.

Proper knowledge of modes of transmission of HIV and means of prevention was still low among the labor migrants. For example, only one third of the respondents in both regions knew all three 'ABCs' and less than two-fifth of the respondents knew all five major indicators 'BCDEF' of HIV and AIDS. The program should address this aspect in a vigilant way. Furthermore, programs focusing on raising awareness activities among MLMs needs to be geared up for regaining the previous status and to enhance their knowledge and modify their behaviors to improve protective behaviors.

Only 3 percent MLMs had interaction or meet with PEs/OEs in last 12 months and very few MLMs were informed about PMTCT services (2.8%), ART services (10.7%), visited HTC centers and STIs treatment service (0.7%) and (0.4%), Viral Load Testing Services (2.1%) and CHBC (2.2%). Hence, outreach activities, mobile HTC and STI services should be organized to increase the access and utilization services rendered for MLMs in migration dense districts.

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## **ANNEXES**

#### **Annex-1: List of selected clusters**

## Sample Clusters from the Western Region

Sample Interval: 7334 First Random Number: 1370

District	Serial No. (CBS)	VDCs Name	Total migrants (Male)	Estima ted (2015)	Selected Clusters	Random Number
Syangja	2	Arjun Chaupari	967	1021	1	1370
Syangja	16	Chinnebas	809	854	1	8704
Syangja	25	Kalikakot	727	767	1	16038
Syangja	35	Manakamana	654	690	1	23372
Syangja	44	PutalibazarNP	3820	4032	1	30706
Syangja	52	ShreekrishnaGa ndaki	1164	1229	1	38040
Syangja	60	Waling NP	3407	3596	1	45374
Kaski	7	Dangsing	322	340	1	52708
Kaski	21	Lamachaur	804	849	1	60042
Kaski	22	LekhnathNP	6578	6943	1	67376
Kaski	32	Pokhara Sub- Metro	21540	22735	3	74710
Kaski	39	Sarangkot	680	718	1	96712
Palpa	10	Bodha pokharathowk	427	451	1	104046
Palpa	22	Foksinghkot	785	829	1	111380
Palpa	34	Jymire	456	481	1	118714
Palpa	50	Pipaldada	873	921	1	126048
Palpa	62	TansenNP	2358	2489	1	133382
Kapilbastu	10	Baskhore	486	513	1	140716
Kapilbastu	34	Hathausa	587	620	1	148050
Kapilbastu	50	Bhalwad	779	822	1	155384
Kapilbastu	68	Shivagadhi	517	546	1	162718
Gulmi	8	Arkhale	1025	1082	1	170052
Gulmi	17	Bhurtung	737	778	1	177386
Gulmi	28	Nayagau	875	924	1	184720
Gulmi	39	Hansara	518	547	1	192054
Gulmi	50	Johang	864	912	1	199388
Gulmi	62	Pallikot	681	719	1	206722
Gulmi	73	Sirseni	452	477	1	214056

Total 30

# Sample Clusters from the Mid to Far Western Region

Sample Interval: 5908 First Random Number: 4945

District	Serial No.(CB S)	VDCs Name	Total migrants (Male)	Estima ted (2015)	Selected Cluster	Random number
Banke	11	Chisapani	211	223	1	4945
Banke	31	Naubasta	1218	1286	1	10853
Banke	43	Sitapur	1137	1200	1	16761
Surkhet	8	Birrendra NP	1453	1534	1	22669
Surkhet	21	Guthu	544	574	1	28577
Surkhet	37	Mentada	1667	1759	1	34485
Surkhet	50	Tatopani	620	654	1	40393
Kailali	3	Beladevipur	649	685	1	46301
Kailali	7	Chaumala	2582	2725	1	52209
Kailali	10	Dhangadhi NP	4214	4448	1	58117
Kailali	15	Godawari	2327	2456	1	64025
Kailali	23	Malakheti	1879	1983	1	69933
Kailali	31	Pathariya	2417	2551	1	75841
Kailali	35	Ramshikharjhala	1185	1251	1	81749
Kailali	42	Tikapur NP	5713	6030	1	87657
Kailali	43	Udasipur	346	365	1	93565
Kanchanpur	4	Daijee	2473	2610	1	99473
Kanchanpur	6	Dodhara	2436	2571	1	105381
Kanchanpur	9	Krishnapur	2599	2743	1	111289
Kanchanpur	11	Bhimdatta NP	6001	6334	1	117197
Kanchanpur	14	RaikawarBichawa	1230	1298	1	123105
Kanchanpur	20	Tribhuwanbasti	1742	1839	1	129013
Doti	13	DipayalSilgadhi NP	2275	2401	1	134921
Doti	26	Kapalleki	438	462	1	140829
Doti	40	Pachanali	485	512	1	146737
Achham	5	Basti	589	622	1	152645
Achham	24	Dhodasain	385	406	1	158553
Achham	38	Kalikasthan	326	344	1	164461
Achham	55	Patalkot	190	201	1	170369
Achham	71	Toli	346	365	1	176277
Total					30	

