

**‘RESEARCH ON THE HEALTH
VULNERABILITIES OF
THE CROSS BORDER
MIGRANTS FROM NEPAL’**

Disclaimer

This research was conducted within the project “Strengthening Government Capacity in the Development and Implementation of the National Strategic Action Plan on Migration Health in Nepal” funded by International Organization for Migration (IOM) Development Fund (IDF). This Cross border health vulnerability research conducted among India bound migrants from Nepal is one component of the project. This research is a true collaboration between IOM Nepal, two British universities (Bournemouth University and Liverpool John Moores University), and a local NGO, Green Tara Nepal.

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While the study team adopted an evidence-to decision approach in guiding the recommended interventions, a more rigorous iterative consensus process is required by authorities and stakeholders. The recommendations provided in this report are therefore conditional and presented as progenitor actions. Methods such as those described by GRADE (Grading of Recommendations, Assessment, Development and Evaluations) ^[1] and The National Institute for Health and Care Excellence (NICE) ^[2] are useful in this regard. Important considerations such as feasibility analysis, financial assessments, potential effects of intervention, resource requirements, implications for health and welfare systems, cost-effectiveness and acceptability for each proposed action need to be assessed through extensive stakeholder consultations facilitated through for instance an inter-sectoral committee on migration health as exemplified in other contexts^[3].

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^[1] Alonso-Coello P, Schunemann HJ, Moher J, Brignardello-Petersen R, Akl EA, Davoli M, et al. GRADE (Grading of Recommendations, Assessment, Development and Evaluations) Evidence to Decision (EtD) frameworks: a systematic and transparent approach to making well-informed healthcare choices. 1: Introduction. *BMJ*. 2016;353.

^[2] The National Institute for Health and Care Excellence (NICE), UK (2012) Methods for the development of NICE public health guidance (third edition) Link: <https://www.nice.org.uk/process/pmg4/chapter/developing-recommendations#formulating-research-recommendations>

^[3] Wickramage K, Mosca D and Peiris, S (2017) Migration health research to advance evidence-based policy and practice in Sri Lanka. IOM Publications, Geneva. 2017: Link: <https://publications.iom.int/books/migration-health-research-advance-evidence-based-policy-and-practice-sri-lanka>.

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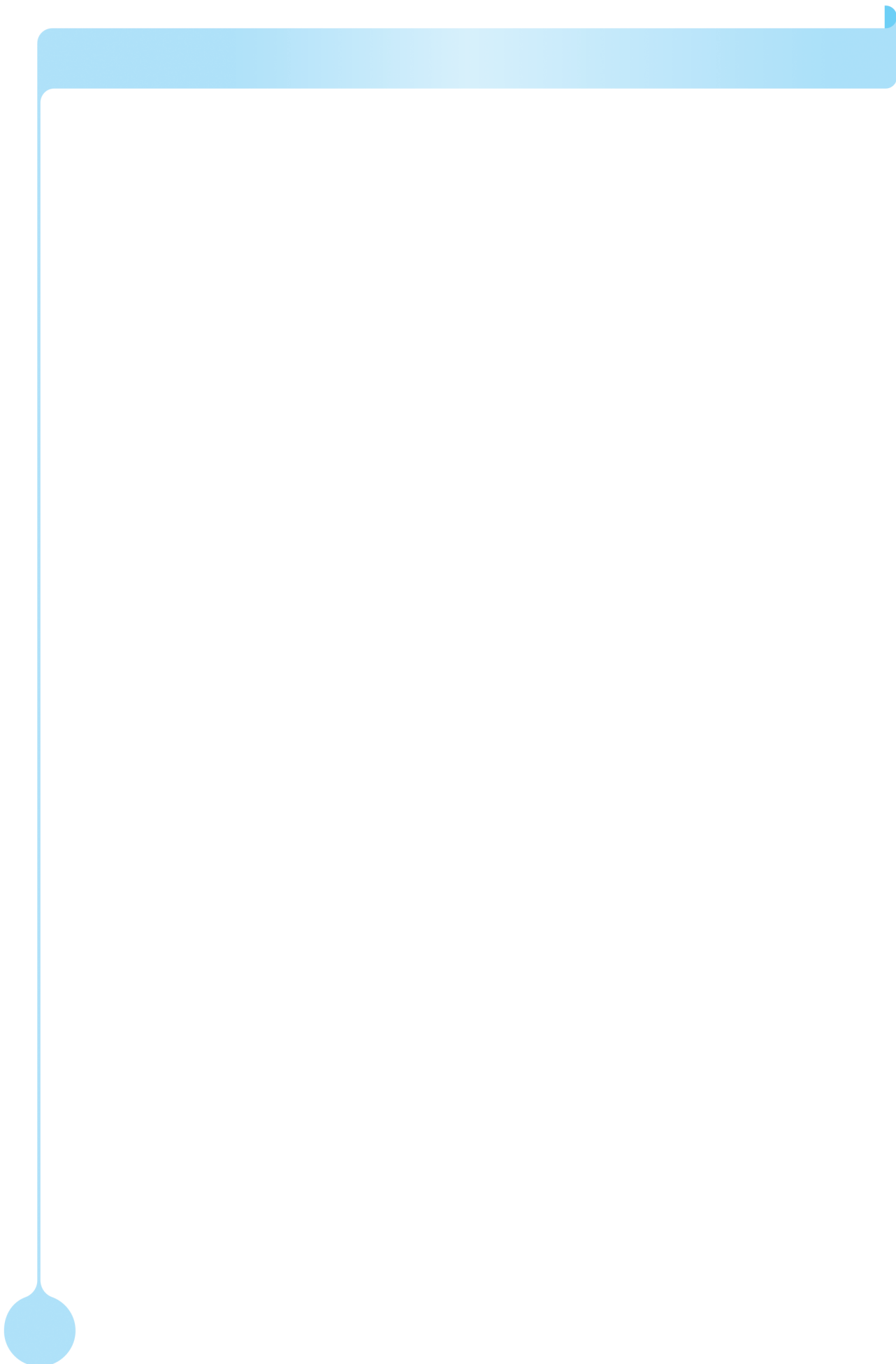


