# Integrated Biological and Behavioral Surveillance (IBBS) Survey among Wives of Migrants in Four Districts of Far-Western Nepal

# **Round III**



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

# Field Work Conducted by:

The IBBS Survey is part of the National HIV Surveillance Plan led by the National Center for AIDS and STD Control (NCASC). The fieldwork of this survey was carried out by National Institute for Development and Research (P) Ltd (NIDR), and the quality assurance was done by National Public Health Laboratory (NPHL) with technical and financial assistance from NCASC.

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# **Survey Team**

# **Principal Investigator**

Dr Basu Dev Pandey- Director, NCASC

# **Co-Investigator**

Bir Bahadur Rawal, SI Focal Person, NCASC
Dr Keshab Deuba, Strategic Information Specialist, NCASC/ Global Fund Programs
Upendra Shrestha, M&E Coordinator NCASC/ Global Fund Programs

# **Technical Support**

Sagun Pant NCASC (NCASC/Global Fund Programs) Shiv Hari Adhikari NCASC (Global Fund Programs)

#### FIELD TEAM

Team Leader	Outreach Managers
Tark Raj Bhatt	Tek Raj Joshi
	Dil Bahadur Singh
Researcher Officer	
Dipa Timilsina	Outreach Workers
	Urmila Buda
Report Writing Assistant	Sangita Aauji
Ganesh Khatiwada	Dammari Khadka
	Laxmi Nepali
Field Coordinators	Ramesh Khadka
Nirmala Bam Singh	Suba Pariyar
Nilam Yogi	Ram Gulabi Chaudhary
	Parwati Bk
Interviewers	Tara Devi Luhar
Neelam Pandey	Ganesh Raj Joshi
Dropati Badu	Nirmala Bhattrai
Menu Shrestha	Parbha Dhanuk
Renuka Lingthep	Gita Luhar
Puspa Chaudhary	Sabittri Damai
Neelam Chaudhary	Maya Kumari Thapa
	Nanda Devi Bittha
Counselors	Pashupati Bogati
Shreejana Chaulagain	Maheshwari B.C
Mina Karki	Sarswoti Kunwar
	Parwati Bk

Laxmi Budha

Simran Bhatta

**Lab Coordinator** 

Dan Bahadur Bohara

Runners

Parwati Bk

Sarswoti Kunwar

Clinicians

Nisa Rana Kalpana Bhatta Laxmi Budha Simran Bhatta

Lalita Devi Damai

**Lab Technicians** 

Mina Paneru Shrijana Bista Dev Bdr. Raneri

Puja Bogati Goyala Dhami

Admin & Finance

Gajendra Bhatta

**Text Editor** 

Gopal D. Joshi

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I do highly appreciate the active role of Strategic Information (SI) Focal Point Mr Bir Bahadur Rawal to complete this survey and provide support to entire survey monitoring team throughout the survey.

We would like to thank National Institute for Development and Research Private Limited (NIDR) and its Survey Team Leader Mr Tark Raj Bhatt and his team members for their commitment and enthusiastic determinations that led to the successful completion of this survey in time. We would like to thank the National Public Health Laboratory (NPHL) for conducting external quality assessments of the biological specimens.

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Director
Dr Basu Dev Pandey
National Center for AIDS and STD Control (NCASC)

# **Executive Summary**

This report is the third round of the Integrated Biological and Behavioral Surveillance Survey (IBBS) among the wives of migrant labourers in Province 7 (Far-Western) of Nepal. The survey is based on the data of 400 wives of those migrant labourers in the four districts (Achham, Doti, Kanchanpur, and Kailali) who temporarily migrate or used to migrate to India to work as labourers. The survey was conducted only among women aged 16 years and above who are current wives or widows of male, who had migrated to India for work for at least three months in the last three years and had returned home at least once within the last three years. The survey measured the prevalence of HIV among the survey population. It also assessed the multiple factors associated with risks for HIV infection, including condom use, sexual behavior, knowledge of HIV/AIDS and sexually transmitted infections (STIs), STI treatment history, exposure to HIV/AIDS awareness messages, and alcohol/drug use habits.

#### **Survey Methodology**

A total of 400 wives of migrants, mainly from Achham, Doti, Kanchanpur, and Kailali district were included in this round of survey. The cross-section survey design and two-stage cluster sampling method was applied to recruit wives of migrants.

#### **Major Findings**

Out of 400 participants, the proportion of sample taken from different districts was diverse where Kanchanpur (35%) had large proportion followed by Kailali (30%), Doti (20%), and Achham (15%) district respectively. Majority of the respondents (58.8%) were above 30 years old, and a higher proportion (31%) of them were illiterate. Ninety-eight percent of the respondents were married, and nearly half of them (48.5%) were from Dalit community. Mean age of marriage was found to be 16.9 years old in those districts. However, only 6.5 percent of respondents were found living with their husband at the time of survey. Nearly 50 percent of the respondents' husbands were found to have been migrating for work below the age of 25 years. The majority (68%) of them were found to be earning more than NRs 15000 with home return pattern once in a year, and they were also found to be consuming alcohol (61.7%) during their stay.

More than two third of respondents told that they had heard about condom. Almost 57% of the respondents were found to be using condoms at their last sex. About 90% of the respondents had heard about AIDS. The knowledge of ABC was found on decreasing trend (from 78% to 43.3%) while knowledge of BCDEF was found to be in a dual trend of fall and

rise over the time that was 18 percent in 2008 and 15.9 percent in 2018. The uptake of HTC was slightly increased as compared to 2008 however it was below 30 percent.

The survey showed HIV prevalence rate among the wives of migrant labors was 0.5 percent, and it was more dominant among the people aged 25 years and above who were currently married and residing in Kailali and Kanchanpur districts. The similar concentration was observed between STI symptoms and age group.

#### **Recommendations**

- HIV prevalence was found to have declined i.e., less than one percent. However, to
  maintain low level of HIV prevalence it is necessary to prioritize incessant delivery
  of HIV prevention interventions mainly targeting to the wives of migrants.
- Comprehensive knowledge of HIV was found decreasing over the time and condom use was less in practice among wives of migrants. Therefore, rural community-based awareness programs should be prioritized to aware wives of migrants about the importance of condom use, encouraging and negotiating their partners to use condoms and adopting preventive measures of HIV infection.
- The survey showed that only a small proportion of wives of labor migrants were exposed to behavioural interventions (peer education, drop-in center -DIC and HTC). So, some intervention programs focusing on wives of migrants need to be designed and implemented to improve their uptake of behavioural interventions.
- Larger proportions of wives of migrants were illiterate. So, different activities to improve social capital of wives of migrants need to be prioritized in future.

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#### Acronyms

AIDS Acquired Immuno-Deficiency Syndrome

CDF Community Development Forum Nepal

CHBC Community and Home Based Care Health Workers

HIV Human Immunodeficiency Virus

IBBS Integrated Biological and Behavioral Surveillance Survey

NANGAN National NGOs Network Group against AIDS Nepal

NCASC National Center for AIDS and STD Control

NGO Non-Government Organization

NIDR National Institute for Development and Research (P) Ltd

NKP Nab Kiran Plus

NNSWA National Social Welfare Association

NPHL National Public Health Laboratory

ODK Open Data Kit

PPS Probability Proportional to Size

SI Strategic Information

SITWG Strategic Information Technical Working Group

SPSS Statistical Package for the Social Sciences

STI Sexually Transmitted Infection

TSDA Thagil Social Development Association

UNAIDS United Nations Programme on HIV and AIDS

WAC Working for Access and Creation Nepal

WoM Wives of Migrants

# **Chapter I: Introduction**

### 1.1 Background

Integrated Biological and Behavioral Surveillance (IBBS) Survey is the integration of scientific and social research among the key populations to analyze the prevalence of HIV and STI which is caused due to unsafe sexual contact and blood transmission. It is highly accepted in the globe to find the prevalence of HIV and knowledge, attitudes, and behaviors among the key population, for example, men who have sex with men, female sex workers, people who inject the drug and labour migrants regarding the HIV/AIDS risk and protection.

The epidemic of HIV in Nepal is concentrated among key populations who are at higher risk. National HIV and AIDS Strategy 2016-2021 has identified female sex workers, transgender sex workers, male sex workers, clients of sex workers, transgender people, gay men and other men who have sex with men, people who inject drugs, incarcerated people, mobile, migrant and displaced populations, young people and uniformed services as key populations.

It is estimated that the internal and external migration for seasonal and long-term labor was in between 1.5 to 2 million people in the country due to the economic survival of many households in both rural and urban areas of Nepal. Migration has been identified as an independent individual risk factor for the acquisition of Human Immune-Deficiency Virus (HIV) (UNESCO/UNAIDS, 2000). Most of the wives of labor migrants are also at risk population because their husbands can transfer the HIV. It was estimated that there was 3.3 percent prevalence of HIV among the wives of migrants in 2008 and 0.8 percent prevalence in 2010 IBBS Surveys (NCSAC, 2008 and 2010). However, 12503 women and 20232 men are living with HIV (NSCASC, 2016) and globally, there were an estimated 17.8 million of women living with HIV (15+ years), that constituting almost half of the global population living with HIV (UNAIDS, 2016).

The first round of IBBS survey among the wives of migrants was conducted in 2008 and second round of IBBS survey among the wives of migrants was carried out in 2010 in four districts (Kailali, Kanchanpur, Doti and Achham) of Far-western Region (Province 7) of Nepal. It was found that HIV prevalence among the wives of migrant laborers was estimated to be 0.8 percent and it varies across four districts (0.7 percent in Achham, 2.6 percent in Doti, 0.4 percent in Kailali in 2010).

#### 1.2 Objectives

The primary and secondary objectives of the IBBS survey among wives of migrants were as below:

#### 1.2.1 Primary objectives

- To determine the trends in the prevalence of HIV and STI infections
- To assess the sexual behaviors related to HIV and STI among the survey populations in the selected survey areas.

#### 1.2.2 Secondary objectives

- Socio-demographic characteristics and additional information (alcohol behaviors; sexual behavior including knowledge and use of condoms);
- Knowledge of transmission and prevention of HIV and STI;
- Access to available HIV and STI prevention, treatment, care and support services in selected survey areas;
- Exploring the association between the risk behaviors and HIV

#### 1.3 Rationale of the survey

The goals of national HIV programmes are to reduce the transmission rate of HIV and to provide care for already infected people. Understanding of the extent of prevalence of HIV infection is needed to achieve these goals. Thus, the prevalence of HIV infection differs among key populations. Biological and behavioral surveillance (IBBS) survey would produce relevant facts and figure that provides information to formulate the plan, policy, and programmes for the prevention and treatment of the HIV. Similarly, the care and support would be provided to the deprived people based on the findings of the IBBS survey.

In this regards, the IBBS survey would be a key component of the national HIV surveillance plan of Nepal that would be conducted at regular intervals. The estimation and projection of HIV infections in the country is also heavily based on IBBS survey data, and the National HIV Indicators (outcome and impact) which are calculated from IBBS survey findings. Similarly, the Global AIDS Monitoring (GAM) key indicators were also calculated and reported using the IBBS survey data. Thus, IBBS survey would establish quality and scientific research in case of integration of both bio-behavioural surveys for hard to reach key population in Nepal as well as other countries.

# **Chapter II: Methodology**

#### 2.1 Survey Design

The survey design was serial descriptive cross-sectional.

#### 2.2 Survey Population

The operational definition of survey population was "Women aged 16 years and above who are current wives or widows of male, who had migrated to India for work for at least three months in the last three years and then returned home at least once within the last three years".

# 2.3 Survey District

The survey was conducted in the four districts (Kailali, Kanchanpur, Doti and Achham) of the Far-Western region (Province 7) of Nepal.