## **Annex-2: Survey tools**

### INTEGRATED BIOLOGICAL AND BEHAVIORAL SURVEILLANCE SURVEY (IBBS) AMONG MALE LABOR MIGRANTS IN WESTERN AND MID TO FAR WESTERN REGION OF NEPAL – 2015

Clinical/Lab Checklist for Male Labor Migrants

Respondent ID Number:				
Name of Clinician:	Date: 2072/_	/		
Name of Lab Technician:				
(A) Clinical Information	(B) Specime	n collection	on Yes	No
Weight: Kg.	Pre test coun	seled	1	2
Blood collected for B.P.:mm of Hg.	HIV test		1	2
Date and place for Pulse :	Post-test resu	alts given	1	2
Condom given Temperature: Vitamins given			1 1	2 ° F 2
Gift Given			1	2
IEC materials given			1	2
1.0 Syndromic Treatment Information				
101. Did you have discharge from your peni past one-month?	is or burning s	sensation v	•	ou urinate in the
(If yes, give treatment for gonorrhea and chl	amydia)			
102. Did you have sore or ulcer or warts rou 1. Yes 2. No (If yes, Refer)	and your genit	als in the	past on	e-month?

## **Respondents ID Card**

ID:				
Date:				
Consented for Laboratory Test:	Yes	No		
Consented for Interview:	Yes	No		
Respondent wants consultation with STI	Technician:	Yes	No	
If yes, Which services were asked?				
Interviewer Name:				

## **Respondents ID Card**

ID:			
Date:			
Consented for Laboratory Test:	Yes	No	
Consented for Interview:	Yes	No	
Respondent wants consultation with S'	TI Technician:	Yes	No
Interviewer Name:			

#### Confidential

# National Centre for AIDS and STD Control (NCASC), Ministry of Health and Population (MOHP), Government of Nepal

# INTEGRATED BIOGICAL AND BEHAVIOUAL SURVEILLANCE (IBBS) SURVEY AMONG MALE LABOR MIGRANTS IN WESTERN AND MID TO FAR WESTERN REGION, NEPAL-2015

Namaste! My name is
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//
Definition of Respondent "Men aged between 18to49 years who have gone to India for work for at least three months and have returned home within the last three years".
Name of interviewer: Code No .of Interviewer  Date of Interview: 2072//
Checked by the supervisor: Signature:Date:2072//

#### 1.0 GENERAL INFORMATION

No.	Questions and Filters	Coding Categories	Skip To
101	Respondent ID No.		
102	Interview Starting Time		
	Interview Completion Time		
103	Where were you born?	District	
		VDC/Municipality	
		Ward No.	
		Village/Tole	
104	Where do you live now?	Districts:	
		VDC/Municipality:	
	(Name of Current Place of Residence)	Ward No.	
		Village/Tole:	
104.1	For how long have you been living in this	Number of months	
	district?	(Record "00" if less than 1 Month)	
		Since birth	
		Don't remember/know	
		No response	
104.2	Before you moved here, where did you live?	Districts:	
		VDC/Municipality:	
		Don't remember/know	
		No response	

#### 2.0 PERSONAL INFORMATION

No.	Questions and Filters	Coding Categories	Skip To
201	How old are you?	Age (write the completed years)	
202	What is your caste?	Ethnicity/Caste	

No.	Questions and Filters	Coding Categories	Skip To
	(Write code no. as per Ethnicity/Caste Manual)	(Specify) Code No	
203	What is your educational status?  (Circle "00" if illiterate, '19' for the literate without attending the school, and write exact number of the completed grade)	Illiterate 0 Literate 19 Grade (write the completed grade)	
204	What is your present marital status?	Married 1 Divorced/Permanently Separated 2 Widower 3 Never married 4	206
205	How old were you when you were first married?	Age (write the completed years)	
206	With whom are you staying currently?	With wife 1 With male friends 2 With female friends 3 Alone 4 With parents 5 With children 6 Others (Specify) 96	
207	How many dependents are there in your family?	Number	