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Acronyms & Abbreviations

AIDS	Acquired Immune Deficiency Syndrome
BU	Bournemouth University
COPD	Chronic obstructive pulmonary disease
CP	Colombo Process
FGD	Focus group discussion
GCM	Global Compact for Safe, Orderly and Regular Migration
GDP	Gross domestic product
GHQ	General health questionnaire
GON	Government of Nepal
GTN	Green Tara Nepal
HIV	Human immunodeficiency virus
IBBS	Integrated biological-behavioral surveillance survey
INGO	International Non-Governmental Organizations
IOM	International Organization for Migration
KII	Key informant interview
LJMU	Liverpool John Moores University
MOHP	Ministry of Health and Population
MOLESS	Ministry of Labour Employment and Social Security
NCASC	National Centre for AIDS and STD Control
NCD	Non-communicable diseases
NGO	Non-governmental organizations
NHRC	Nepal Health Research Council
NR	Nepali rupees
SAARC	South Asian Association for Regional Cooperation
SDG	Sustainable Development Goal
SES	Socio-economic status
SPSS	Statistical Package for the Social Science
STAC	SAARC TB/HIV Center
STD	Sexually transmitted diseases
STI	Sexually transmitted infection
TB	Tuberculosis
VC	Village Councils
WHO	World Health Organization

EXECUTIVE SUMMARY

Background and objectives

Many Nepali seek employment within the international labour market, especially in other countries of Asia and the countries Gulf Cooperation Council (GCC). Between 1993/94 to 2014/15 the government of Nepal (GoN) issued over 3.8 million work permits to overseas destinations. This is an underestimation of the total volume of migrant workers since this figure excludes those Nepali migrants who cross the border to India for work. The 'open border' allows thousands of Nepali to cross the border to work in India. Many remain undocumented and thus difficult to enumerate.

Various research studies have indicated that Nepali labour migrants in India may be vulnerable to multiple health problems, including infectious diseases such as human immuno-deficiency virus (HIV) infections, tuberculosis (TB), and malaria (IOM, 2015; Vaidya & Wu, 2011). For example, the 2015 Integrated Biological-Behavioral Surveillance Survey (IBBS) of Nepali male labour migrants revealed that risky sexual behaviors were relatively common, and that HIV prevalence was 0.4%, compared with national prevalence among adults of 0.15% (NCASC, 2017). Recent updates of HIV cases in Nepal found that 10.3% of the total number of HIV-positive patients in Nepal were migrant workers. Of them, 3,072 were male and 289 female (NCASC, 2018). Another 7.2% (2,372) of HIV-positive patients were the spouses or partners of migrant workers (NCASC, 2018). Migrant workers can also be vulnerable to mental health problems and psychosocial distress (Khaled, 2019).

Despite these evidences, reliable information on the health vulnerabilities and resilience factors of cross-border migrants and associated possible preventive measures is lacking. To remedy this gap and thereby facilitate the development of evidence-informed policy and programme development, this study was undertaken to assess the health vulnerabilities of Nepali migrants to India.

Study design

This study had a cross-sectional design and used a mixed methods approach comprising a survey of 751 returnee migrants, 12 in-depth interviews with returnee migrants, six focus group discussions (FGDs) with returnee-migrants, one in each of six districts, and 12 key informant interviews (KII) with stakeholders such as health professionals, local non-governmental organization (NGO) staff and local authorities. Data were collected from mid-November 2017 to early-January 2018 from a total of six districts, four from province 7 (Kailali, Kanchanpur, Doti, Achham), and one each from province 5 (Banke) and province 6 (Surkhet). Anecdotal evidence suggests that these are the districts with high migration trend to India for work.

A multi-stage sampling method was used to select returnee migrants who had worked at least six months in India to participate in the study.

This study created a Nepali-language tool based on several validated instruments. Guidelines for the FGDs and KIs were also developed. Green Tara Nepal (GTN) recruited and trained 12 enumerators to collect data. All six districts were surveyed simultaneously.

Key findings

The returnee migrant workers contacted in this study had worked at nearly all states of India but Maharashtra, Gujarat, and Delhi were the key states of destination. Most of the study population were male (96.7%) and the majority of them opted working either in factories, hotels or as watchmen. The health issues, risk and access to health care of migrants investigated in this study are fairly similar compared to other studies (for instance trans-continental flows like Gulf countries) based in Nepal (Adhikary et al. 2011). The key findings are presented below.

Tuberculosis and malaria:

Mosquito borne diseases malaria and dengue were the key health problems of migrants described experiencing while working in India as reported by 6.6% and 3.6% participants respectively. Among those who reported key illness or health related problems (n=507), this portion was 9.9% and 5.3% respectively. A notable proportion of participants (11.8%) had not heard of malaria. Of those participants who had, the vast majority (97.4%) knew that the bites of infected mosquitoes are the main cause of malaria. Around 1.7% of the participants self-reported that they had TB at any time in the past as told by the health worker. The qualitative analysis also found that cross-border migrants are at the risk of TB and malaria because working in the open space and living in the cramped room.

Sexual health and condom use:

Of the male and female participants who had had sexual intercourse in the past six months, more than a quarter reported having more than one sex partner. Although condom use was reported to be high in sexual contacts with sex workers and friends (98.3%), only 41% used condoms with spouses. Among married participants with more than one sex partner, only 27.5% reported having used a condom during their last sexual intercourse.

Non-Communicable disease, accidents and injuries:

Work-related injuries from falls (2.5%), hypertension (1.5%), and diabetes (1.5%) were key existing health problems reported, but the nature of this study did not enable us to establish that these problems had been caused by work-related circumstances. Of those currently having an illness, 74.3% reported that their health problems which were diagnosed in India had not been previously known to them in Nepal. Most (76.9%) claimed that the working and living conditions in India were the main reason for their existing health problems. Our qualitative data indicated a perception that cross-border migrants are at significant risks of accidents and injuries such as mechanical accidents, electrocution, and even work-place related deaths.

Psychological distress, smoking and alcohol intake:

As measured by General Health Questionnaire (GHQ-12), psychological distress was reported by 13.4% of participants. Factory workers and participants from Doti and Surkhet districts had the highest rates of psychological morbidity. Heavy work-loads, long working hours, poor pay and lack of spare time were reported as the leading causes of psychological distress in the qualitative part of the study. The prevalence of tobacco use, either in the form of cigarettes or smokeless tobacco, was high (78.4%) as was current alcohol use (58%).