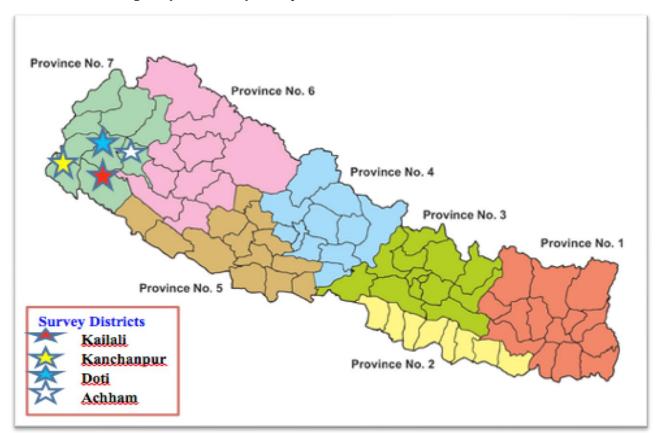
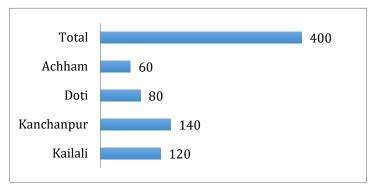


Figure 2.1: Map of study sites

#### 2.4 Population and Sample Size

The survey applied two-stage clustering sampling to generate high quality, robust evidence

on biological and behavioral survey among Wives of Migrants (Kailali, Kanchanpur, Doti and Achham districts) and find out the ways to effectively reducing the burden of HIV, STI and Syphilis related risk behavior among such key population. There were 400 respondents in total as a sample size Kailali, 140 from Kanchanpur, 80 survey districts from Doti and 60 samples were from Achham district.



where 120 samples were taken from **Figure 2.2: Distribution of respondents by** 

#### 2.5 Sampling Technique

The 400 survey respondents were selected by using two-stage cluster sampling method. In the first stage, the sampling frame was developed for the selection of the clusters during the mapping period in the survey districts. The survey team members had visited and mapped the survey sites to prepare a list of clusters where the wives of migrants were living based on the information provided the by Female Community Health Volunteer (FCHV), social mobilizers and outreach workers of local NGOs who were working in the selected districts. The 95 clusters were the local areas of wards of Rural/Municipalities of the selected districts and 40 clusters were selected out of 95 clusters by using probability proportional to size (PPS) method.

In the second stage, the field coordinator developed the list of at least of 30 wives of migrants in consultation with outreach workers in each cluster. Then field coordinator again selected 10 respondents (out of a list of 30 wives of migrants) by using systematic random sampling method and encouraged the outreach workers to call the selected 10 samples. There were four (1%) samples who refused to participate during the survey and next samples from previously selected samples replaced them.

#### 2.6 Data Collection Tools and Techniques

A structured questionnaire was used to collect behavioral data relating to sexual behavior, sex partners, use of condoms as well as their demographic, social characteristics and exposure to services related to HIV and STI.

The data based developer had digitized questionnaire in ODK software and administered into the tablets to collect biological and behavioral data. The tablet based collected data were then sent to the central server at each evening of the day. The data collected information was made available for the quality check to the central survey team (data analyst) to check any inconsistency and to instruct for the correction.

The field coordinators asked some screening questions to respondents whether they are right participants or not. Rapport building process was adopted with the support from the runners who assisted the survey team in the screening process.

The one team worked in Kailali and Kanchanpur, and other team was mobilized in Doti and Achham for data collection by setting survey centers in different accessible places. The field coordinators had provided a unique code to each respondent and followed the survey flow chart to collect behavioral information, blood samples, and STI checkup of respondents.

Confidentiality of the survey was maintained by applying following measures:

- Each respondent were given unique ID to participate in the survey
- All the field staffs had maintained confidentiality regarding the information of respondents.
- The interviewer had taken consent from respondents in front of runners and then taken signatures of all the respondents.
- Confidentiality was maintained throughout the survey period.
- All the recorded data were kept confidentially in the custody of field coordinator.
- Lab technicians and clinicians had also maintained confidentiality on their wards regarding test results.
- Lab technicians also provided the test result in closed envelope to the counselor.
- Counsellors took permissions from respondents before opening the test result for post-test counselling.

#### 2.7 Training of Field Team and Pretesting

Survey team members including field coordinators, field researchers (data collectors), lab technicians, clinicians and counselors were recruited to carry out the survey for Wives of Migrants of four districts of Far-western region. A five days training package was provided to field team (field coordinators, field researchers (data collectors), lab technicians, clinicians and counselors) from 22nd April to 27th April 2018. The facilitators were from NCSAC, Save the Children/Global Fund, NPHL and Jagriti Mahila Maha Sanga (JMMS) and NANGAN by following National IBBS training manual in Kathmandu. The objectives of training were to familiarize and instruct the team members with the survey objectives. They were taught how to characterize the target groups, apply rapport-building techniques, understand contents of the questionnaire, get consent form; get orally informed, do witness consent taking process, follow clinical and laboratory processes and adopt the procedures including universal precaution and waste management during survey period.

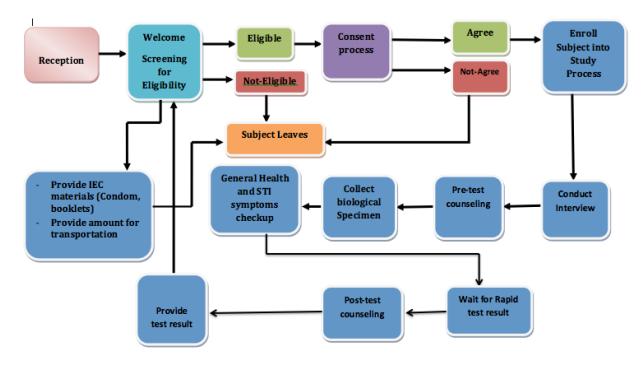
The survey questionnaire was pre-tested in tablets on the same day after the closing of training session. The drafted survey tools were pre-tested among Wives of Migrants in the NANGAN office. The findings of pre-test were uploaded into online system, which was then analyzed and reviewed by survey team and NCASC team. The necessary changes were incorporated into the survey tools.

The survey team was comprised of a central team and a field team. In central team there were team leader, research officer, data analyst, report editor, finance officer and admin assistant while in field team there were two field coordinators, two counselors, two clinicians, two lab technicians and six field researchers. Similarly, there were 22 outreach workers and 8 runners recruited from the community to support the field work.

#### 2.8 Fieldwork

The survey period was from 9<sup>th</sup> March 2018 to 8<sup>th</sup> June 2018. The fieldwork was lasted for 14-15 days to survey the 400 samples of the four districts. The survey sites were in Attariya and Fulbari of Kailali district, Bhim Datta Municipality of Kanchanpur, Silgadi, and Sajghat of Doti and Markhu and Safebagar of Achham district to cover 40 selected clusters. During the survey, the DPHO, Rural/Municipalities, local NGOs, Hotels and Schools support remained unconditional in getting coordination and cooperation for establishing survey sites to conduct survey in time. There were 8 rooms (1 Reception room for waiting, 1 Welcome room for screening and providing ID number, 3 Interviewing rooms for taking consent and interview, 1 STI room for physical examining, 1 Laboratory room for blood

sample test and Counseling room for pre and post counseling). The fieldwork process is shown in the following chart:



## 2.9 Clinical and Laboratory Procedure

This sub-section describes the clinical and laboratory procedures during the survey conducted in the field.

#### 2.9.1 Clinical procedure

A static clinic was established at the survey site to provide the clinical services to survey participants, especially for doing STI diagnosis and treatment. The participants were clinically examined for STI symptoms and basic health checkup (measuring blood pressure, body temperature, weight, and pulse) and they provided symptomatic treatment to the respondents in accordance with the National STI Case Management Guidelines by a trained clinician. The survey respondents were benefitted with medicines such as Paracetamol, Tinidazole, Metronidazole, Cetirizine, Ciprofloxacin, Doxycycline, Azithromycin, Albendazole, Diclofenac, Ranitidine, Fluconazole, Acyclovir, Liquid Betadine, Cefixime, Alkalysing agents and Vitamins based on syndromic diagnosis and complications and referred at district hospital for further examining if severe cases/symptoms were found.

#### 2.9.2 Laboratory procedures

The laboratory was set up on-site for rapid test of HIV1/2 followed by a confirmation test. About 5 ml of whole blood was drawn from each respondent using disposable syringe. The blood sample was placed in a centrifuge to separate the blood cells from the serum. Each collected sample was labelled with the Unique ID number of the respondent. The HIV rapid test was performed using serum and blood by an experienced lab technician. The OJaswi Polyclinic, a lab partner of NIDR, had facilitated and maintained all the standards of laboratory. Universal precautions and stringent waste management protocol was also followed for waste disposal. All positive and a random 10 percent of the negative samples of HIV were sent to National Public Health Laboratory (NPHL), Teku, Kathmandu for external quality assurance (EQA). The cold chain was maintained putting the thermometer in the refrigerator and cool box. The temperature was recorded 3 times a day, i.e. morning, day and evening and made recording chart to know the day wise cold chain pattern.

The detail HIV test procedures are as follows:

#### **HIV1/2**

The HIV screenings of serum samples was performed using rapid test kits following the national HIV testing algorithm and National HIV Testing and Treatment Guideline 2017. Determine HIV $^{1/2}$  (Abbot, Japan), Uni-Gold HIV $^{1/2}$  (Trinity Biotech, Ireland), and Stat-Pak HIV $^{1/2}$  (Chembio diagnostics), for HIV testing of the respondents. The serum that tested reactive with the Determine HIV $^{1/2}$  first kit (A1) was confirmed with the Uni-Gold HIV $^{1/2}$  second kit (A2) and Stat-Pak HIV $^{1/2}$  third kit (A3). The samples that were found reactive on all three (A1, A2 and A3) tests were considered HIV positive. Samples those were non-reactive on the Determine HIV $^{1/2}$  first test (A1) was considered HIV negative. Any sample that was reactive on the Determine HIV $^{1/2}$  first (A1), Uni-Gold HIV $^{1/2}$  second (A2) test and nonreactive on the Stat-Pak HIV $^{1/2}$  third test (A3) then all three test (A1, A2, and A3) were repeated with same individual sample and if retesting gave the same result then sample was considered as HIV inconclusive. In that condition, sample was suggested to repeat the test after 14 days in HIV testing center/ hospital. The internal quality of the assay was assured by the inbuilt control of each kit and external quality assured by sending all positive cases and 10% of negative cases to NPHL.

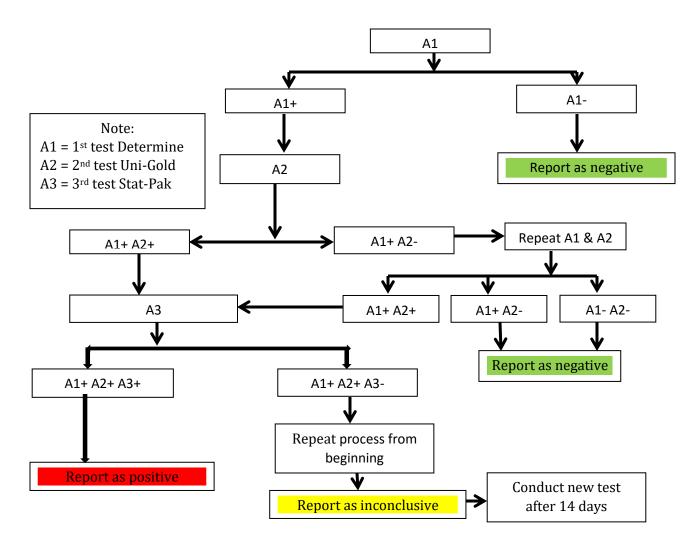


Figure 2.3: Diagrammatic Representation of Rapid HIV Testing Algorithm<sup>1</sup>

Table 2.1: HIV Testing Algorithm Sensitivity and Specificity of HIV1/2Kits

Test Kits	Company	Initial	Confirmation	Reconfirmation /Tiebreak	Antigen Type
Determine	Allere	X			HIV1 and HIV2
Uni-Gold	Trinity Biotech		X		HIV1 and HIV2
Stat-Pak	СНЕМ ВІО			X	HIV1 (gp41; p24)2 (gp36)

The different color buckets were managed for putting types of waste (Hazardous, disposal and non-disposal and blood coated cotton) and later the waste was managed in District

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<sup>&</sup>lt;sup>1</sup>Adopted from NCASC, National\_HIV\_testing\_and\_Treatment\_Guidelines\_2017

Hospital and Health Posts coordinated by field coordinators. The post-exposure mechanism was managed by giving referral name of medical superintendent/ HIV section chief and hospital.