#### 3.0 WORK AND MIGRATION

# Mention first place of work at first. Write detail description of each location and duration in this table

Visited Country			Vi	ate of isited	Months Spent	Date of Returned Back to		Months Spent	Type of Work	
	State	City	Nearby City	Year	Month	Abroad	Year	Month	in Nepal	Abroad

No.	Questions and Filters	Coding Categories	Skip to
302	How old were you when you had gone abroad for Work for the first time?	Age	
		(write the completed\years)	
303	Last time when you were abroad, how much did You earn per month in your last job?	Runees	
		(If it is IC convert it into NC)	
304	When did you last come back to Nepal?	Months ago	
	(If less than a month, write '00')		
		Don't know98	
305	Last time when you were abroad, how often did	Everyday1	
	you have drinks containing alcohol?	2-3timesaweek2	
		At least once a week3 Less than once a week4	
		Never5	
306	Last time when you were abroad, with whom did	Alone1	
	you live?	With wife	
		With other woman3 With friends4	
		With relative5	
		Others96	
307	Will you be going abroad again for work?	Yes1	
		No2	
308	After your return from abroad have you	Don't know	
308	After your return from abroad have you ever lived in any other place in Nepal for	No	
	work?	Don't know 98	401
	(Other place means different from currently living place where the respondent has stayed		

309. Where did you work in Nepal and for how long?

(First time returned back from abroad to till now)

Mention first place of work at first. Write detail description of each location and duration in this

#### table.

When	n did you go Visited Cities and Duration		Type of Work		
Year	Month	District	VDC/Municipality	<b>Months Spent</b>	<b>.</b> 1
				·	

#### 4.0 INFORMATION ON SEXUAL BEHAVIORS

Q.N.	Questions and Filters	Coding Categories	Skip to
401	Did you ever have had sexual intercourse with a woman? (If answer is' No' Probe)	Yes	<b>-5</b> 30
402	How old were you at your first sexual Intercourse? (In completed years)	Year's old Don't know/can't recall98	
403	Have you ever had sex with a sex worker? (If answer is' No' Probe)	Yes	530

# Sexual Behavior with Female Sex Workers in Nepal

404	Did you ever have had sex with a female sex worker in Nepal?( <b>If answer is' No' Probe</b> )	Yes
405	In Nepal, about how many female sex workers Did you have sex within your lifetime?	Number
406	In Nepal, did you have sex with a female sex Worker in the past year?	Yes
407	During past one year, how many female sex Workers did you have sexual intercourse with in Nepal?	Number
408	How many times did you have sex with female Sex worker in the past12 months in Nepal?	Times

Q.N. Questions and Filters Coding Categories Skip to	Q.N.	Questions and Filters	Coding Categories	Skip to
--	------	-----------------------	-------------------	---------

409	Where did you meet the female sex worker with	Lodge/Hotel1	
	Whom you had your last sexual intercourse in	Eating-place(Restaurant)2	
	Nepal?	Bhatti(Liquor shop)3	
		On the street4	
		Forest5	
		Workplace6	
		Others96	
		(Specify)	

# Sexual Behavior with Female Sex Workers when living abroad

Q.N.	Questions and Filters	Coding Categories	Skip to
410.	Did you ever have sex with female sex workers abroad?( <b>If answer is 'No' Probe</b> )	Yes	<b>5</b> 01
411	With about how many female sex workers have you had sex with so far when you were abroad?	Number	
412	Did you have sex with a female sex worker When abroad in the past year?	Yes	501
413	During the past one year how many female sex workers did you have sexual intercourse abroad?	Number	
414	During the past one year how many times did You have sex with female sex workers abroad?	Times	
415	In which places did you have sex with female sex workers during the past one year of your stay abroad?	Name of Country City/ Nearby City	
416	Where did you meet that last sex worker for Sexual intercourse?	Lodge/Hotel       1         Eating-place(Restaurant)       2         Bhatti(Liquor shop)       3         On the street       4         Forest       5         Brothel       6         Workplace       7         Others       96         (Specify)	
417	During your stay abroad, did you usually go to sex workers alone or with friends?	Alone 1 With Friends 2	