Barriers of accessing health services:

When they were ill in India, most participants had gone to private hospitals or clinics. However, more than one-quarter faced difficulties accessing those health services i.e. timely use of diagnostic care and treatment. High costs, language barriers, and lack of information were the most-cited barriers. Only 5.5% of participants were covered by health insurance. Migrants said that other barriers to seeking healthcare in India included financial problems, discrimination against migrants, lack of an *aadhar* card (identification number for residents in India (regardless of citizenship) who live there for minimum of 182 days), delayed treatment, communication problems and unfamiliarity with locations.

RECOMMENDATIONS

The major recommendations from the study include: (1) the need for the government to develop a migrant-sensitive health system to facilitate the access of health services at each stage of migration process; (2) develop a culturally and linguistically sensitive strategic behavior and communication health materials targeting migrants and their families, and local radios, television and social media should be harnessed for effective health communications; (3) expand the pre-departure health programs for India bound seasonal migrants similar to the third country migration for employment; (4) strengthen the capacity of the health system to improve the migrant-responsive-and-sensitive health services; (5) the need of cross-country partnership, network and frameworks to deal with the complexity of migration on health and social issues of the migrants so as to ensure health rights in all stages of migration process; (6) should coordinate and harmonize the inter-ministerial efforts and cooperation to facilitate the foreign employment process to India and other countries that promotes health and wellbeing of migrants; (7) the need of initiation of the process to formulate policies/strategies, develop a regulatory mechanism to effectively monitor the cross border activities and also to rectify the global and regional migration related conventions and declarations to address health needs of seasonal migrants; (8) the need for initiation of the process to systematize labour migration for employment to India by establishing partnership while ratifying global migration related conventions, to incorporate health as an essential and 'non-negotiable' component. In addition, health system should be reformed from traditional to techno-friendly health care services for the community-based patient-centered case management practice.

1. CHAPTER ONE: INTRODUCTION

Background of the study

Nepal is a major and growing source country for migrant workers. An estimated 3.5 million Nepali are working abroad, primarily in India, Malaysia and the Middle East (Ministry of Labor & Employment, 2014) out of a population of nearly 30 million. Since employment and other opportunities within the country are limited, many view international migration as a livelihood strategy. Most migrant workers are involved in high-risk unskilled and semi-skilled jobs. Men mainly work in construction sites and factories whereas women work mainly in domestic work. The economic contribution of Nepali migrants to the country is significant. In 2015 they remitted over USD 4 billion, or 28% of Nepal's total gross domestic product (GDP) (Ministry of Finance, 2015). The choice of destination country is determined by the income, education and socio-economic status (SES) of Nepali migrants as well as the types of work available in receiving countries. For example, people of lower SES tend to favor India, the Middle East and Malaysia for work (Adhikary et al., 2011; Cousins, 2016).

Because of the open border between Nepal and India and cheap cost of migration, India is a key destination. Migration to India is also one of the survival strategies for the people from far west and bordering districts of Nepal. Reliable information on cross-border mobility is not available, however as proper recording and reporting systems are lacking. According to 2017 migration stock database, there were 537,517 Nepali migrants in India (UNDESA, 2017). The majority of Nepali migrant workers in India are of low SES and have very limited access to health information and services both within India and within Nepal. Most perform demanding jobs, mainly as restaurant workers in big restaurants, hotels or roadside eateries (*dhaba*), factory workers, watchmen, drivers, domestic workers, agriculture workers, porters, quarries, coalminers, rickshaw pullers, and Indian government civil servants (Bhattarai, 2007).

Nepali labour migrants in India may be vulnerable to many health problems, including infectious diseases such as HIV, TB, and malaria (Bam et al., 2013). However, there is little evidence related to the health of cross-border migrants. This fact, as well as economic dependence of migrants on their jobs and the prevalence of migratory behavior, justifies the focus of this research on the health vulnerabilities of cross-border migrants from Nepal.

Significance of the study

Nepal and India share similar cultural and religious practices and their political ties facilitate cross-border migration. In particular, the Peace and Friendship Treaty of 1950 provided citizens of the other country with rights similar to those granted to their own citizens, except voting rights. This policy is one of the major drivers of work-related migration to India.

Being away from home and family, compromised living and working environments, the risk of human rights violations, barriers to mobility, cultural differences, and lack of familiarity with and limited accessibility to local healthcare services make migrants highly vulnerable to health problems. Furthermore, they normally engage in the “3D” job category, jobs that are difficult, dangerous and dirty, and therefore accrue higher-than-usual health risks for themselves, their families and their communities. Previous studies (Adhikary et al., 2011; Joshi et al., 2011) have documented that Nepali migrants have a greater risk of accidents and other health problems than local workers because they work long hours, are unfamiliar with local languages, and endure poor living and working conditions. Many studies of migrants to India have focused on their sexual risk-taking behaviors. One in-depth study found that *Dalit* (oppressed social group) labour migrants to India have a higher risk of HIV infections than other labour migrants (Bam et al., 2013).

Despite these facts, migration health has not been prioritized in Nepal. Because the Health Policy (2014) does not mention migration health or the health issues of migrant workers as a priority, this component is not included in the Nepal Health Sector Implementation Plan (III). None of Nepal’s development policies or strategic papers prioritize migration health as an agenda for action. Until recently, little was known about health vulnerability-related risk factors or the quality of life of migrants’ abroad. In this context, IOM Nepal, in close collaboration with the MoHP, National Planning Commission, Ministry of Labour Employment and Social Security MoLESS and other ministries recently initiated a project titled ‘Strengthening Government Capacity in the Development and Implementation of the National Strategic Action Plan on Migration Health in Nepal.’

The project aims to strengthen the capacity of the GoN in comprehensively addressing the health vulnerabilities of migrants and protecting their right to health by developing its first national migration health policy and related strategies. This study is a part of the project designed to explore the health vulnerabilities of cross-border migrants from Nepal so that

its findings and recommendations will be able to serve as evidence for the GoN to formulate evidence-based health plans and policies to mitigate both the health vulnerabilities and the challenges of cross-border Nepali workers in India.