#### 2.10 Fieldwork Supervision and Monitoring

The team leader was overall responsible for supervision and monitoring and research officer was directly involved in the survey to maintain quality as per monitoring checklists and director and SI focal person from the NSCAC had visited survey sites and provided feedbacks regarding lab issues, clarity on asking pattern of questions that were resolved at a time of their visit.

#### 2.11 Quality Control of Laboratory Tests and External Quality Assurance Scheme

Quality control of the laboratory testing was maintained at all levels. The Lab coordinator and lab technicians were responsible for quality control at field and transporting the sample at NPHL for external quality assurance. The laboratory daily records were kept properly maintaining the highest degree of data accuracy. All tests utilized for the survey had built-in internal controls to eliminate false positive and false-negative results. External quality assurance of the laboratory procedures and tests were verified by randomly choosing 10 percent of the negative samples and all the positive samples from the survey were sent to the National Public Health Laboratory (NPHL), Teku, for retesting.

External Quality Assurance (EQA) was an evaluation of the performance of a testing laboratory by an external agency. An External Quality Assessment Scheme (EQAS) is essential in these kinds of surveys to determine the quality of rapid HIV testing.

#### 2.12 Data Management and Data Analysis

The Field researchers and lab technicians had sent data at the server database (ODK) each day, and data analyst was observing for whether or not quality data were coming and providing feedback soon to respective field researchers if there was any missing data or inconsistency. Finally, the database developer had sent the excel sheet data to data analyst for data cleaning. The data analyst exported data into SPSS for further data analysis, and the comments were addressed that were provided by SI unit of NCASC regarding missing and inconsistency of data. The only descriptive analyses were presented in this report. The safety and security of data was kept in mind and put it in hard drive and D-drive of computer giving date wise proper name of file.

#### 2.13 Ethical Considerations

Only after receiving the NHRC approval letter from the NCSAC the survey was started in the field. The field researcher had informed respondents about confidentiality incentive/travel cost, risk and benefits of being participant in the survey. The pre and post counseling through qualified counselors was provided regarding the STI and HIV results to the respondents by taking their consent. All the field staffs were strictly prohibited from recording any personal identifiers in the tablet-based questionnaire. However, we used written informed consent and requested participants to write their short name or nickname with signature (signature should not be a real one which they use for the official purpose). We requested wives of migrants with no formal education to cross 'X' sign in the informed consent document instead of their signature. We did not link informed consent with the tablet-based questionnaire.

#### 2.14 Limitations of the Survey

The survey had the following limitations:

- The survey findings of four districts could not depict the representative picture of the whole country.
- Some of the responses might be affected by the recall bias due to inability to remember past events.
- The wives of migrants of rural areas of hilly districts could not respond openly. So some of the responses could be affected by social desirability bias.

## Chapter III: Results

This chapter describes the socio-demographic characteristics of wives of migrant workers selected for the survey in the four districts namely, Achham, Doti, Kanchanpur and Kailali in the Far-Western region (Provence 7) of Nepal.

#### 3.1 Socio-demographic Characteristics

In total, 400 wives of labor migrants of Achham, Doti, Kanchanpur and Kailali participated in the survey. Among them 35 percent were from Kanchanpur, 30 percent from Kailai, 20 percent Doti and 15 percent were from Achham.

**Table 3.1: Number of Respondent by Birth District** 

District	No. of Migrants' Wife Interviewed	Percent
Achham	60	15.0
Doti	80	20.0
Kailali	120	30.0
Kanchanpur	140	35.0
Total	400	100.0

The Socio-demographic characteristics of the respondents' revealed that most of the respondents' age ranged between 17-60 with the mean age being 32 years (Table 3.2). Majority of the respondents (58.8%) were found to be above 30 years old. Only three percent of the respondents were below 20 years old.

A higher proportion of the respondents (31%) were illiterate while only 19.5percent were literate however they had no any formal education. Fourteen percent had completed primary level of education, 21.3 percent were educated up to secondary level, and 14.3 percent had SLC or higher level of education.

Regarding caste/ethnic group of the respondents, majority (48.5%) of them represented Dalit, 47.5 percent represented Brahmin/Chhetri, and 3.5 percent represented disadvantaged janajati while only 0.5 percent represented disadvantaged non-Dalit Terai caste groups.

Ninety-eight percent of the respondents were found to have married while only two percent were widow.

In those districts, girls were more likely to get married in their young ages with the mean age of marriage being just 16.9 years old. Majority of the respondents were found getting married before 20 years of age including 13.5 percent of them just got married before 15 years old. Only 1 percent of them were found to have married after the age of 25.

 Table 3.2: Socio-demographic Characteristics of Respondents

Characteristics	N=400	%
Age		
16-19	12	3.0
20-24	79	19.8
25-29	74	18.5
30-34	85	21.3
35-60	150	37.5
Range	17-	-60
Mean/median age	32/	/30
Education		
Illiterate	124	31.0
Literate, no schooling	78	19.5
Grade 1-5	56	14.0
Grade 6-9	85	21.3
SLC and above	57	14.3
Ethnic/caste group		
Dalit	194	48.5
Disadvantaged Janajatis	14	3.5
Disadvantaged non-dalit Terai caste groups	2	0.5
Brahman/Chhetri	190	47.5
Marital status		
Married	392	98.0
Widow	8	2.0
Age at first marriage		
5-14	54	13.5
15-18	283	70.8
19-24	59	14.8
25 years and above	4	1.0
Range	7-:	31
Mean/median age	16.9	/17
Currently Living with		
With Children	187	46.8
Within laws	183	45.8
With Husband	26	6.5
Alone	3	0.8
With Parents	1	0.3

No. of dependents (children and adult)		
None	199	49.8
1	36	9.0
2-3	103	25.8
4 and more	62	15.5
Range		1-8

Only 6.5 percent of the respondents were found living with their husband at the time of survey while 4.8 percent were living with their children and 45.8 percent were living with their in-laws. Three respondents (0.8%) were found living alone, and only one respondent (0.3%) was living with his/her parents.

At the time of survey, majority (49.8%) of respondents were found not having any dependents with them to look after while 15.5 percent had four or more than four dependents, 25.8 percent had two or more dependents, and 9 percent had only one dependent.

#### 3.2 Migration and Mobility

Assessing the information on migration and mobility pattern of respondent's spouses as presented in table 3.3 below, the range of age at their first migration was from 10 to 38 years. Among them respondents' spouses who had first migrated for work, their mean age was 19.5 years among whom 14.5 percent migrated below at the age of 18 years. Among those migrants a very larger proportion (59.0%) was found to have migrated with unknown age.

Table 3.3: Migration Pattern among Respondent's Spouses

Information about Respondent's Spouses	N=400	%
Age at first migration		
Below 18 years	58	14.5
18 years and above	106	26.5
Age not known	236	59.0
Range		10-38
Mean/median age		19.5/19.0
Current age of husband		
Below 18 Years	1	0.3
19-24	35	8.8
25-29	67	16.8
30-35	82	20.5
35-40	90	22.5
Above 40	107	26.8
Age not known	18	4.5

Range	19-70		
Mean/median age	36.1/35		
<b>Education status</b>			
Illiterate	41	10.3	
Literate, no schooling	50	12.5	
Grade 1-5	76	19.0	
Grade 6-9	116	29.0	
SLC and above	117	29.3	
Last Monthly income (NRs)			
1000-5000	6	1.5	
5001-10000	62	15.5	
10001-15000	45	11.3	
More than 15000	272	68.0	
Monthly income not known	15	3.8	
Range	4000—160000		
Mean/median income	18781.3/16000		
Respondents' age when her spouse had gone	·		
abroad			
Up to 19	65	16.3	
20-24	35	8.8	
25-29	10	2.5	
30-35	4	1.0	
35-40	1	0.3	
Before my marriage	269	67.3	
Age not known	16	4.0	
Range	12—37		
Mean/median age	19.9/19		
Returned home last time			
< 3 months	101	25.3	
3-6 months	132	33.0	
7-12 months	128	32.0	
13-18 months	24	6.0	
> 18 months	15	3.8	
Returned home second last time			
< 3 months	6	1.5	
3-6 months	39	9.8	
7-12 months	148	37.0	
13-18 months	52	13.0	
> 18 months	49	12.3	
He came back only once	106	26.5	
Consumed alcohol when your spouse returned			
home last time	N=392	%	

Everyday	62	15.8
2-3 times a week	93	23.7
At least once a week	30	7.7
Less than once a week	57	14.5
Never	150	38.3
With whom did your husband live abroad in	130	30.3
last time	N=392	%
Alone	189	48.2
With other woman	4	1.0
With friends	76	1.0
With relatives	_	
	114	29.1
Others	3	.8
Don't Know	6	1.5
Husband married second wife	N=392	%
Yes	19	4.8
No	373	95.2
Husband died	N=8	%
3-6 months	2	25.0
13-18 months	1	12.5
> 18 months	5	62.5
Know the cause of death	N=8	%
Yes	5	62.5
No	3	37.5
If yes, what was the cause of death	N=5	%
HIV/AIDS	2	40.0
Others	3	60.0
If the cause of death was HIV/AIDS, was his	N-2	07
blood tested	N=2	%
Yes	2	100.0

Regarding their spouse's abroad stay, nearly half of them (48.2%, N=392) were found living alone, 29.1percent with relatives, 19.4 percent with friends while 1percent was living with other woman.

Regarding the current age of respondents' husband, larger proportion (26.8%) was above 40 years, nominal proportion (0.3%) was below 19 years with age being ranged from 19 to 70 years of old. Also, 19 out of 392 (4.8%) were found to have married to the second wife.

The majority (77.3%) of the respondent's spouse were found to have had obtained formal education where 29.3 percent of them had SLC or above, 12.5% had non-formal education, and 10.3% of them were illiterate.

Monthly income of respondents' spouse was found to vary largely ranging from NRs 4000 to 160000 where majority (68%)of them were found earning more than NRs 15000 per month while 1.5 percent were found just earning NRs 1000 to 5000 with an average income of NRs 18781.3.

Assessing the respondents' husband home return pattern, major proportion (33%) of them were found to have returned home last time with 3-6 months interval, 32 percent returned with 7-12 months interval, 25 percent returned before 3 months and rest of them returned with the interval of 12 months period while more than 50 percent were found to have returned home second last time within and before 12 months period time.

Regarding respondents' husband last home visit information it was revealed that 38.3 percent (N=392) of them had never consumed alcohol, while 61.7 percent consumed alcohol at least once a week, 15.8 percent were found consuming daily, 23.7 percent 2-3 times a week and remaining others were found consuming rarely, once in a week or so (Table 3.3).

#### 3.3 HIV Prevalence

HIV prevalence rate among the wives of migrant labors living in four survey conducted districts of Provence-7 was found to be 0.5 percent. Respondents in Kailali had HIV prevalence of 0.8 percent while in Kanchanpur, it was 0.7 percent as shown in Table 3.4.

Table 3.4: HIV Prevalence by sample sites

Sample sites	Total sample	HIV Positive (n, %)
Achham	60	0.0
Doti	80	0.0
Kailali	120	1 (0.8)
Kanchanpur	140	1 (0.7
Total	400	2 (0.5)

#### 3.4 Relationship between Selected Characteristics and HIV Infection

In this section, relationship between HIV infection and some of the selected characteristics have been presented. HIV infection was dominant among currently married 25 years and above age groups (Table 3.5).

Table 3.5: Relationship between selected characteristics and HIV Infection

Characteristics	<b>Total sample</b>	HIV Positive (n, %)
Age		
Below 25 years	91	0.0
25 years and above	309	2 (0.6)
Marital status		
Married	392	2 (0.5)
Widow	8	0.0

Table 3.6 shows that frequency of use of condom during sexual intercourse among respondents and their spouse. Only one percent of the respondents were found using condom rarely during sexual intercourse and 1.3 percent of the respondents who never used condom during sexual contact were found to have HIV positive.

Table 3.6: Relationship between condom use and HIV Infection

Condom use during sexual contact with husband	N=400	HIV Positive n (%)
Use of condom during spous	e's last home visit	
All of the time	70	0 (0.0)
Most of the time	59	0 (0.0)
Sometimes	107	0(0.0)
Rarely	41	1(1.0)
Never	79	1 (1.3)

#### 3.5 Behavior (Sexual Behavior)

Majority of the respondents (98%) could not recall their age when they had experience of first sex. Among those who could recall, only 2 percent had first sexual intercourse somewhere between the ages of 13-20 years where 16 years was the mean age of having sexual intercourse.