#### 5.0 USE OF CONDOM WITH SEX PARTNERS

Condom Use with Wife

Note: If the answer is other than married in Q.204, Go to Q.505

Q.N.	Questions and Filters	Coding Categories	Skip to
501	During the past one-year have you had sexual intercourse with your wife?	No98	



502	Did you use condom in your last sexual	Yes1
	Intercourse with your wife?	No
503	Who suggested condom use at that time?	Myself1
		My wife2 > 505
		Don't know 98
504	Why didn't you use condom at that time?	Not available1
		Too expensive2
		Partner objected3
		I didn't like to use it4
		Didn't think it was necessary.5
		Didn't think of it6
		Others96
		(Specify)
		Don't know 98
505	O	All the time
505	Over the last one year, how often did you	All the time
	use condom while having sex with your	Sometimes3
	wife?	
		Rarely4 Never5
506	Why you did not use condom always?	Not available1
		Too expensive2
		Partner objected3
		I didn't like to use it4
	(Multiple answers. Do not read the possible	Didn'tthinkitwasnecessary.5
	answers)	Didn't think of it6
		Others96
		(Specify)
		Don't know 98

# Condom Use with Female Sex Worker in Nepal

# Note: If the answer is 'No' in Q. 403 or 404 or 406, then Go to Q.507

Q.N.	Questions and Filters	Coding Categories	Skip to
507	Did you use condom in your last sexual	Yes1	
	Intercourse with a sex worker in Nepal?	No2	509
508	Who suggested condom use at that time?	Myself1	
		My Partner2	510
		Don't know 98	

509	Why didn't you use condom that time?	Not available	
510	Over the last1year, how often did you use Condom while visiting sex workers in Nepal?	All the time	512
511	Why didn't you use condom always?  (Multiple answers. Do not read the possible answers)	Not available	

#### Condom Use with Girl Friend/Lover in Nepal

512	During the past1year, did you have sexual Intercourse with your girlfriend in Nepal?	Yes	<b>→</b> 518
513	Over the last1month, how many times did you have sexual intercourse with your girlfriend?  (Write'00'if there is no sexual intercourse with girlfriend in last 30	Number of times	
514	Did you use condom in your last sexual Intercourse with your girlfriend in Nepal?	Yes1 No2	516
515	Who suggested condom use at that time?	Myself	517

O.N.	Questions and Filters	Coding Categories	Skip to
A	Questions and I neers	county cutegories	Simp to

516	Why didn't you use condom at that time?	Not available	
517	Overthelast12months,howoftendidyouuse Condom while having sex with your girlfriend in Nepal?	All the time	511

Condom Use with Female Sex Worker During Abroad Stay

Note: If the answers is 'NO' in 403 or 410 or 412, then go to question no. 523)

518	Did you use condom in your last sexual	Yes1
	Intercourse with sex worker when you were	No2 = 20
	abroad?	
519	Who suggested condom use at that time?	Mysself
319	Who suggested condom use at that time?	Myself
		My Partner
520	Wiles I' lek sees as a less of the Circa	
520	Why didn't you use condom at that time?	Not available1
		Too expensive
		Partner objected
		I didn't like to use it4
		Didn't think it was necessary.5
		Didn't think of it6
		Others96 \rightarrow
		(Specify)
		Don't know 98
521	Over the last1year, how often did you use	All the time
	Condom while visiting sex workers abroad?	Most of the time2
		Sometimes3
		Rarely4
		Never5
522	Why didn't you use condom always?	Not available1
		Too expensive2
		Partner objected3
		I didn't like to use it4
	(Multiple answers. Do not read the possible	Didn't think it was necessary5
	answers)	Didn't think of it6
		Others96
		(Specify)
		Don't know 98