Objectives of the study

General objective:

The main objective was to explore health vulnerabilities of cross-border migrants from Nepal.

Specific objectives:

The two objectives in this study were detailed as to:

- (a) Assess the health vulnerabilities of returnee migrants from India and their spouses.
- (b) Determine the accessibility of health care services of returnee migrants while in India and back home in Nepal as well as to assess the health-seeking behaviors and the barriers to their accessing health services in both countries.

2. CHAPTER TWO: METHODOLOGY

This study applied a mixed method design, or one which combines both quantitative and qualitative research techniques, methods and concepts into a single study (Johnson, 2004; MacKenzie-Bryers et al., 2014). The study collected quantitative data from returnee migrants using a paper-based interviewer-administered questionnaire in a structured survey.

Study areas

This study was conducted in six districts, four from province 7, one from Karnali province and remaining one from Province 5 of Nepal, namely Surkhet, Banke, Kailali, Kanchanpur, Doti and Achham. These districts were selected based on the anecdotal evidence which suggests that these are the districts with high migration trend to India for work. Location of selected districts are shown in Figure 2.1 below.

Figure 2.1: Study districts of Nepal



Study period

The duration of the study was from September 2017 to February 2018. The field work for the data collection was conducted between, mid-November 2017 to early-January 2018.

Samples and study participants

The study population in this study was defined as follows:

Migrants: Male or female Nepali migrant workers who are 18 years old or above, have lived in India for at least six months as a migrant from one six target districts in the mid- and far-western areas of Nepal, and has consented to take part this study.

Key informants: Representatives from health facilities, local government offices and NGOs/INGOs working on migrant issues, HIV/AIDS, and other health issues.

Sample size

2.4.1 Quantitative sample size

The sample size for the survey, 735, was determined using the formula below. The margin of error was considered $\pm 5\%$ for a proportion which was the anticipated prevalence of non-condom use of Nepali migrant workers (around 65%) (International Organization for Migration, 2015). The final sample size was adjusted with the design effect (2) and the expected non-response rate (5%) (Daniel, 1999).

The sample size was calculated using the formula:

$$n = z^2 P(1-P) / d^2$$

z = z statistics for level of confidence of 95% i.e. 1.96

P = prevalence (0.65)

d^2 = margin of error 5% in proportion of 1 i.e. 0.05

2.4.2 Qualitative participants

To collect qualitative data, six FGDs (one in each of the six target districts) were held with male returnee migrants. Each FGD had 6-8 participants and was conducted by a skilled FGD facilitator. Twelve returnee migrants were interviewed as they did not wish to discuss their migration issues in a group. The FGD guidelines were modified to facilitate the in-depth interviews. Another 12 KIIs, two in each district, were conducted with representatives from health facilities, local government offices and NGOs/INGOs working on migrant issues, HIV, and other health issues were selected for KIIs.

Sampling Technique

2.5.1 Survey sampling technique

The multi-stage sampling method was applied to select the representative sample from the study population.

In the first stage, six of the 32 districts in the provinces 5, Karnali Pradesh and Province 7 of Nepal (or former mid- and far-western developmental regions) were purposively selected [Fig 1]. They were selected based on the recommendations that emerged during a consultative meeting organized in the centre of the region where districts are presumed to have high cross-border migration rate.

In the second stage, the municipalities of each district were stratified into two strata: municipalities located within district headquarters and those located in their peripheries. One of each type was randomly selected from each district. As no official records of returnee migrants in municipalities or at the ward level were available, research team consulted with district-level stakeholders and government authorities and decided to interview returnee migrants at the border in order to generate a list of wards in which expected to find 30 returnee migrants and randomly selected two wards from each municipality. Thirty (30) was an arbitrary number generated by dividing the total sample size (735) by the number of selected wards (24) and chosen to ensure that the total population of migrants was evenly distributed across the wards.

Finally, since there was no information on households with recent returnee migrants from India and since reaching every household was not feasible, different non-random sampling methods were used to maximize the selection of all households with returnee migrants in each ward. The field researchers purposively selected eligible participants at border entry points, in district headquarters or in the market hubs of each ward in order to get them to help identifying other eligible participants, visited every household in pocket areas of migrants, mobilized social leaders (school teachers, health workers, local political leaders) and used the lists of service users developed by local organizations working in migration in order to increase the number of eligible participants. As field researchers interviewed all the returnee migrants available, the number of participants in the study exceeded the expected sample size (751 versus 735).

2.5.2 Recruitment of participants for qualitative data collection

The qualitative element of this mixed-methods study includes (a) Focus Group Discussions (FGDs) with migrant workers; (b) interviews with migrants who declined to participate in FGDs; and (c) Key Informant Interviews (KIIs) with informants. The qualitative study comprised six FGDs, 12 in-depth interviews and 12 KIIs. Six FGDs (one in each of the six target districts) and 12 interviews were held with male returnee migrants. Each FGD had six to eight participants and was conducted by a skilled FGD facilitator. Thus, 40 participants for six FGDs, 12 participants for each twelve in-depth interview (n=12) and 12 KII (n=10 male, n=2 female) were approached to gain a deeper understanding of their health and vulnerability in India. KIIs were conducted with representatives from health facilities, local government offices and NGOs/INGOs working on migrant issues, HIV, and other health issues.

Data collection tools

2.6.1 Survey tool

The survey tool was developed by adapting questions taken mainly from the Nepali versions of the 2015 IBBS Survey and the IOM's 2015 Baseline Assessment of Health Vulnerabilities of Migrants from Nepal (IOM, 2015). The General Health Questionnaire 12 (GHQ-12), which is a screening device to identify minor psychiatric disorders in a population and was validated in Nepal by Koirala et al. in 1999, was used to assess the general mental-health status of the participants. Similarly, smoking and alcohol-related questions were adapted from the STEPS Survey Nepal 2013 conducted by the Nepal Health Research Council (NHRC). To assess migrants' vulnerability to TB, we used the global verbal TB screening tool.