**Table 3.7: Sexual Behavior** 

Sexual Behavior	N=400	%	
Age at first sex			
10-16	5	1.2	
17-20	3	8.0	
Don't know/ can't recall	392	98.0	
Range	13	3-20	
Mean/median age	16,	/15.5	
Ever had sex with a man other than husband			
Yes	2	0.5	

No	398	99.5
When did you have sex with a man other than your husband	N=2	%
When husband was abroad	1	50.0
Before getting married	1	50.0
How frequent do you have sex with other men?	N=2	%
Sometimes	1	50.0
Rarely	1	50.0
Ever had sex with paying partner	N=2	%
Yes	1	50.0
No	1	50.0
Have sex with someone other than husband who pays in cash or kind	N=2	%
Yes	1	50.0
No response	1	50.0

Two respondents (0.5%) were found to have ever had sex with a man other than husband while majority (99.5%) of respondents never had such behavior. Between two respondents who had sex with someone else, one had sex with other man when her husband was abroad while other one had sex before marriage with other man and one of them was sold to have sex.

### 3.6 Knowledge and Accessibility of Condom

The majority of the respondents (82%) were found to have heard about condom mainly through three different sources like radio/FM (84.8%), TV (54.5%) and FCHV (45.8%). Among them, 84.8 percent (N=330) were found to have ever used condom, but only 39.3% (N=280) were found to be keeping condom at home.

Regarding knowledge from where they can get condom, 92.5 percent of respondents (N=280) were found to have had an idea that it can be found in health posts/health centers, 45.6 percent of respondents said it was found in pharmacy, 35.2 percent of respondents told it was found in private clinics and some of them were aware of some other different sources as listed in Table 3.8.

Table 3.8: Knowledge and Accessibility of Condom

Knowledge of Condom and its Accessibility	N=400	%
	<b>Ever heard</b>	of condom (N=400)
Yes	330	82.5

No	70	17.
Sources of information on condom (N=330)*		
Radio/FM	280	84.
TV	180	54.
Health workers	115	34.
NGOs	56	17.
FCHV	151	45.
Peer/friends	14	4.
Husband	94	28.
Peer/Outreach educators	28	8.
Volunteer/Community worker	6	1.
Ever used condom (N=330)		
Yes	280	84.
No	50	15.
Keep condom at home (N=280)	<u>I</u>	
Yes	110	39.
No	170	60.
Known sources of condom (N=280)*	1	
Health post/Health center	260	92.
Pharmacy	128	45.
General retail store	6	2.
Private Clinic	99	35.
Paan shop	5	1.
Hospital	45	16.
FPAN clinic	8	2.
Peer/Friends	148	52.
FCHV	34	12.
NGOs	25	8.
Peer/Outreach educators	50	17.
Health workers	8	2.
Time needed to obtain condoms from nearest place	ce (N=280)	
Up to 5 minutes	5	1.
6-10 minutes	25	8.
11-15 minutes	51	18.
16-20 minutes	36	12.
21 and more minutes	95	33.
Required time not known	68	24.
Range		260 minutes
Usual mode of obtaining condom (N=280)	<u> </u>	
I always get it free of cost	15	5.
	1	
I buy	10	3.

My husband/sex partner brings it	211	75.4
Husband/sex partner often obtain condo	ms (N=211)	
Always buys	36	17.1
Both (buy & get free)	65	30.8
Don't know	110	52.1
From where does your husband/sex part	ner obtain free	
condom (N=188)*		
Health Post/Health Center	70	59.3
Hospital	11	9.3
FPAN Clinic	5	4.2
Peer/Friends	3	2.5
FCHV	61	51.7
Outreach peer educators	3	2.5
NGOs	9	7.6
Health Workers	23	19.5
Volunteer/ Community worker	3	2.5
Most convenient place to obtain condom	for husband/sex	
partner (N=124)*		
Health Post/Health Center	97	78.2
Hospital	8	6.5
FPAN Clinic	20	16.1
Peer/Friends	2	1.6
FCHV	70	56.5
Outreach peer educators	11	8.9
NGOs	3	2.4
Health Workers	18	14.5
From where does your husband/sex part	ner buy condom	
(N=46)*		
Pharmacy	45	97.8
General retail store	2	4.3
Private clinic	27	58.7
Most convenient place to buy condom for	your husband/sex	
partner (N=46)*		
Pharmacy	45	97.8
General retail store	2	4.3
Private clinic	27	58.7
Received condom from anywhere (e.g. pe	er educators, STI treatmer	nt centers) in the
past one year (N=280)		
Yes free	89	31.8
Yes on cash	38	13.6
No	153	54.6

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

Among the respondents who ever had used condoms, 5.4 percent told that they obtained condoms free all the time while 3.6 percent said they always purchased. On the other hand, 75.4 percent of the respondents mentioned that it was their husband/sexual partner who used to bring condoms. On a query how their husband/sexual partner obtained these condoms, 30.8 percent mentioned that they themselves used to buy and give them for free. Regarding the source of free condoms, 59.3 percent of respondents' partners were found to obtain them from health posts/health centers, 51.7 percent of were from FCHV followed by health workers (19.5%) and others as in table 3.7.

Regarding the feelings of respondents upon getting condom for free, majority of the respondents (78.2%) expressed that they feel comfortable to get free condoms from health post/health center followed by FCHV (56.5%), FPAN clinic (16.1%) and health workers (14.5%) respectively. In case of respondents who purchased condoms all of the time or some of the time, most of them showed their preference to buy them from pharmacy (97.8%) followed by private clinic (58.7%).

Similarly, only 1.8 percent of the respondents who had ever used condoms told that condoms were available at accessible point i.e about or, within 5 minutes distance. However, 33.9 percent of respondents said that condoms were not so easy to access as it takes them more than 20 minutes to obtain condoms from the nearest place.

## 3.7 Sexual Relation and Condom Use with Spouse during his Last Home Visit

Most of the respondents (89%) said that they had sexual contact with their husband during their last home visit. Respondents' spouse were found to be staying for a period of 1-25 months during their last home visit and median number of sexual contacts between them during that time period was 15.

Among the respondents who had sexual contact, 57.6 percent were found to be using condom during last sex. 51.1 percent of them said that they use condom with the mutual understanding as a combined suggestion, while in 27.3 percent of the situations their husbands were found to be dominant to make decision to use condoms. On the other hand, among the wives of migants who had not used condom during their last sexual contact with their husband, 45.8 percent of them told it was not considered to be necessary to use condoms for them.

Table 3.9: Sexual Relation and Condom Use with Spouse during his Last Home visit

Had sex with spouse (N=400)	N=400	%	
Yes	356	89.0	
No	44	11.0	
Duration of spouse's stay at home (N=400)			
Up to 1 month	90	25.9	

2-6 months	198	56.9
7-12 months	48	13.8
> 12 months	12	3.4
Range		(1-25)
Median		3
Frequency of sex (N=356)		
1-30 times	50	14.0
31-60 times	18	5.1
> 60 times	5	1.4
Don't Know	283	79.5
Range		(2-80)
Median		15
Use of condom during last sex (N=356)	<u> </u>	
Yes	205	57.6
No	151	42.4
Person to suggest the use of condom during last sex		
(N=205)		
Myself	40	19.5
My husband	56	27.3
Both of us	106	51.7
Don't know	3	1.5
Reason for not to use condom (N=151)		
Not available	12	7.9
Husband objected	15	9.9
I didn't like to use it	6	4.0
Didn't think it necessary	56	37.1
Didn't think of it	37	24.5
Didn't know/wasn't aware of condoms	25	16.6
Frequency of sex with spouses (N=356)		%
All of the time	70	19.7
Most of the time	59	16.6
Sometimes	107	30.1
Rarely	41	11.5
Never	79	22.2
Reason for not to use condom consistently (N=286)	·	
We wanted child	50	17.5
We were using other FP methods	61	21.3
Not available	19	6.6
Too expensive	1	.3
	_	
Husband objected	68	23.8
Husband objected Didn't like to use it		23.8 9.1

Didn't know/ wasn't aware of condoms	86	30.1
Didn't know/wasn't aware of condoms	34	11.9
Reason for not to have sex with husband (N=44)		
I was sick	19	43.2
Husband was sick	16	36.4
Husband was at home for a short time	3	6.8
I was not at home when husband came back home	4	9.1
Others	1	2.3
Don't response	3	6.8

Those respondents who did not have sex with their husbands during their last home visit reported that 43.2 percent of them were sick themselves, 36.4percent respondents' said their spouses were sick while 9.1 percent respondents said that they were away from home at that time period.

#### 3.8: Level of Knowledge on HIV/AIDS

While assessing the level of knowledge of respondents on HIV/AIDS, majority of the respondents (89.5%) were found to have heard about HIV/AIDS while 10.5 percent said that they had never heard about it. Those who had heard about HIV/AIDS mentioned Radio/FM (55%), FCHV (50.3%) followed by peer/friends (43.9%), NGOs (30.4%) respectively as their sources of information (Table 3.10).

**Table 3.10: Sources of Knowledge of HIV/AIDS among Respondents** 

Ever heard about AIDS (N=400)	N=400	%
Yes	358	89.5
No	42	10.5
Sources of information of HIV/AIDS (N=358)*		
Radio/FM	197	55.0
TV	90	25.1
Health workers	97	27.1
NGOs	109	30.4
FCHV	180	50.3
Peer/friends	157	43.9
Husband	22	6.1
Peer/Outreach educators	35	9.8
Relatives/neighbor	18	5.0
Others	21	5.9

Note: Percentage may exceed 100 due to multiple responses.

Among the respondents who had heard about HIV/AIDS, 83 percent said that they had heard HIV is transmitted through blood, 40.8 percent told they were informed that sexual

contact with multiple partners should be avoided while 39.1 percent were found to have heard that condoms should be used during sexual contact and unsafe sex should be avoided. Respondents were also found to be informed about not to share syringe/needle/knives with others and avoid sexual contact with commercial sex workers (Table 3.10).

**Table 3.11: HIV/AIDS Related Messages Heard by Respondents** 

Message heard	N=358	%
HIV is transmitted through blood	297	83.0
Sexual contact with multiple partners should be avoided	146	40.8
Condoms should be used, unsafe sexual contacts should be avoided	140	39.1
Syringe/ needles used by others should not be used	263	73.5
Sharing of knives/tools may transmit HIV	236	65.9
Sexual contact with commercial sex workers should be avoided	87	24.3

*Note: Percentage may exceed 100 due to multiple responses.* 

### 3.9: Knowledge about Preventing HIV/AIDS

The knowledge about preventive measures of HIV/AIDS stated by the respondents was as follows: A- abstinence from sexual contact (58.4%); B- Being faithful with sexual partner (55%); C-consistent use of condoms (72.9%). Respondents were also aware about HIV transmission knowledge, i.e. D- a healthy looking person may have HIV (73.8%); E- a person cannot get HIV infection from mosquito bite (45.8%); F- HIV is not transmitted while sharing a meal with an HIV infected person (88.8%).

Table 3.12: Respondents knowledge about Preventing HIV/AIDS

Knowledge of Six Major Indicators on HIV/AIDS	N=358	%
A=Abstinence from sexual contact	209	58.4
B=Being Faithful with Sexual Partner	197	55.0
C=Consistent condom use during each sex	261	72.9
D= A healthy-looking person can be infected with HIV	282	78.8
E=A person cannot get HIV from mosquito bite	164	45.8
F= HIV is not transmitted while sharing a meal with an HIV infected person	318	88.8
Knowledge of all three indicators-ABC	155	43.3

Knowledge of all five indicators-BCDEF	57	15.9
	5/	15.9

Although 43.3 percent of the respondents were found to be aware of all three preventive indicators ABC, only 15.9 percent of them had comprehensive knowledge on HIV (BCDEF).

#### 3.10: Knowledge on ways of HIV/AIDS Transmission among Respondents

While assessing respondents' awareness level on different modes of HIV/AIDS transmission, 99.4 percent of them were found being aware of blood transfusion from HIV infected person transmits HIV to others, 97.8 percent were aware that using previously used needle/syringe could also transmit HIV while 95 percent were well aware that holding an HIV infected person's hand does not transmit HIV.