Condom Use with Girl Friend During Abroad Stay

Q.N.	Questions and Filters	Coding Categories	Skip to
523	Over the past 1 –year did you have sexual	Yes1	
	Intercourse with your girlfriend abroad?	No2	<b>-</b> 530
524	Over the last1month, how many times did you		
	have sexual intercourse with your girlfriend	Number of time	
	abroad?	Don't know	}
	(Write'00' if there is no sexual	Don't know	<u>ا</u>
505	intercourse with girlfriend in last	V	
525	Did you use condom in your last sexual	Yes1	507
<i>506</i>	Intercourse with your girlfriend abroad?	No	<b>≯</b> 527
526	Who suggested condom use at that time?	Myself1	520
		My Partner2	<b>&gt;</b> 528
507	Will the second of the second	Don't know	ノ
527	Why didn't you use condom at that time?	Not available1	
		Too expensive2	
		Partner objected3	
		I didn't like to use it4	<b>→</b>
		Didn't think it was necessary.5	
		Didn't think of it6	
		Others 96	
		(Specify)	
		Don't know 98	
528	Over the last1year, how often did you use	All the time1	<del>5</del> 30
	condom while having sex with your girlfriend	Most of the time2	
	abroad?	Sometimes3	
		Rarely4	
		Never5	
529	Why you did not use condom always?	Not available1	
		Too expensive2	
		Partner objected3	
	(Multiple answers. Do not read the possible	I didn't like to use it4	
	answers)	Didn'tthinkitwasnecessary5	
		Didn't think of it6	
		Others 96	
		(Specify)	
		Don't know 98	

	aoni ese wini maie i ariner in repai	
530	During the past one-year did you have anal sex	Yes1
	With a male partner in Nepal?	No2 <del></del> <b>5</b> 37
531	Over the last1month, how many times did you Have anal sex with male partner in Nepal?	
	Have anal sex with male partiel in Nepar?	Number of time
	(Write'00' if there is no anal sex with male partner in last 30 days)	Don't know
532	Did you use a condom in your last anal sex with	
	Your male partners in Nepal?	No2 → 534

533	Who suggested condom use at that time?	Myself1 My Partner
534	Why didn't you use condom at that time?	Not available
535	Over the last 1 year, how often did you use Condom with male partner/s in Nepal?	All of the time
536	Why didn't you use condom at that time?	Not available

# Condom Use with Male Partner during Abroad Stay

537	During the past one-year did you have anal sex		
	with male partner when you were abroad?	No2	<del></del> <b>5</b> 47
538	Overthelast1month,howmanytimesdidyou	, , , , , , , , , , , , , , , , , , ,	
	have anal sex with male partner	Number of time	
	abroad?(Write'00' if there is no anal sex	Don't know98	
	with male partner in last 30 days)		
539	Did you use condom in your last anal sex	Yes1	<b>^</b> /
	with male partners when you were abroad?	No2	<b>\$</b> 41
540	Who suggested condom use that time?	Myself1	<b>~</b>
		My Partner2	<b>」</b> 542
		Don't know 98	
541	Why didn't you use condom that time?	Not available1	
		Too expensive2	
		Partner objected3	
		I didn't like to use it4	
		Didn't think it was necessary 5	
		Didn't think of it6	
		Others (Specify)96	
		Don't know 98	

542	Over the last1year, how often did you use Condom with male partner/s abroad?	All of the time
-----	--	-----------------

Q.N.	Questions and Filters	Coding Categories	Skip to
543	Why you did not use condom always?  (Multiple answers. Do not read the possible answers)	Not available	<u>,                                      </u>
544	With whom did you have the last sexual intercourse?	FSW	547
545	Did you use condom at that time? (Check with Qno.503, 505,509,513,515,519523,527, 531)	Yes	
546	Where did you have the last sexual intercourse?	Nepal	

#### Condom Accessibility

547	Do you usually carry condoms with you?	Yes1	
		No2	

548	Which places or persons do you know where	Health Post/Health Center1	
	You can obtain condoms?	Pharmacy2	
		General retail store	
		(Kirana Pasal)3	
		Private Clinic4	
		Paan shop5	
	(Multiple answers. Do not read the possible	Hospital6	
	answers)	FPAN Clinic7	
		Peer/Friends8	
		Health Workers/Volunteers9	
		Hotel/Lodge10	
		Brothel11	
		NGO12	
		FCHVs13	
		Others ((Specify)	
		96	
		Don't know 98	550

Q.N.	Questions and Filters	Coding Categories	Skip to
549	How long does it take for you to get condom		
	From your work place or home?	Minute	
550	Do you usually obtain condoms free of cost	I get it free of cost1	
	or Pay for it or obtain both ways?	I buy2	553
		Both3	
		Never used condom4	601
551	From where do you of ten obtain free	Health Post/Health Center1	
	condoms?	Hospital 2	
		FPAN Clinic3	
		Peer/Friends4	
	(Multiple answers. Do not read the	During Community Program5	
	possible answers)	Health Workers/Volunteers6	
		NGO7	
		FCHVs8	
		Others96	
		(Specify)	
552	Which would be the most convenient place/s		
	for you to obtain free condoms?	Hospital2	
		FP Clinic3	
		Peer/Friends4	
	(Multiple answers. Do not read the	During Community	
	possible answers)	Programme5	
		Health Workers/Volunteers6	
		NGO7	
		FCHVs8	
		Others96	
		(Specify)	