The survey tools focused on these five issues: (a) existing health conditions, including HIV/AIDS, TB, malaria, and NCDs; (b) risk factors and information regarding the general health status and health vulnerabilities of migrants; (c) occupational health-related issues such as type and duration of work and the availability of occupational health and safety policies and practices (including provisions for annual and sick leave); (d) lifestyle and behavioral issues including substance misuse, heavy alcohol intake, and

smoking; and (e) mental health-related issues including self-reported anxiety and depression while in India.

2.6.2 Qualitative tools

Our FGD and interview tools were also developed using a literature review of survey tools. FGD and interview guidelines were developed in a question format (Hennink, 2007) in Nepali. The contents of the tools were discussed in a national consultation workshop in order to get input from various researchers and stakeholders. Those inputs were used to make the tools more comprehensive and robust. MoHP has approved their use in the data collection. Research team also requested other researchers with similar research backgrounds to provide feedback to ensure the relevance and comprehensiveness of the tools. In addition, all the tools were pre-tested and the adequacy of the questions and clarity and wording of the questions were assessed (van Teijlingen & Hundley, 2001) and necessary adjustments made.

The qualitative methods addressed issues regarding the accessibility of health services, health-seeking behavior and barriers to access of health care both in India and back home in Nepal. The FGD tools also covered accommodation and general life (e.g., the facilities available in their accommodations), working environment (e.g., workload, breaks for tea and/or meals during shifts, bullying, timeliness of salary, injury, and compensation at work), entertainment and lifestyles (e.g., means of recreation, smoking and alcohol, healthy diet, and visiting sex workers).

Data collection

GTN recruited and trained data enumerators (n=12) and supervisors (n=3). The enumerators had at least bachelors' degree qualification in public health, population studies and health education. Preference was given to local candidates from the survey districts who were familiar with the local context and languages.

Three-days orientation was provided to the data enumerators on the survey objectives, tools and methods with participation of the core team members from GTN. The enumerators practiced mock sessions on administering survey tools in order to familiarize with the tools,

interview technique and filling out questionnaire. The tools were field-tested in Kailali district.

The main survey was carried out using of a paper version of a structured questionnaire developed in Nepali. FGDs, in-depth interviews, and KIIs were audio-recorded with the permission of all participants. All the discussions were held in mutually agreed, secure and private places (mostly in the residences of the participants).

Supervision and monitoring

Researchers strictly followed the research plan and activities submitted with their application to NHRC. The core research team members visited the study sites on an ongoing basis to monitor and supervise activities and to provide assistance. A monitoring plan and checklist were prepared. The checklist was to audit data quality. It included five criteria: (a) the research study design and methodology were followed; (b) eligible participants were included; (c) ethical considerations were kept in mind; (d) discussion guidelines were properly followed; and (e) qualitative notes had adequate information and were properly documented.

Data management and analysis

(a) Quantitative survey

The enumerators spot-checked completed survey questionnaire data to minimize errors and missing information. Intensive supervision during the entry of the survey data reduced the entry of data entry errors and duplication of data. Quantitative data were entered into Epi data software. Ten percent of data was entered twice to check the quality of the data-entering process. STATA software was used for statistical data analysis.

Descriptive statistics were generated using means, standard deviations (SDs), frequencies and percentages. The Clopper-Pearson method was used to estimate an exact confidence interval (CI) for each proportion. The data from the GHQ-12 questionnaire was analyzed using a dichotomous score for each of the 12 questions (i.e. a score of either 0 or 1 was considered '0' and those of 2 and 3 were considered '1'. Participants with overall scores of equal to or greater than 6 were defined as experiencing psychological morbidity) (Patel et al. 2008).

(b) Qualitative data

FGDs, KIIs and In-depth interviews were transcribed (McLellan et al., 2003) based on the original recordings. The transcribed data and associated notes were translated into English and stored in electronic files. Each interaction was transcribed within three to five days before being shared with the research team so that the team could (a) become familiar with each individual situation; (b) identify texts that were unclear due to differences in cultural contexts; (c) point out areas in which interviewing and transcription techniques could be improved; and (d) identify recurrent themes. Each transcript provided the format of covering note describing the interview, its setting, how the discussion was established, any differences from other interviews, particular incidents, the environment and the issues identified in the interview or discussion as well as thoughts about that session. The transcriptions also included non-verbal behaviors. The core research team independently reviewed the transcripts and translated versions. Transcripts were cross-checked with original recordings. Any disagreements about the appropriate translation were discussed in detail by the investigators. Qualitative data was analyzed using a thematic approach (Pope et al., 2000). Only relevant quotes from the transcriptions have been included in the research report.

Ethical consideration

This study was conducted in compliance with all human rights and with the ethical standards that health researchers conducting studies among human subjects are required to observe. The study protocol was approved by the NHRC (ref. No. 888). All survey procedures were designed to protect participants' privacy and participation was both anonymous and voluntary. Informed consent was obtained from all research participants prior to the survey interviews, FGDs, KIIs and in-depth interviews. A participant-information sheet written in Nepali provided research participants with sufficient information about the study's purpose procedures, including its complaint procedure, as well as about confidentiality and the risks and benefits to participants.

3. CHAPTER THREE: RESULT

This chapter is divided into two sections: the first section presents the quantitative data, and the second, the qualitative.

3.1 Quantitative findings

3.1.1 Socio-economic and demographic information

A total of 751 returnee migrants from six districts in Nepal with high rates of labour migration trends to India participated in this study. These districts were Achham, Banke, Doti, Kailali, Kanchanpur, and Surkhet. Men comprised a greater proportion than women overall; men, $n=726$ (96.7%) and women, $n=25$ (3.3%). The fact that labour migration is predominantly a male phenomenon in Nepal (Ministry of Labor Employment and Social Security, 2018) may account for the low numbers of women in this study. Table 3.1 shows the distribution of the study sample by gender in each sampled district.