Table 3.13: Knowledge on ways of HIV/AIDS Transmission among Respondents

Know anyone infected with HIV or has died of AIDS (N=358)	N	%
Yes	225	62.8
No	133	37.2
Relation shared with the person who is infected with HIV or		
died of AIDS (N=358)		
Close relative	104	46.2
Close friend	41	18.2
No relation	80	35.6
Awareness on HIV/AIDS (N=358)		
A woman with HIV/AIDs can transmit the virus to her new-born child through breastfeeding (N=358)	285	79.6
Holding an HIV infected person's hand does not transmit HIV (N=358)	340	95.0
Using previously used needle/syringe may transmit HIV (N=358)	350	97.8
Blood transfusion from HIV infected person transmit HIV to others (N=358)	356	99.4
HIV may be transmitted from a pregnant woman infected with HIV/AIDS to her unborn child (N=358)	282	78.8
A pregnant infected woman can reduce the risk of transmissions of HIV to her unborn child by (N=358)		
Take medication	217	77.0
Others	3	1.1
Don't know	62	22.0

Similarly, 79.6 percent of the respondents were aware of the risk of HIV transmission from an infected mother to her newborn child through breastfeeding and 78.8 percent were aware of the risk of pregnant woman with HIV/AIDS transmitting to the fetus in her womb and 22.0 percent were also found not knowing how to reduce the risk and 1.1 percent

came with other suggestions as the ways to reduce the risk of HIV like consulting doctors, doing abortion and not having sex with other one (Table 3.13).

### 3.11: Attitude toward HIV/AIDS

The stigma associated with HIV/AIDS increases the impact of HIV on the patients as well as MARPs. The respondents' perception towards HIV positive persons and the stigma associated with the disease was also examined with the help of a series of questions as shown in Table 3.11. Over 90 percent of the respondents expressed their readiness to take care of an HIV positive male or female or any relative if they have in their home as and when needed. However, 24 percent of the respondents told that they would prefer to keep it confidential if any of their family members was affected with HIV.

Table 3.14: Attitude towards HIV/AIDS

Perception on HIV/AIDS	N=400	%
Willing to take care of an HIV positive male rela	tive at	
home		
Yes	362	90.5
No	32	8.0
Don't know	6	1.5
Willing to take care of an HIV positive female re	lative	
at home		
Yes	363	90.8
No	30	7.5
Don't know	7	1.8
Would prefer to secret the HIV-positive status of	fa	
family member		
Yes	96	24.0
No	296	74.0
Don't know	8	2.0

### 3.12: Knowledge about STIs

While assessing the respondents' experience of STI symptoms in the past year, it was found that 81.9 percent of the respondents experienced white discharge/discharge of pus, 32.5 percent experienced burning sensation while urinating, 3.5 percent experienced pain during urination and some other experienced ulcer or sore around genital area (Table 3.14).

Table 3.15: Reported STI and Treatment (past year)

Types of STI symptoms experienced in the past year (N=400)*	N=400	%
White Discharge/Discharge of pus	68	81.9

Pain during urination	14	16.9
Burning sensation while urinating	27	32.5
Ulcer or sore around genital area	10	12.0
Others	8	2.0
Experienced any of the above symptoms	83	20.8
Experienced none of the above symptoms	317	79.3
Received treatment for above symptoms (N=54)		
White Discharge/Discharge of pus	32	69.6
Pain during urination	3	6.5
Burning sensation while urinating	13	28.3
Ulcer or sore around genital area	5	10.9
Others	1	2.2
Places of treatment of STI symptoms in the past year (N=46)		
Private clinic	20	43.5
Pharmacy	9	19.6
Self-treatment	12	26.1
NGOs	4	8.7
Others	1	2.2

<sup>\*</sup> Note: Percentage may exceed 100 due to multiple responses.

Among the respondents who had experienced STIs in the past year, 43.5 percent were found to have received treatment from private clinic, 26.1 percent involved into self-treatment while 19.6 percent had been to pharmacy to seek treatment (Table 3.15).

While assessing if respondents were currently experiencing STIs symptoms, 11.3 percent respondents were found experiencing some kind of symptoms of STI like white discharge/discharge of pus (16.5%), burning sensation (7.0%) followed by pain during urination (3.0%) at the time of survey (Table 3.16).

Table 3.16: Reported STI and Treatment (at the Time of Survey)

Understanding of STI (N=400)*	N=400	%
White Discharge/Discharge of pus/Dhatu flow	166	41.5
Pain during urination	73	18.3
Burning sensation white urinating	78	19.5
Ulcer or sores around genital area	124	31.0
Syphilis (Bhiringi)	22	5.5
HIV/AIDS	82	20.5
STI symptom not known	193	48.3
Others	16	4.0
Types of STI symptoms		
White Discharge/Discharge of pus	66	16.5
Pain during urination	12	3.0

Burning sensation while urinating	28	7.0
Ulcer or sore around genital area	8	2.0
Others	7	1.8
Experienced any of the above symptoms	45	11.3
Experienced none of the above symptoms	330	88.8
Received treatment for above symptoms		
(N=81)		
Yes	45	55.6
No	36	44.4
Treatment received (N=45)		
After< 1 week	16	35.6
After 2-4 weeks	15	33.3
After > 4 weeks	14	31.1
Places of treatment of STI symptoms (N=45)*		
Private clinic	19	42.2
Pharmacy	8	17.8
Self-treatment	15	33.3
NGOs	2	4.4
Others	3	6.7
Prescription for medicine (N=45)		
Yes	43	95.6
No	2	4.4
Obtained all the prescribed medicine (N=43)	•	
Yes I obtained all of it	43	100.0
Had taken all prescribed medicine (N=43)		
Yes	43	100.0

<sup>\*</sup> Note: Percentage may exceed 100 due to multiple responses.

Among those who had recently experienced symptoms of STIs, 55.6 percent were found to have received treatment. Out of those, 35.6 percent sought for treatment within a week, while others waited more than a week (Table 3.15). The most common places of their treatment were private clinic (42.2%), self-treatment (33.3%) followed by pharmacy (17.8%). Among those who sought for treatment, 95.6 percent were found to have received prescriptions and taken all prescribed medicine regularly.

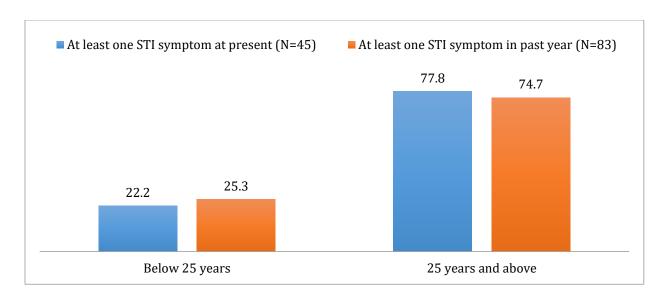


Figure 3.1: Relation between Reported STI symptoms and Age Group

Figure 3.1 compares STI symptoms experienced by the respondents with their age group. As shown in the figure, larger proportion of respondents of 25 years of age and above were found to have experienced at least one STI symptom in the past year as compared to younger respondents.

During the assessment of STI status among respondents' spouses and treatment sought, 3 percent mentioned that their spouses had STI symptoms during their last home visit, while 2.5 percent of them were found to have such symptoms when they visited second last time. However, among those respondents' spouses all of them were not found seeking treatment for such symptoms (Table 3.17).

Table 3.17: STI Status among Respondents' Spouses and Treatment Sought

Spouses had STI symptoms and treatment Among Respondents'		
spouses	N=400	%
Spouses had STI symptom during last home visit (N=400)		
Yes	12	3.0
No	370	92.5
STI status not known	18	4.5
Received treatment (N=12)		
Yes	7	58.3
No	5	41.7
Places of treatment of STI symptoms (N=7)*		
Private clinic	4	57.1
FPAN Clinic	1	14.3
Health Post/Health Center	2	28.6
Hospital	2	28.6

STI symptoms seen among Spouses during second last home visit (N=400)		
Yes	10	2.5
No	379	94.8
STI status not known	11	2.8
Received treatment (N=10)		
Yes	5	50.0
No	5	50.0

Note: Percentage may exceed 100 due to multiple responses.

## 3.13: Perception on HIV Testing

Almost 6 out of ten respondents (62.8%) were found being aware regarding the availability of confidential HIV testing facility in their community. Among them 74 percent had known where they could go for HIV test. However, only 34.6 percent had ever taken an HIV test. Most (83.1%) of them had taken the test voluntarily, but 13.7 percent were asked to have the test. Those who had tested for HIV, 96.8 percent had received their test results. However, only about half of the respondents (46%) had taken test in the past one year.

Table 3.18: Knowledge about HIV Testing Facilities among Respondents and History of HIV Test

Knowledge of HIV Test	N=358	%
Confidential HIV test facility available in the		
community		
Yes	225	62.8
No	107	29.9
Don't know	26	7.3
Know where to go for HIV test		
Yes	265	74.0
No	93	26.0
Ever had HIV test	·	
Yes	124	34.6
No	234	65.4
Obtained the test result (N=124)	<u>.</u>	
Yes	120	96.8
No	4	3.2
Voluntarily underwent the test of because it	was	
required (N=124)		
Voluntarily	103	83.1
Required	17	13.7
Others	4	3.2
HIV test in the past one year (N=124)		

Yes	57	46.0
No	67	54.0
Obtained the test result (N=57)		
Yes	55	96.5
No	2	3.5

The three-fifths (60%) of respondents in Achham district were found to have ever had HIV test while almost 30 percent of respondent ever had HIV test in Kanchanpur, Doti and Kailali (Figure 3.2).

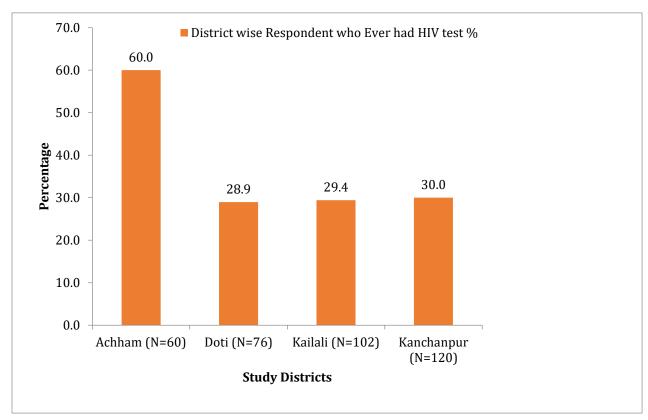


Figure 3.2: District wise Respondent who ever had HIV test

### 3.14: Smoking, Use of Alcohol and Drugs

Above one-tenth (12.5%) respondents were found taking cigarettes while less than one percent were found consuming alcohol or using any type of drugs at least once in the past month and none of them reported to have injected any type of drugs (Table 3.19).

Table 3.19: Use of Alcohol and Cigarette Smoking Among Respondents and their Spouses

Smoke cigarette	N=400	%
Yes	50	12.5
No	350	87.5

Consumed alcohol in the last month			
2-3 times a week	3	8.0	
At least once a week	1	0.3	
Less than once a week	8	2.0	
Never	386	96.5	
Don't know	1	0.3	
No response	1	0.3	
Drugs used in the last month			
Yes	2	0.5	
No	387	96.8	
Don't know	11	2.8	
Ever Injected drugs			
No	387	96.8	
Don't know	13	3.3	

### 3.15: Exposure to HIV/AIDS Awareness Programs

Wives of migrant labors were one of the risk groups for HIV transmission. So, various awareness programs such as group discussion, training session, street drama, different radio programs and condom use demonstration have been conducted by governmental and non-governmental agencies focusing these groups through targeted intervention.

During the assessment of respondents' exposure to such awareness programs it was found that 29.5 percent of respondents were exposed in at least one HIV/AIDS awareness program in last 12 months' time period. Among those, 2.3 percent were found to have visited Drop-in Center, 8.8 percent visited STI clinic while 6 percent visited HTC clinic in the last 12 months.