553	From where do you often buy condoms?	Pharmacy1
		General retail store
		(Kirana Pasal)2
	(Multiple answers. Do not read the possible answers)	Private clinic3
	possible answers)	Paan Shop4
		Others96 >
		(Specify)
554	Which records be the most convenient	Dharmany ————————————————————————————————————
334	Which would be the most convenient	Pharmacy1
	places for you to buy condom?	General retail store
		(Kirana Pasal)2
	(Multiple answers. Do not read the	Private clinic3
	possible answers)	Paan Shop4
		Others96
		(Specify)

#### 6.0 AWARENESS OF HIV and AIDS

Q.N.	Questions and Filters	Coding Categories	Skip to
601	Have you ever heard of an illness called HIV and AIDS?	Yes	701
602	Where have you seen or heard messages Regarding HIV and AIDS?	Country City/village District/State In Nepal	
	Name district and/or city and country any others?	Abroad	
603	What messages have you heard?  (Probe this about any others)	List Messages  1 2 3 4 5	
604	What are the sources of these information on HIV and AIDS?	List sources of information  1 2 3 4 5.	
605	Has any person tried to educate you about HIV Or STDs in the past year?	Yes	607

606	In which district or city did those people educate you?	Country City/village District/State In Nepal
		Abroad

# Knowledge, Perception and Attitudes on HIV and AIDS

607	Do you know anyone who is infected with HIV Or who died of AIDS?	Yes	609
608	Do you have a close relative or close friend Who is infected with HIV or has died of AIDS?	Yes ,a close relative	
609	Can people protect themselves from HIV by Having one uninfected faithful sex partner?	Yes	
610	Can people protect themselves from HIV virus Causing AIDS by using condom correctly in each sexual contact?	Yes	
611	Do you think a healthy-looking person can be infected with HIV?	Yes	
Q.N.	Questions and Filters	Coding Categories	Skip to
612	Cana person get the HIV virus from mosquito bite?	Yes	
613	Can a person get HIV by sharing a meal with the HIV infected person?	Yes	
614	Can a pregnant woman infected with HIV and AIDS transmit the virus to her unborn child?	Yes	616
615	What can a pregnant woman do to reduce the Risk of transmission of HIV to her unborn child?	Take Medication	
616	Can a woman with HIV and AIDS transmit the Virus to her newborn child through breastfeeding?	Yes	
617	Can people protect themselves from HIV virus By abstaining from sexual intercourse?	Yes	
618	Can a person get HIV by holding on with HIV Infected person's hand?	Yes	
619	Can a person get HIV by using previously used Needle/syringe?	Yes	

620	Can blood transfusion from HIV infected Person transmits HIV to others?	Yes	
621	I sit possible in your community for someone To have a confidential HIV test?	Yes	
621.1	If you have to go for HIV testing, do you know Where can you go for it?	Yes	
622	I don't want to know the result, but have you Ever had an HIV testing?	Yes1 No2	701
623	Did you voluntarily undergo the HIV test or was it required?	Voluntarily	
624	Please do not tell me the result, but did you Find out the result of your test?	Yes1 No	625.1
625	Why did you not receive the test result?	Sure of not being infected1 Afraid of result	
625.1	In the past one year did you go for HIV testing?	Yes	626
625.2	I don't want to know the result, but did you Receive the test result?	Yes1 No2	
626	When did you have your most recent HIV test?	Within last 12 months	701
626.1	How many times have you undergone for HIV test within the last 12 months?	times	

# 7.0 STI (SEXUALLY TRANSMITTED INFECTION)

701	Which diseases do you understand by STI?  (Multiple answers. Do not read the possible answers)	White Discharg Pus/Dhatu flor Pain during urin Burning Sensation Urinating Ulcerorsorearoun Syphilis (Bhiri HIV/AIDS Others(Spec	w	
702	Do you currently have any of the following sympto  Symptoms	ms?	No	