Table 2: Sample size and gender of the participants

Districts	Women	Men	District sample
N (%)			
Achham	0 (0)	125 (17.2)	125 (16.6)
Banke	16 (64)	116 (15.9)	132 (17.6)
Doti	1 (4)	125 (17.2)	126 (16.8)
Kailali	0 (0)	124 (17.1)	124 (16.5)
Kanchanpur	3 (12)	116 (15.9)	119 (15.8)
Surkhet	5 (20)	120 (16.5)	125 (16.6)

The mean number of household members sharing the same kitchen was 6.3 (SD 2.7, range 2 to 20). Key socio-demographic characteristics are presented in Table 3.2. The majority were from age-group of 21 to 30 years and 31 to 40 years. The mean age of returnee participants was 32.0 years (SD 9.2, range 18 to 67). The vast majority were married (81.6%) and 17.4% were single. The mean monthly household income of participants was Nepali rupees (NPR) 20,614 (SD 15,225; range 0 to 150,000; mode

20,000). The mean duration of schooling among the participants was 6.8 years (SD 9.2; range 1 to 18; mode 8). Overall, 13.6% (95% CI 11.2-16.2) of returnee migrants had never attended school.

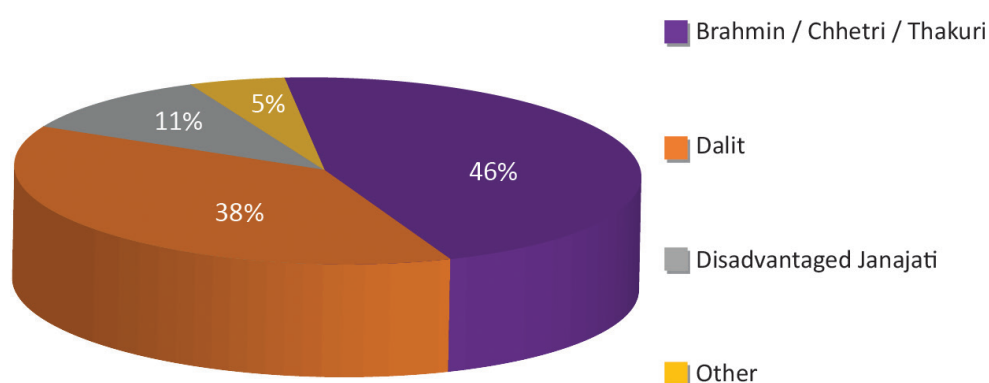
Table 3.2: Key socio-demographic characteristics of the participants

Variables	N (%)
Age distribution	
20 years or below	62 (8.3)
21 to 30 years	308 (41.0)
31 to 40 years	263 (35.0)
41 to 50 years	82 (10.9)
51 years or above	36 (4.8)
Educational status	
No schooling	102 (13.6)
Primary	236 (31.4)
Lower Secondary	231 (30.8)
Secondary	138 (18.3)
School Leaving Certificate (SLC) or higher	44 (5.9)
Marital status	
Married	613 (81.8)
Unmarried	123 (16.4)
Others*	13 (1.7)
Monthly household income (NPR)	
Less than 10,000	128 (17.2)
10,000 to 19,999	252 (33.9)
20,000 to 29,000	235 (31.6)
30,000 or more	129 (17.3)

NPR= Nepali Rupees (1 US \$= 110.8 NPR as of 10th June, 2019), others*= divorced, separated, widowed

The distribution of caste and ethnicity is presented in Figure 3.1. Nearly half of the participants (45.9%) were Brahmin, Chhetri or Thakuri and more than one-third were Dalit (38.1%).

Figure. 3.1: Distribution of returnee migrants by caste and ethnicity



3.1.1 Migration profile of returnee migrants

Of the 29 states of India, participants had worked in 24 in their most recent visits for work. Maharashtra, Gujarat, Delhi and Uttar Pradesh were the key destinations. Migrants from Achham and Doti were more likely than migrants from other districts to migrate to Maharashtra while those from Surkhet were more likely than others to work in Gujarat and Uttarakhand. Table 3.3 shows where participating returnee migrants had been.

Table 3.3: Destination Indian states of the participants

<i>Destination Indian states</i>	<i>Number (%)</i>
Maharashtra	201 (26.8)
Gujarat	90 (12.0)
Delhi	85 (11.3)
Uttar Pradesh	53 (7.0)
Himachal Pradesh	37 (4.9)
Punjab	37 (4.9)
Karnataka	36 (4.8)
Uttarakhanda	32 (4.3)
Haryana	30 (3.9)
Rajasthan	24 (3.2)
Goa	19 (2.5)
Jammu and Kashmir	16 (2.1)
Bihar	14 (1.9)
Other 11 states*	77 (10.2)

**Other states: Andhra Pradesh, Arunachal, Asaam, Jharkhanda, Kerala, Madhya Pradesh, Manipur, Odisha, Sikkim, Telangana, West Bengal*

The majority worked as factory workers (28.2%), hotel workers (27.8%) or watchmen (26.5%).

Table 3.4 shows the occupations of the participants.

Table 3.4: Occupations of the participants

<i>Occupation</i>	<i>Number (%)</i>
Factory worker	212 (28.2)
Hotel worker	209 (27.8)
Watchman	199 (26.5)
Driver	40 (5.3)
Agriculture worker	35 (4.7)
House servant	29 (3.9)
Other*	27 (3.5)

Other= Employee of Indian government, support role in school, hospital, bank etc.*

Participants from Surkhet District were mostly factory workers (46.4%), while those from Achham were mostly watchmen (45.6%) (Table 3.5). There was a significant difference in the proportions of various occupations by district of origin: chi-square (30 d. f.) was 163.2, $P < 0.01$.

Table 3.5: Occupation of the participants by district of origin

	Origin districts					
	Achham	Banke	Doti	Kailali	Kanchanpur	Surkhet
Occupation	N (%)					
Factory worker	12 (9.6)	46(34.8)	21(16.7)	34(27.4)	41 (34.4)	58(46.4)
Hotel worker	44 (35.2)	30(22.7)	44(34.9)	38(30.6)	27 (22.7)	26(20.8)
Watchmen	57 (45.6)	21(15.9)	33 (26.2)	26 (21.0)	33 (27.7)	29(23.2)
Driver	4 (3.2)	9 (6.8)	13 (10.3)	2 (1.6)	8 (6.7)	4 (3.2)
Agriculture worker	0 (0)	13 (9.8)	0 (0)	17 (13.7)	0 (0)	5 (4.0)
House servant	4 (3.2)	8 (6.1)	12 (9.5)	2 (1.6)	3 (2.5)	0 (0)
Other	4 (3.2)	5 (3.8)	3 (2.4)	5 (4.0)	7 (5.9)	3 (2.4)

Overall, 83.5% of migrants lived in India without their families. The self-reported mean monthly income of the participants while in India was Indian rupees (IRS) 11,590.35 (SD 4,529.7; range 1,000 to 60,000; mode 10,000). The income was fairly similar regardless of which district a participant was from. The mean duration of stay in India for work in the most recent visit was 13.7 months (SD 11.6; range 6 to 144; mode 8). On average, participants had been to India for work 5.9 times (SD 4.5; range 1 to 35; mode 4) during their live. The majority (80.9%) intended to migrate to India for work again.