Table 3.20: Exposure to HIV/AIDS Awareness Programs

Exposure to HIV/AIDS Awareness Programs	N=400	%	
Met/Interaction with Peer Educators (PE) /Outreach Educators (OE) in the last 12 months			
Yes	118	29.5	
No	282	70.5	
Met/Interaction with Drop-in Center (DIC) in the last 12 months			
Yes	9	2.3	
No	391	97.8	
Visited any STI clinic in the last 12 months			
Yes	35	8.8	
No	365	91.3	

Visited any HTC clinic in the last 12 months		
Yes	24	6.0
No	376	94.0

Only 7.3 percent of the respondents were found to have participated in at least one HIV/AIDS awareness raising program or similar community event in the last 12 months' time period. Among those, 55.2 percent participated in group discussion while others participated in HIV/AIDS-related training (37.9%), street drama (13.8%), condom use demonstration (10.3%), AIDS day celebration and Condom day celebration (6.9% each).

However, 18.5 percent of respondents were found to have visited by Community and Home Based Care Health Workers (CHBC) for raising awareness on HIV/AIDS in the last 12 months' time period (Table 3.21).

Table 3.21: Participation in HIV/AIDS Awareness Programs

Participation in HIV/AIDS Awareness raising Program or		
community events in the last 12 months (N=400)	N=400	%
Yes	29	7.3
No	371	92.8
Participated activities (N=29)*		
Street drama	4	13.8
AIDS Day	2	6.9
Condom Day	2	6.9
Group discussions	16	55.2
HIV/AIDS-related training	11	37.9
Condom use demonstrations	3	10.3
Others	2	6.9
Was visited by CHBC staff in the past 12 months	•	
Yes	74	18.5
No	326	81.5

Note: Percentage may exceed 100 due to multiple responses.

## **Chapter IV: Trend Analysis**

This chapter describes the data trend of different important indicators based on first round to third round survey. It would help to compare the result and evaluate in which direction indicators are heading.

#### 4.1: HIV Prevalence

Figure 4.1 shows declining HIV prevalence over time among wives of migrants. HIV prevalence was 3.3 percent in first round (2008) which decreased to 0.8 percent in the second round (2010), and it again decreased to 0.5 percent in the third round (2018).

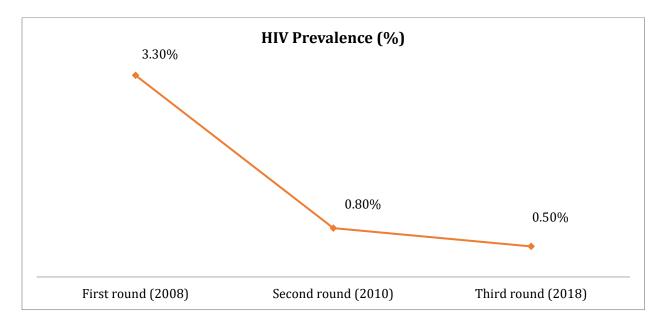


Figure 4.1: Trends in HIV Prevalence over time.

#### 4.2: Knowledge and Behavior on Condom

Figure 4.2 compares the knowledge of respondents on condom and their behavior on its use. The percentage of respondents who ever heard of condom was almost stable over the time whereas the use of condom was massively increased (57.6%) in the third round of survey.

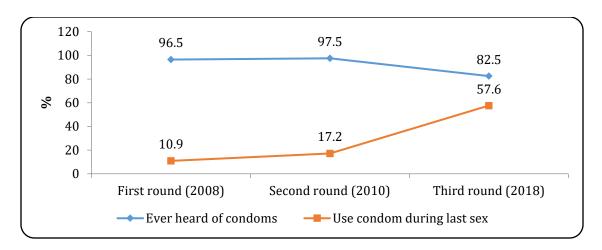


Figure 4.2: Respondents' knowledge and behaviour about condoms.

### 4.3: Respondents Knowledge on HIV/AIDS

Regarding the trends on knowledge on all three preventive indicators of ABC and knowledge on all five transmissions (BCDEF), the knowledge of ABC was in decreasing trend (78% to 43.3%) while knowledge of BCDEF was slightly fall and rise in trend over the time that was 18 percent in 2008 and 15.9 percent in 2018 (Figure 4.3).

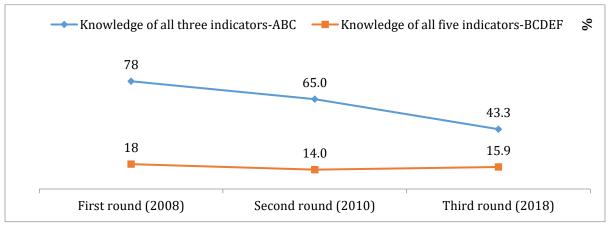


Figure 4.3: Respondents' knowledge of HIV/AIDS

### 4.4: Respondents' Exposure to HIV/AIDS Awareness Programs

Figure 4.4 shows the trends of exposure to HIV/AIDS awareness programs. The percentage of respondents who met/discussed/interacted with PE/OE/CM/CE was found to have been slightly increased in third round of survey however it was stagnant (27%) in earlier two rounds of survey. The percentage of respondent who visited STI clinic in past 12 months and during the second round of survey, there were not any such significant changes whereas the percentage of the respondent who visited HTC in the past 12 months slightly decreased over the time.

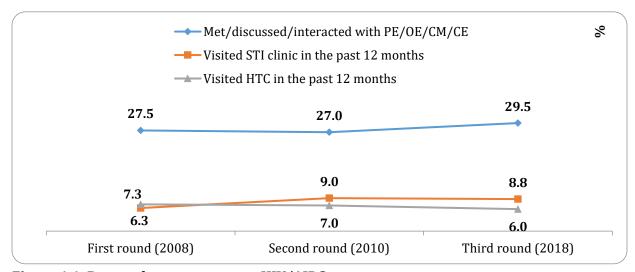


Figure 4.4: Respondents exposure to HIV/AIDS awareness programs

## **Chapter V: Conclusions and Recommendation**

#### 5.1. Conclusion

Out of 400 participants, the proportion of sample taken from different districts was diverse where Kanchanpur (35%) had large proportion followed by Kailali (30%), Doti (20%), and Achham (15%) district respectively. Majority of the respondents (58.8%) were above 30 years old, and a higher proportion (31%) of them was illiterate. Ninety-eight percent of the respondents were married, and nearly half of them (48.5%) were from Dalit community. Mean age of marriage was found to be 16.9 years old in those districts. However, only 6.5 percent of respondents were found living with their husband at the time of the survey.

Nearly 50 percent of the respondents' husbands were found to have been migrating for work below the age of 25 years. The majority (68%) of them were found to be earning more than NRs 15000 with home return pattern once in a year, and they were also found to be consuming alcohol (61.7%) during their stay.

The mean age for first sexual contact of the respondents was 16 years. Almost all respondents (99.5%) shared that they had never had sex with other than the husband. More than two third of respondents were found to have heard about condom, and they knew where to buy or get condoms. Almost 57% of the respondents were found to be using condoms only at their last sex.

The knowledge of ABC was found on decreasing trend (78% to 43.3%) while knowledge of BCDEF was found to be in a dual trend of fall and rise over the time that was 18 percent in 2008 and 15.9 percent in 2018. The uptake of HTC was slightly increased as compared to 2008; however, it was below 30 percent.

The survey showed HIV prevalence rate among the wives of migrant labors was 0.5 percent, and it was more dominant among the people aged 25 years and above who were currently married and residing in Kailali and Kanchanpur districts. The similar concentration was observed between STI symptoms and age group.

#### 5.2. Recommendations

Based on findings of fourth round of IBBS survey, following recommendations are made:

- HIV prevalence was found to have declined i.e., less than one percent. However, to
  maintain low level of HIV prevalence it is necessary to prioritize incessant delivery
  of HIV prevention interventions mainly targeting to the wives of migrants.
- Comprehensive knowledge of HIV was found decreasing over the time and condom use was less in practice among wives of migrants. Therefore, rural community-based awareness programs should be prioritized to aware wives of migrants about the importance of condom use, encouraging and negotiating their partners to use condoms and adopting preventive measures of HIV infection.
- The survey showed that only a small proportion of wives of labor migrants were exposed to behavioural interventions (peer education, drop-in center -DIC and HTC). So, some intervention programs focusing on wives of migrants need to be designed and implemented to improve their uptake of behavioural interventions.
- Larger proportions of wives of migrants were illiterate. So, different activities to improve social capital of wives of migrants need to be prioritized in future.

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- 2. NCASC (2008) Integrated Biological and Behavioral Surveillance (IBBS) Survey among Wives of Migrants in four districts of Far-Western Region, Round 1, Nepal.
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- 4. NCASC (2017), National HIV Testing and Treatment Guidelines; Ministry of Health and Population National Centre for AIDS and STD Control, Kathmandu, Nepal.
- 5. NCASC (2017), National Estimates of HIV Infection in Nepal, National Centre for AIDS and STD Control, Ministry of Health and Population, Government of Nepal, Kathmandu, Nepal.
- 6. New ERA, Intrepid and FHI (2010), Integrated Biological and Behavioral Surveillance (IBBS) Survey among Wives of Migrants in four districts of Far-Western Region, Round 2, Nepal.
- 7. USAIDS (2016) Fact sheet Latest statistics on the status of the AIDS epidemic.

## **Annexes**

# **Annex 1: Key Indicators**

S.N.	Key Indicators (N=400)	Hill	Terai	<25 yrs	25+ yrs
1	Percentage of respondents who are HIV-infected (N=400)	0.0	8.0	0.0	0.6
2	Percentage of respondents who had Ever used condom (N=330)	82.5	85.8	82.1	85.7
3	Use condom during last sex (N=356)	45.5	63.8	59.8	56.9
4	HIV test in the past one year (N=124)	53.4	39.4	61.9	42.7
5	Obtained the test result (N=57)	93.5	100.0	92.3	97.7
6	Percentage of respondents with Knowledge of all three indicators-ABC	29.4	51.9	45.3	42.6
7	Percentage of respondents with Knowledge of all five indicators-BCDEF (N=400)	8.1	20.7	14.0	16.5
8	Met/Interaction with Peer Educators (PE) /Outreach Educators (OE) in the last 12 months (N=400)	19.3	35.0	29.7	29.4
9	Met/Interaction with Drop in Center (DIC) in the last 12 months (N=400)	2.9	1.9	1.1	2.6
10	Visited any STI clinic in the last 12 months (N=400)	12.1	6.9	9.9	8.4
11	Visited any HTC clinic in the last 12 months (N=400)	9.3	4.2	4.4	6.5

# **Annex 2: List of selected clusters**

Range = 108
Total cluster= 95
Selected clusters=40
Selection of samples from each cluster =10
Kailali = 12 clusters = 120 samples
Kanchanpur =14 clusters=140 samples
Doti= 8 clusters= 80 samples
Achham= 6 clusters= 60 samples
Total samples = 400

Note: Details of cluster name not provided in report to ensure anonymity of areas where wives of migrants operate.

# **Annex 3: Survey Questionnaire**

Where do you live now?

104

Integrated Biological and Behavioral Surveillance (IBBS) Survey

Among Wives of Migrants in Far-Western Region of Nepal

•	mong	Wives of Migrants in Far Western Region of	repar	
D	)efinitio	on of Respondent		
I	ndia foi	n aged 16 years and above who are current wi r work for at least three months in the last thr thin the last three years".		
1	Name o	f interviewer:Code No. of Intervi	ewer:	
I	Date of	Interview:/		
I	Has son	neone from NIDR has interviewed you with a c	questionnaire in last few weeks?	
		1. Yes 2. No (Continue Interview)		
		When? Days ago (STOP INTERVIEW)		
1	100.	GENERAL INFORMATION		
	S.N.	Questions and Filters	Coding Categories	Skip To
	101	Respondent ID No.		
	102	Interview Starting Time	Hour Minute	
	103	Where were you born?	District	

Districts: \_

(Name of Current Place of Residence)	

## 200. PERSONAL INFORMATION

S.N.	Questions and Filters	Coding Categories	Skip To
201	How old are you?	Age 🗆	
		(Write the completed years)	
202	What is your caste?	Ethnicity/Caste	
		(Specify)	
	(Write code no. as per Ethnicity/Caste Manual)	Code No	
203	What is your educational status?	Illiterate 00	
		Literate 19	
	(Circle '00' if illiterate, '19' for the literate without attending the school, and write	Grade 🗆 🗆	
	exact number of the completed grade)	(Write the completed grade)	
204	What is your present marital status?	Married 1	
		Divorced/permanently	
		separated 2	
		Widow 3	
205	How old were you when you were married?	Age	
		(write the completed years)	
206	Currently whom are you staying with?	With Husband 1	

With in laws 2	
Alone 3	
With parents 4	
With children 5	
With male friends 6	
Others96	
(Specify)	

S.N.	Questions and Filters	Coding Categories	Skip To
207	How many dependents (whom you have to support) are in your family?  (Count those above 18 as adults)	Number of children  Number of adults	
		Total No	

#### 300. ABOUT YOUR HUSBAND

#### NOTE:

Before asking questions about her husband make sure that he had migrated to India for at least three months for work and had returned home at least once within last three years.