1. White Discharge/Discharge of pus	1	2	
2. Pain during urination	1	2	
3. Burning sensation while urinating	1	2	
4. Ulcer or sore around genital area	1	2	
96.Others(Specify)	1	2	
(Ifansweris'No'toallintheQ.No.702GotoQ.710)		1	
Have you gone through medical treatment for Any of these symptoms?			710
If yes, for how long did you wait to go for treatment? (Write'00'iflessthanaweek)	Week		
Where did you go for the treatment?	Private Clinic	1	
(Multiple answers. Do not read the possible answers)	Health Post/Hea Hospital Pharmacy Self Treatment(Spec	lth Center3 4 5 cify)6	
	fy the treatment.		
Symptoms	Treat	ment	
2. Pain during urination			
3.BurningSensationwhileUrinating			
4.Ulcerorsorearoundgenitalarea			
96.Others(Specify)			
	2. Pain during urination 3. Burning sensation while urinating 4. Ulcer or sore around genital area 96.Others(Specify)  (Ifansweris'No'toallintheQ.No.702GotoQ.710)  Have you gone through medical treatment for Any of these symptoms?  If yes, for how long did you wait to go for treatment? (Write'00'iflessthanaweek)  Where did you go for the treatment?  (Multiple answers. Do not read the possible answers)  For which symptoms did you get treatment? Specific Symptoms  1.WhiteDischarge/Discharge of Pus 2. Pain during urination 3.BurningSensationwhileUrinating 4.Ulcerorsorearoundgenitalarea	2. Pain during urination 3. Burning sensation while urinating 4. Ulcer or sore around genital area 96.Others(Specify)  (Ifansweris'No'toallintheQ.No.702GotoQ.710)  Have you gone through medical treatment for Any of these symptoms?  If yes, for how long did you wait to go for treatment? (Write'00'iflessthanaweek)  Where did you go for the treatment?  (Multiple answers. Do not read the possible answers)  For which symptoms did you get treatment? Specify the treatment.  Symptoms  Treat  1.WhiteDischarge/Discharge of Pus 2. Pain during urination 3.BurningSensationwhileUrinating 4.Ulcerorsorearoundgenitalarea	2. Pain during urination  3. Burning sensation while urinating  4. Ulcer or sore around genital area  96.Others(Specify)

Q.N.	Questions and Filters	Coding Categories	Skip to
706	Did you receive a prescription for medicine?	Yes	709 709
707	Did you obtain all the medicine prescribed?	Yes I obtained all of it1 I obtained some but not all2 I did not obtain the medicine 3	709
708	Did you take all of the medicine prescribed?	Yes	709
708.1	If not, why did you not take all of the medicine prescribed?	Forgot to take	
709	How much did you pay for medicine you took? (Note: If not paid mention the reasons)	RsReason	
710	Did you have any of the following symptoms during	the past year?	
	Symptoms	Yes No	
	1. White Discharge/Discharge of pus	1 2	
	2. Pain during urination	1 2	

	3.	Burning sensation while urinating	1	2	
	4.	Ulcer or sore around genital area	1	2	
	96.	Others(Specify)	1	2	
	(If answe	er is 'No 'to all in Q.No.710, Go to Q. 801)			
711	Did you	get treatment for the symptoms cite in the pa	ast year?		
		Symptoms	Yes	No	
	1.	White Discharge/Discharge of pus	1	2	
	2.	Pain during urination	1	2	
	3.	Burning sensation while urinating	1	2	
	4.	Ulcer or sore around genital area	1	2	
	96.	Others(Specify)	1	2	
	(Ifanswe	ris'No'toallinQ.No.711GotoQ.801)	1	l	
712	Where di	d you go for the treatment?	Private Clinic .	1	
	(Multiple answers)	e answers. Do not read the possible	NGO Clinic	lth Center3 4 5 cify)6	80
713		e from the place you visit for treatment ou about how to avoid the problem?	Yes		801
714	What did s	she/he tell you?	Told me to use cond Told me to reduce repartners	number of sexual2	

# 8.0 USE OF DRUGS AND INJECTION

801	During the last1 month, how often did you Have drinks containing alcohol?	Everyday	
802	Some people take different types of drugs. Have you also tried any of those drugs in the past 30days?	Yes	
803	Some people inject drugs using a syringe. Have You ever injected drugs?  (Do not count drugs injected for medical purpose or treatment of any illness)	Yes	901
804	Have you injected drugs in last 12 months?  (Do not count drugs injected for medical purpose or treatment of any illness)	Yes	- 90 1