Table 3.6 below presents the key reasons for the migrants' return from India. The most common reasons were leave for holiday, personal circumstances (unpaid and no guarantee of future work) and quitting their jobs. Only four participants (0.5%) reported that they had returned due to illness and just one (0.1%) was injured in an accident and thus not able to work.

Table 3.6: Reasons for return from India

Reason for return	Men	Women
	N (%)	
Holiday	348 (47.9)	2 (8)
Personal	310 (42.7)	20 (80)
Quitting the job	37 (5.1)	0 (0)
Pushed out	6 (0.8)	0 (0)
Political	3 (0.4)	1 (4)
End of contract	2 (0.3)	0 (0)
Other reasons*	20 (2.7)	2 (8)

* *accident, illness, employment in other countries, not getting salary, closure of workplace, etc.*

3.1.3 Work circumstances

The mean number of working hours of the participants per day was 10.9 hours (SD 2.5; range 4-24; mode 12). There was a statistically significant difference in the daily mean working hours by occupation (chi-square=79.2, $P < 0.001$). Less than one-third of participants reported having a weekly day off, sick leave and paid sick leave, with those who worked in agriculture or as domestic help the least likely to enjoy such rights. Table 3.7 shows the self-reported work-related circumstances of the participants by occupation.

Table 3.7: Work circumstances in India

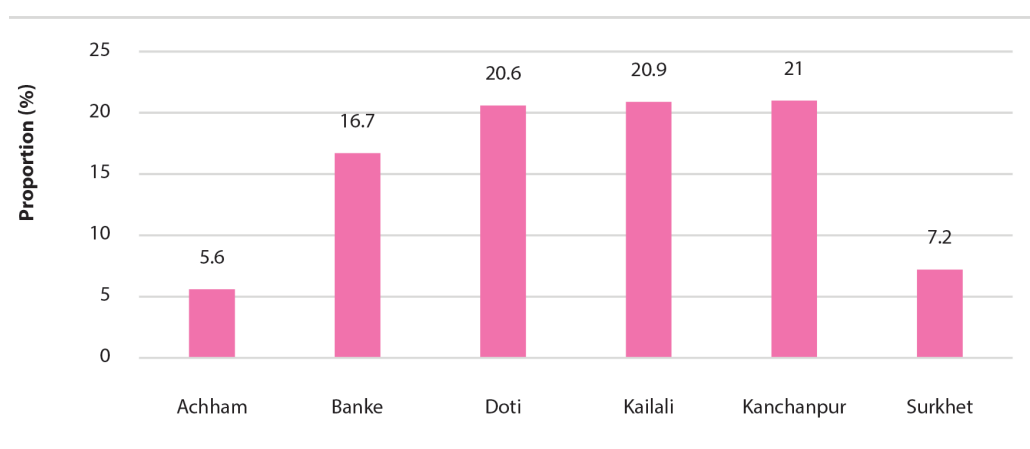
Occupation	Working hours/ day		Weekly day off (yes)	Sick leave(yes) (yes)	Paid leave (yes)
	Mean SD	Min-Max		N (%)	
Factory worker	10.7 (2.3)	6, 18	82 (24.5)	123 (26)	24 (17.8)
Hotel worker	10.3 (2.1)	4, 17	117 (35.0)	142 (30.0)	35 (25.9)
Watchmen	12.0 (2.7)	5, 24	89 (26.6)	117 (24.7)	48 (35.6)
Driver	10.2 (2.2)	6, 16	24 (7.2)	33 (7.0)	19 (14.1)
Agriculture worker	9.4 (1.8)	7, 15	12 (3.6)	31 (6.5)	0 (0)
House servant	12.4 (3.7)	4, 24	2 (0.6)	20 (4.3)	4 (3.0)

3.1.4 Existing health problems

Altogether 115 participants (15.3%) self-reported having existing health problems or being in treatment. Seven women (28%) and 108 men (14.9%) had existing health problems or were in treatment. Of all participants, 64 (8.5%) reported having an NCD or its risk factors, and 32 (4.3%) reported having communicable or infectious diseases. Work-related injuries (mainly accidents and falls) were the main existing health problem and were reported by 19 (2.5%) participants. This problem was followed by diabetes, $n=11$ (1.5%); hypertension, $n=11$ (1.5%); chronic obstructive pulmonary disease (COPD), $n=8$ (1.1%); malaria, $n=6$ (0.8%); and hepatitis, $n=6$ (0.8%). Five people (0.7%) reported having STIs. Participants who had worked in Gujarat reported the highest proportion of existing health problems or involvement in treatment, $n=19$ (21.1%); followed by those who worked in Punjab, $n=7$ (20%); Delhi, $n=15$ (18.1%); Karnataka, $n=6$ (16%); Uttar Pradesh, $n=8$ (15.4%); Himachal Pradesh, $n=4$ (12%); and Maharashtra, $n=23$ (11.5%).

Figure 3.2 shows the self-reported proportion of existing health problems or involvement in treatment by district. Participants from Kanchanpur, Kailali, and Doti had the highest rates, and differences by district were statistically significant: chi-square (5 d.f.) was 24.4, $P<0.01$.