If the respondent is a widow/divorce, she should answer the questions relating to her husband's last home visit before death or before separation.

[THIS BEING A SENTIMENTAL ISSUE, SHOULD BE HANDLED WITH UTMOST CARE AND HONOR TO THE CONCERNS OF THE RESPONDENT]

S.N.	Questions and Filters	Coding Categories	Skip To
301	How old was your husband when he had gone abroad for work for the first time?	Age (Write the completed years) Don't know 98	
301. a	How old is your husband now?	Age (Write the completed years)  Don't know 98	
301. b	What is your husband's educational status?  (Circle '00' if illiterate, '19' for the literate without attending the school, and write exact number of the completed grade)	Illiterate 00 Literate 19  Grade Grade (Write the completed grade)	
302	How much did your husband earn per month from his last job when abroad?	Rupees (If it is IC convert it into NC)  Don't know 98	

303	How old were you when your husband had gone abroad for work for the first time?	Age  (write the completed years)  Before my marriage 96  Don't know 98	
304	When did he come back home for the last time?  (If less than a month, write '00')  Check: if answer is more than 36 months	Months ago	
	respondent will not be qualified for interview		
305	When had he come back home before the last time?	He came back only once 95	
	(Check: answer to Q. No. 306 must be larger than the answer to Q. No. 305)	Months ago	
306	The last time when your husband came, how often did he drink alcohol while at home?	Every day 1 2-3 times a week 2 At least once a week 3 Less than once a week 4 Never 5 Don't know 98	
307	The last time your husband was abroad, with whom did he live there?	Alone 1 With other woman 2 With friends 3 With relatives 4 Others96 (Specify)	

	Don't Know	98	

S.N.	Questions and Filters	Coding Categories	Skip To
308	Is/Was your husband married to other woman also?	Yes 1 No 2	
	(This question will be applicable to those who are currently married and divorced. If the respondent is a widow ask whether her husband had other wives before his death)	Don't Know 98	
	Note: If response to Q no. 204 is 3 go to Q n	o. 309, 'Otherwise' go to Q. No. 401	
309	When did your husband die?  (If less than a month, write '00')	Months ago	
310	Do you know the cause of death of your husband?	Yes 1 No 2-	→ 401
311	If yes, (as in 311), what was the cause of death of your husband?	HIV/AIDS 1 Other96- (Specify)	→ 401
312	If the cause of death was HIV/AIDS, was his blood tested?	Yes 1- No 2 Don't Know 98	→ 401
313	If his blood was not tested, how do you know that cause of death was HIV/AIDS?		

## 400. SEXUAL BEHAVIOR

S.N.	Questions and Filters	Coding Categories	Skip To
401	How old were you at your first sexual intercourse?  (In completed years)	Years old  Don't know/can't recall  98	
402	Did you ever have sexual intercourse with a man other than your husband?  (If answer is 'No' Probe)	Yes 1 No 2-	→ 405
403	If Yes in 402, when did you have sex with a man other than your husband?  (Multiple Response Possible. Don't read the responses)	When husband was abroad 1  After getting divorced 2  (check Q no 204 whether she is a divorcee)  After the death of husband 3  (check Q no 204 whether she is a widow)  Before getting married 4  Others96  (Specify)  No Response 99	
404	Have you ever had say with someone	Most often 1 Sometimes 2 Rarely 3 Had such sexual contact only before getting married 4 No response 99	
405	Have you ever had sex with someone other than your husband who paid you in cash or in kind for sex?  (If answer is 'No' Probe)	Yes 1 No 2-	→501

S.N.	Questions and Filters	Coding Categories	Skip To
406	Since when have you been having sex with someone other than your husband who pays you in cash or in kind?	Since less than 3 months  back 1  Since past one year 2  Since past three years 3  Since past five years 4  Since more than past five	
		years 5 Rarely 6 No response 99	

# 500. KNOWLEDGE, ACCESSIBILITY AND USE OF CONDOM

# Condom Knowledge and Accessibility

Q.N.	Questions and Filters	Coding Categories	Skip to
501	Have you ever heard about condom?	Yes 1	
	(If answer is No, Probe)	No 2-	→513
502	From where did you hear about condom?	Radio/FM 1	
		TV 2	
		Health workers 3	
	(Multiple response. Do not read the	NGOs 4	
	possible answers)	FCHV 5	
		Peer /friends 6	
		Husband 7	
		Peer/outreach educators 8	
		Volunteer/community worker9	
		Others96	

Q.N.	Questions and Filters	Coding Categories	Skip to
		(Specify)	
503	Have you ever used condom?	Yes 1	
	(If answer is No, Probe and confirm)	No 2-	→ 513
504	Do you usually keep condoms at home?	Yes 1	
		No 2	
505	Which are the places or people that you	Health Post / Health Center 1	
	know from where you can obtain condoms?	Pharmacy 2	
		General retail store	
		(KiranaPasal) 3	
		Private Clinic 4	
		Paan shop 5	
	(Multiple answer. Do not read the possible	Hospital 6	
	answers)	FPAN Clinic 7	
		Peer /Friends 8	
		FCHV 9	
		NGOs 10	
		Peer/outreach educators	
		Health Workers 12	
		Volunteer/community worker13	
		Others 96	
		(Specify)	
		Don't know 98	
506	How long does it take for you to get condom from the nearest place from your home?  (if it is less than one minute write 00)	Minutes  Don't know 98	

Q.N.	Questions and Filters	Coding Categories	Skip to
507	How do you usually obtain condoms?	I always get it free of cost 1-	→508
		I buy 2-	<b>→</b>
		Both (buy & get free) 3	<b>→</b> 510
		My husband/sex partner	508
		brings it 4	

Q.N.	Questions and Filters	Coding Categories	Skip to
507.	How does your husband/sex partner often obtain free condoms?	Always gets free of cost 1  Always buys 2  Obtains both ways 3  Don't know 98	→ 510 → 512
508	From where do you (does your husband/sex partner) obtain free condoms mostly?  (Multiple answer. Do not read the possible answers)	Health Post/ Health Center 1  Hospital 2  FPAN Clinic 3  Peer /Friends 4  FCHV 5  Outreach/peer educators 6  NGO 7  Health worker 8  Volunteer/community worker9  Others96  (Specify)	
509	Which would be the most convenient place/s for you (your husband/sex partner) to obtain free condoms?	Health Post/ Health Center 1 Hospital 2	

Q.N.	Questions and Filters	Coding Categories	Skip to
		FPAN Clinic 3	
		Peer /Friends 4	
	(Multiple answers: Do not read the possible	FCHV 5	
	answers)	Outreach/peer educators 6	
		NGO 7	
		Health worker 8	
		Volunteer/Community worker9	
		Others96	
		(Specify)	
	(Note: If response is '1' in Q 507, or '1' in Q 5	07.1, go to Q. 512)	
510	From where do you (your husband/sex	Pharmacy 1	
	partner) often buy condoms?	General retail store	
		(KiranaPasal) 2	
		Private clinic 3	
	(Multiple answers: Do not read the possible answers)	Paan Shop 4	
		Others96	
		(Specify)	
511	Which would be the most convenient	Pharmacy 1	
	places for you (your husband/sex partner) to buy condom?	General retail store	
		(KiranaPasal) 2	
	(Multiple answers: Do not read the possible	Private clinic 3	
	answers)	Paan Shop 4	
		Others96	
		(Specify)	
512	In the past one year, did you get condom	Yes free 1	
	from anywhere? (e.g. peer educators, STI treatment centers)	Yes on cash 2	
	,	No 3	

## Condom Use with Husband when he was home last time

Q.N.	Questions and Filters	Coding Categories	Skip to
513	Did you have sex with your husband when he was back to home last time?  (If answer is 'No' Probe)	Yes 1 No 2-	<b>→</b> 521
514	How long did your husband stay when he was back to home last time?  (write '00' if less than one month)	He is at home now 95  Month	
515	How many times did you have sexual intercourse with your husband when he was back to home last time?	Times Don't know 98	
	If response '2' in Q. No. 501 or Q. No. 503 or about condom or has never used it, go to Q N	<u>-</u>	
516	Did you use condom in your last sexual intercourse with your husband?  (Check with Q no. 501 and 503)	Yes 1 No 2-	<b>→</b> 518
517	Who suggested for the condom use at that time?	Myself 1  My husband 2  Both of us 3  Don't know 98	519
518	Why didn't you use condom at that time?	Not available 1 Too expensive 2 Husband objected 3 I didn't like to use it 4 Didn't think it necessary 5 Didn't think of it 6 Didn't know/ wasn't aware of condoms 7	

Q.N.	Questions and Filters	Coding Categories	Skip to
		Others 96 (Specify)	
519	When your husband was back to home last time, how often did you use condom while having sex with him?	All of the time 1  Most of the time 2  Sometimes 3  Rarely 4  Never 5	<b>→</b> 522

Q.N.	Questions and Filters	Coding Categories	Skip to
520	Why you did not use condom always?	We wanted children 1-	
		We were using other FP	
		methods 2	
	(Multiple answers: Do not read the possible	Not available 3	
	answers)	Too expensive 4	
		Husband objected 5	522
		I didn't like to use it 6	
		Didn't think it necessary 7	
		Didn't think of it 8	
		Didn't know/ wasn't aware	
		about condoms 9	
		Others96	
		(Specify)	
		Don't know 98	
521	May I ask you the reason why you did not have sex with your husband when he was	I was sick 1	

Q.N.	Questions and Filters	Coding Categories	Skip to
	home last time?	Husband was sick 2	
		Husband was at home for a	
	(Multiple answers: Do not read the possible answers)	short time 3	
	unswers)	I was not at home when	
		husband came back home 4	
		Others 96	
		(Specify)	
		No Response 99	
522	When your husband was back to home	Yes 1	
	before last time, did you have sexual intercourse with him?	No 2	
		First time returned to home 3	

## 600. AWARENESS OF HIV/AIDS

Q.N.	Questions and Filters	Coding Categories	Skip to
601	Have you ever heard about HIV/AIDS?	Yes 1	
	(Probe if answer is NO to confirm)	No 2-	<b>→</b> 701
602	From where/whom did you hear about	Radio/FM 1	
	HIV/AIDS?	TV 2	
		Health workers 3	
		NGOs 4	
	(Multiple answers: Do not read the possible answers)	FCHV 5	
		Peers/Friends 6	
		Husband 7	
		Peer/outreach educators 8	
		Others 96	
		(Specify)	

Q.N.	Questions and Filters	Coding Categories	Skip to
603	What messages have you heard about HIV/AIDS?	HIV is transmitted through	
		blood 1	
	(Probe if respondent stops at one or two	Sexual contact with multiple partners should be avoided 2	
	messages)	Condoms should be used, unsafe	
		sexual contacts should be	
		avoided 3	
		Syringe/ needles used by others	
		should not be used 4	
		Sharing of knives/tools may	
		transmit HIV 5	
		Sexual contact with commercial sex workers should be avoided 6	
		Others96	
		(Specify)	
604	Have you been provided any sort of	Yes 1	
	information/education by anyone on HIV or STIs in the past year?	No 2	
		Don't know 98	
	Knowledge, Opinion and Attitudes on HIV/AIL	DS .	
605	Do you know anyone who is infected with	Yes 1	
	HIV or who has died of AIDS?	No 2	607
606	Do you have a close relative or close friend	Yes, a close relative 1	
	who is infected with HIV or has died of AIDS?	Yes, a close fried 2	
		No 3	
607	Do you know that HIV infection can be	Yes 1	
	prevented by abstaining from sex?	No 2	