805	Are you currently injecting drugs?	Yes	901
806	Think about the last time you injected drugs. Did you use a needle or syringe that had previously been used by someone else?	Yes	
807	Think about the time you injected drugs during the past one month. How often was it with a needle or syringe that had previously been used by someone else?	Every Time	
808	Usually how do you get/did you get syringe/needle?	My friend/relative gave it to me after his use	

#### 9.0 STIGMA AND DISCRIMINATION

Q.N.	Questions and Filters	Coding Categories	Skip to
901	If a male relative of yours become ill with	Yes1	
	HIV, would you be willing to care for him in	No2	
	your household?	Don't know	
902	If a female relative of yours become ill with	Yes1	
	HIV, would you be willing to care for him in	No2	
	your household?	Don't know 98	
903	If a member of your family become ill with	Yes1	
	HIV, would you want it to remain secret?	No2	
		Don't know 98	
904	If you knew a shop keeper or food seller had	Yes1	
	HIV, would you buy food from him/her?	No2	
		Don't know98	
		No response99	
905	Do you think a person with HIV should get the	Same1	
	Same, more or less healthcare than someone with	More2	
	any other chronic disease?	Less3	
		Don't know98	
906	If one of your colleagues has HIV but he/she is	Yes1	
	Not very sick, Do you think he/she should be	No2	
	allowed to continue working?	Don't know98	
		No response99	

906a	Do you think children living with HIV should be able	Yes1	
	to attend school with children who are HIV negative?"	No2	
		Don't know98	
		No response99	

# 10.0 KNOWLEDGE AND PARTIICIPATION IN STI, HIV AND AIDS PROGRAMS

1001	Have you met, discussed, or interacted with	Yes1	
	peer educators(PE) or community mobilizer	No2	1003
	(CM) in the last12 months?	No response99	1,1005
1002	Do you know from which organization were	NGOs (Specify)	
	they?	Other (specify)	
	(Multiple answers: DO NOT READ the possible answers given below)		
1003	Have you visited or been to any drop in	Yes1	
	Center (DIC) in the last 1 year?	No2	1005
1004	Do you know which organizations were	NGOs (Specify)	
	Running those DICs?	Other (specify)	<b>—</b>
	(Multiple answers: DO NOT READ the		
	possible answers given below)		
1005	Have you visited any STI clinic in the last	Yes1	
	1year?	No2	1007
1006	Do you know which organizations run	Government sector (specify)	
	Those STI clinics?	Private sector (specify)	
		NGOs (Specify)	
	(Multiple answers: DO NOT READ the	Others (specify)	
	possible answers given below)		
1007	Have you visited any voluntary counseling	Yes1	
	And testing (VCT) centers in the last 12	No2	1009
	months?		
1008	Do you know which organizations run	Government sector (specify)	
	Those HTC centers?	Private sector (specify)	
		NGOs (Specify)	
	(Multiple answers: DO NOT READ the	Others (specify)	
	possible answers given below)	Don't know 98	
Q.N.	Questions and Filters	Coding Categories	Skip to
1009	In the last 1 year have any CHBC health	Yes1	
	I and table I your many diffy differ mounting		4400

Q.N.	Questions and Filters	Coding Categories	Skip to
1009	In the last 1 year have any CHBC health Workers visited your house?	Yes1 No2	<b>→</b> 1100
1010	Do you know which organizations were They from?	Government sector (specify)  NGOs (Specify)  Others(Specify)96	
	(Multiple answers: DO NOT READ the possible answers given below)	Don't know	<b>→</b>

1011	Have you ever heard about prevention of mother to child transmission services (PMTCT) for pregnant women?	Yes
1011.1	Do you know from where pregnant women can get PMTCT services?	Yes
1011.2	If Yes, please specify	
1012	Have you ever heard about anti-retroviral therapy (ART) services for HIV positive individuals?	Yes
1012.1	Do you know from where HIV positive individuals can get ART services?	Yes
1012.2	If Yes, please specify	
1013	Have you heard of viral load testing services for HIV positive individuals?	Yes
1013.1	Do you know from where HIV positive individuals can get viral load testing services?	
1013.2	If Yes, please specify	

Thank the respondent and send to clinicians

**Annex-3: Map showing Study Districts** 