Q.N.	Questions and Filters	Coding Categories	Skip to
		Don't know 98	
608	Can people protect themselves from HIV	Yes 1	
	by having one uninfected faithful sex partner?	No 2	
		Don't know 98	
609	Can people protect themselves from HIV	Yes 1	
	by using condom correctly in each sexual contacts?	No 2	
		Don't know 98	
610	Do you think a healthy-looking person can be infected with HIV?	Yes 1	
		No 2	
		Don't know 98	
611	Can a person get the HIV virus from mosquito bite?	Yes 1	
		No 2	
		Don't know 98	
612	Can a person get HIV by sharing a meal	Yes 1	
	with an HIV infected person?	No 2	
		Don't know 98	
613	Can a pregnant woman infected with HIV	Yes 1	
	transmit the virus to her unborn child?	No 2	
		Don't know 98	615

Q.N.	Questions and Filters	Coding Categories	Skip to
614	What can a pregnant woman do to reduce the risk of transmission of HIV to her	Take Medication 1 Others 96	
	unborn child?	(Specify)	
		Don't know 98	

Q.N.	Questions and Filters	Coding Categories	Skip to
615	Can a woman with HIV/AIDS transmit the virus to her newborn child through	Yes 1	
	breastfeeding?	No 2	
		Don't know 98	3
616	Can a person get HIV by shaking hands	Yes 1	
	with HIV infected persons?	No 2	
		Don't know 98	:
617	Can a person get HIV by using previously	Yes 1	
	used needle/syringe?	No 2	:
		Don't know 98	3
618	Can blood transfusion from HIV infected	Yes 1	
	person transmit HIV to others?	No 2	:
		Don't know 98	3
619	Is it possible in your community for	Yes 1	
	someone to have a confidential HIV test?	No 2	:
		Don't know 98	3
620	If you have to go for HIV testing, do you	Yes, I know 1	
	know where can you go for it?	No, I don't know 2	
621	I do not want to know the result, but have	Yes 1	
	you ever had an HIV test?	No 2	701
622	Did you voluntarily undergo the HIV test	Voluntarily 1	
	or was it required?	Required 2	

Q.N.	Questions and Filters	Coding Categories	Skip to
		Others	
		96	
		(Specify)	
		No Response 99	
623	I do not want to know the result; Did you	Yes 1	<b>►</b> 625
	receive the result of your HIV test?	No 2	
624	Why did you not receive the test result?	I am sure that I am not infected	
		1	
		I am too scared to receive the	
		result 2	
		I felt it unnecessary 3	
		I forgot about it 4	
		Others96	
		(Specify)	

Q.N.	Questions and Filters	Coding Categories	Skip to
625	Did you have HIV test in the past one year?	Yes 1	
		No 2-	<b>→</b> 627
626	When did you have your most recent HIV	Within last 12 months 1	
	test?	Between 1-2 years 2	
		Between 2-4 years 3	
		More than 4 years ago 4	
627	Did you receive the result of your HIV test?	Yes 1	
		No <del>2</del>	701
628	What was the result of HIV test	Positive1	<b>→</b> 701
		Negative	701
		Indeterminate	630
		Do not Know98	630

Q.N.	Questions and Filters	Coding Categories	Skip to
		No response99 I	<b>7</b> 01
629	After positive result, have you avoided	Yes1	701
	receiving HIV treatment care in the last 12 months	No2	
630	Why didn't you go to HIV treatment care	Felt I was healthy1	
	even after knowing you were HIV positive?	Others might know2	
		Had to pay3	
		Bad attitude of healthcare provider4	
		Long waiting time/Could not manage with Clinic opening time5	
		Others (Specify)96	
		Don't know98	
		No response99	

# 700. SEXUALLY TRANSMITTED INFECTION (STI)

Q.N.	Questions and Filters	Coding Categories	Skip to
	STI and Treatment		

Q.N.	Questions and Filters	Coding Categorie	Skip to	
701	Which diseases do you understand by STI?	White Dischar	ge/Discharge o	f
		Pus/ <i>Dha</i>	tu flow	1
	(Multiple answers: Do not read the possible	Pain dur	ing urination	2
		Burning	Sensation while	e
		t	Jrinating :	3
	answers)	Ulcer or sor	e around genita area.	
		Syphilis	(Bhiringi)	5
		H	IIV/AIDS (	5
		Others	90	5
			(Specify	
		Do	on't know 98	3
702	Do you currently have any of the following s	ymptoms?		
	Symptoms	Yes	No	
	1. White Discharge/Discharge of pus	1	2	
	Pain during urination	1	2	
	Burning sensation while urinating	1	2	
	Ulcer or sore around genital area	1	2	
	96. Others (Specify)	1	2	
	(If answer is "No" to all in Q. No. 702 Go to Q	. 714)		
703	Are you currently going through medical		Yes	1
	treatment for any of these symptoms?		No 2	2─►714
704	If yes, for how long did you wait to go for treatment? (Write "00" if less than a week)		Week	

Q.N. Questions and Filters Coding Categories	Skip to
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Q.N.	Questions and Filters	Coding Categories	Skip to
705	Where did you go for the treatment?	Private clinic 1	
		Health Post/ HealthCenter 2	
		Hospital 3	
		Pharmacy 4	
	(Multiple answers. Do not read the possible	NGOs5	
	answers)	Others 96	
		(Specify)	
706	For which symptoms did you get treatment?	Specify the treatment.	
	Symptoms	Treatment	-
	1. White Discharge/Discharge of Pus		
	2. Pain during urination		
	3. Burning Sensation while Urinating		
	4. Ulcer or sore around genital area		
	96. Others (Specify)		
707	Did you receive a prescription for	Yes 1	
	medicine?	No 2	}
		Treated at Home 3	711
708	Did you obtain all the medicine	Yes I obtained all of it 1	
	prescribed?	I obtained some but not all 2	<b>711</b>
		I did not obtain the medicine 3	
709	Did you take all of the medicine	Yes 1-	<b>→</b> 711
	prescribed?	No 2	
710	If not, why did you not take all of the	Forgot to take 1	
	medicine prescribed?	Felt it was cured 2	
		Medicine did not help much 3	
		Others96	

Q.N.	Questions and Filters	Coding Categories	Skip to
		(Specify)	
711	How much did you pay for STI medicines?  (Note: If not paid mention the reasons)	RsReason	
712	Did anyone from the place you visited for treatment counsel you on ways to avoid such problem?	Yes 1 No 2-	<b>→</b> 714

Q.N.	Questions and Filters	Coding Categories	1	Skip to
713	What did she/he tell you?	Told me to use cor	ndom 1	
		Told me to 1	reduce number	
		of sexual p	partners 2	
	(Multiple answers: Do not read the possible	Others	96	
	answers)		(Specify)	
714	Did you have any of the following symptoms	r?		
	Symptoms	Yes	No	
	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 answer is 'No' to all in Q. No. 714 Go to Q.	717)		
715	Did you get treatment for the symptoms cited in the past year?			

Q.N.	Questions and Filters	Coding Categorie	Skip to	
	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 answer is 'No' to all in Q. No. 715 Go to Q.	717)		
716	Where did you go for the treatment?	P	rivate Clinic 1	
		Health Post/ Heal	lth Center 2	
		Н	ospital 3	
	(Multiple answers. Do not read the possible	P	harmacy 4	
	answers)	Se	elf treatment 5	
		NGO	s6	
		Others	96	
			(Specify)	
	Husband's STI and Treatment			
717	When your husband was back home last		Yes 1	
	time, did he have any STI symptoms?		No 2	]}
		Do	n't know 98	J 721
718	Did he seek medical treatment for any of		Yes 1	
	those symptoms?		No 2	]
		Do	n't know 98	<sup>721</sup>
				, 21

Q.N.	Questions and Filters	Coding Categories	Skip to
719	Where did he go for the treatment?	Private Clinic 1	

Q.N.	Questions and Filters	Coding Categories	Skip to
		N-SARC Clinic 2	
		FPAN Clinic 3	
		Health Post/ Health Center 4	
	(Multiple answers. Do not read the possible	Hospital 5	
	answers)	Pharmacy 6	
		Self treatment 7	
		Nepal Red Cross Society 8	
		Hasti AIDS 9	
		Others 96	
		(Specify)	
720	How much did your husband pay for		
	medicine he took?	Rs.	
		Don't Know 98	
	(Note: If not noid montion the negrous)		
	(Note: If not paid mention the reasons)	Reason	
	If response to Q No. 522 is 3 go to Q No. 801		
721	When your husband was back home	Yes 1	
	before last time, did he have any STI symptoms at that time?	No 2	] ]
	symptoms at that time.	Don't know 98	801
722	If Yes, was he treated at that time?	Yes 1	
		No 2	
		Don't know 98	

## 800. USE OF DRUGS AND INJECTION

Q. N.	Questions and Filters	Coding Categories	Skip to
801	Do you smoke?	Yes 1	
		No 2	
		No response 99	
802	Do you drink alcohol?	No, never 1	
	If Yes, During the last 30 days how often	Yes, everyday 2	
	did you drink alcohol?	Yes, 2-3 times a week 3	
		Yes, at least once a week 4	
		Yes, less than once a week 5	
		Don't know 98	
		No response 99	
803	Some people take different types of oral	Yes 1	
	drugs. Have you also tried any of those drugs in the past 30 days?	No 2	
		Don't know 98	
		No response 99	

Q.N.	Questions and Filters	Coding Categories	Skip to
804	Some people inject drugs using a syringe. Have you ever injected drugs?	Yes 1	
	(Do not count drugs injected for medical	No 2 Don't know 98	
	purpose or treatment of an illness)	No response 99	

## 900. STIGMA AND DISCRIMINATION

Q. N. Questions and Filters	Coding Categories	Skip to
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Q. N.	Questions and Filters	Coding Categories	Skip to
901	If anyone of your male relatives become ill with HIV, would you be willing to care for him in your household?	Yes 1	
		No 2	
		Don't know 98	
902	If anyone of your female relatives become ill with HIV, would you be willing to care for her in your household?	Yes 1	
		No 2	
		Don't know 98	
903	If any members of your family become ill with HIV, would you want it to remain secret?	Yes 1	
		No 2	
		Don't know 98	

# 1000. KNOWLEDGE OF AND PARTICIPATION IN STI and HIV/AIDS PROGRAMS

Q. N.	Questions and Filters	Coding Categories		Skip to
1001	Have you met, discussed, or interacted with peer educators (PE), or outreach educator (OE) or community mobilizer (CM) in the last 12 months?	Yes	1	
		No	2	
		No Response	9	
1002	Have you visited or been to any drop in center (DIC) in the last 12 months?	Yes	1	
		No	2	
1003	Have you visited any STI clinic in the last 12 months?	Yes	1	
		No	2	
1004	Have you visited any voluntary counseling and testing (VCT) centers in the last 12 months?	Yes	1	
		No	2	
1005	Have you ever participated in HIV/AIDS awareness raising program or community events in the last 12 months?	Yes	1	
		No	2	

1006	When you participated in such events in	Street drama 1	
1006	When you participated in such events in what activities were you involved?  (Multiple answers. Do not read the possible answers)	Su eet urania 1	
		AIDS Day 2	
		Condom Day 3	
		Video Shows 4	
		Group discussions 5	
		Talk programs 6	
		HIV/AIDS related training 7	
		HIV/AIDS related Workshops 8	
		Condom use demonstrations 9	
		Others 96	
		(Specify)	
1007	Have you ever been visited by	Yes 1	
	Community and Home Based Care (CHBC) health workers in the last 12 months?	No 2	Stop intervi ew
			<u>I</u>
Interv	view completed time	hrs.	mins.

## **Annex 4: Sample Size Formula**

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

n = required minimum sample size

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

P1 = the estimated proportion at the time of the first survey.

P2 = the desired proportion at some future date.

(P2-P1) is the magnitude of change of change you want to be able to detect.

$$P = (P1 + P2)/2$$

 $Z1-\alpha$  = the Z-score corresponding to the level of significance

Z1-β = the Z-score corresponding to the level of power



# **National Center for AIDS and STD Control**

Teku, Kathmandu Tel: +977 1 4258219, 4261653 Fax: +977 1 4215149

URL: <a href="mailto:www.ncasc.gov.np">www.ncasc.gov.np</a> .Email: data@ncasc.gov.np