Figure 3.2: Self-reported existing health problem or involvement in treatment (n=115)



Both men and women working as factory workers and watchmen were more likely to report existing health problems or involvement in treatment. The main health problems of factory workers were injuries due to falls (n=10, 24.4%); TB and pain (n=4 each; 9.7%). For watchmen, diabetes (n=7; 18.9%) and hypertension (n=6; 16.2%) were the main health problems. There was no statistically significant difference in these rates by occupation: chi-square (6 d.f.) was 10.4, P=0.1. Table 3.8 shows the proportion of self-reported existing health problems or involvement in treatment by the occupations of the participants while working in India.

Table 3.8: Self-reported proportions of returnee migrants with existing health problem or in treatment by occupation (n=115)

Occupation	Number (%)
Factory worker	41 (35.6)
Watchman	37 (32.2)
Driver	7 (6.1)
House servant	5 (4.3)
Other*	25 (21.7)

**Other occupations were agriculture farmer, government job, working at school, hospital, care home, beauty salon etc.*

The majority of the participants (76.9%) perceived that their working and living condition in India were the main reason for their existing health problems. With regards to working and living conditions related-health risk, more than one-fourth (26.1%) reported that infectious diseases (TB, malaria, dengue, and/or typhoid) were the main risk, followed by accident and injury (11.6%).

3.1.5 Psychological morbidity

The mean GHQ score of the participants was 11.2 (SD 5.3). 101(13.4%) (95% CI 11.1 to 16.1) participants had a score of equal to or greater than 6, which is the cut-off point for morbidity. Table 3.9 shows the proportion of participants with GHQ scores of 6 or above by age group. There was no significant difference in mental distress by age group: chi-square (4 d.f.) was 4.7, P=0.32.

Table 3.9: Participants with psychological morbidity (score of 6 or more) by age group (n=101)

Age group	Number (%)
20 years or less	9 (8.9)
21 to 30 years	41 (40.6)
31 to 40 years	32 (31.7)
41 to 50 years	10 (9.9)
51 years or above	9 (8.9)

More than one-quarter of migrants from Doti and Surkhet suffered from great mental distress and there were significant differences by district of origin: chi-square (5 d.f.) was 64.0, $P < 0.01$. Those who had worked in Gujarat and Maharashtra had greater, but not statistically significant, mental health risks. There were no statistically significant differences in mental distress by occupation either, although factory workers, watchmen and drivers had higher rates. The proportion of participants with psychological morbidity by district of origin, Indian state of destination and occupation is given in Table 3.10.

Table 3.10: Psychological morbidity by district of origin, state of destination and occupation (n=101)

Variables	Number (%)
<i>Origin district*</i>	
Achham	1 (0.9)
Banke	5 (4.9)
Doti	32 (31.7)
Kailali	15 (14.8)
Kanchanpur	14 (13.9)
Surkhet	34 (33.7)
<i>Key destination states</i>	
Maharashtra	31 (30.7)
Gujarat	16 (15.8)
Delhi	7 (6.9)
Uttar Pradesh	6 (5.9)
Punjab	5 (4.9)
Himachal Pradesh	2 (1.9)
Karnataka	3 (2.9)
<i>Occupation</i>	
Factory worker	32 (31.7)
Watchman	30 (29.7)
Hotel worker	26 (25.7)
Driver	6 (6.1)
House servant	5 (4.9)
Support staff (private)	1 (0.9)
Agriculture worker	1 (0.9)

3.1.6 Malaria

Around 6.6% (n=50) of the participants self-reported having suffered from malaria while working in India. A not able proportion of participants (11.8%) had not heard of malaria. Of those participants who had (n=662), the vast majority (97.4%, n=645)

knew that the bites of infected mosquitoes are the main cause of malaria. More than one-third (39.3%) reported that they always worked in an open space and 22.8% occasionally worked in an open space. Of those who always or occasionally worked in an open space (n=466), 51.8% had to work outdoors most of their time.

Around 69.8% of participants always used preventive measures against mosquito bites and 9% reported using preventive measures intermittently. Of those who always used preventive measures against mosquitos (n=524), nearly half (47.3%) reported using mosquito nets. Other common methods were using coils (29.8%), liquid (18.1%), creams (8.9%), air fans and sprays (3.2%).

3.1.7 Sexual behavior and violence

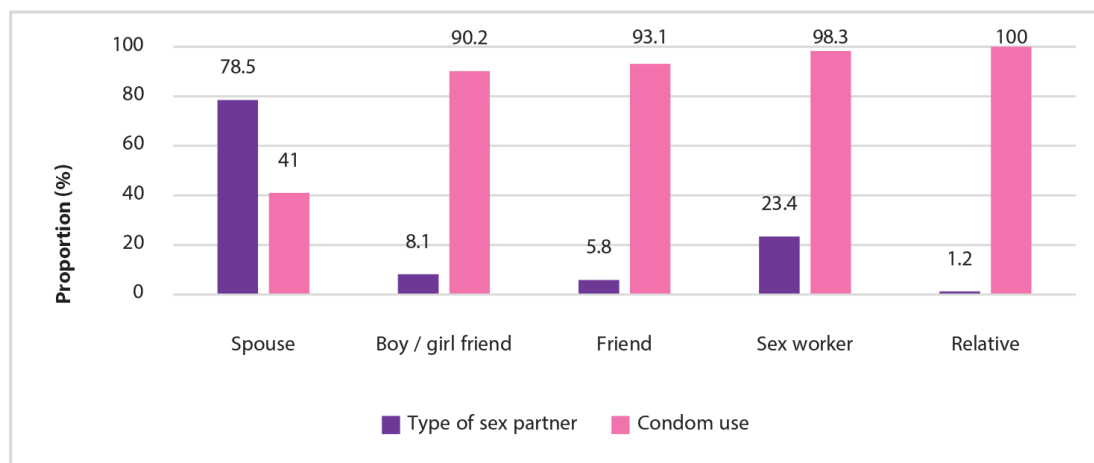
Around two-thirds (n=502, 66.8%) of participants had had sexual intercourse in the past six months. Of them 30.4% (148 men, 5 women) reported that they had had more than one sex partner (Table 3.11).

Table 3.11: Number of sex partner of the participants in past 6 months by gender

Number of sex partner	Men(n=489)	Women(n=13)
N (%)		
One	342 (69.9)	8 (61.5)
Two to five	142 (29.0)	5 (38.5)
Six to nine	4 (0.8)	0 (0)
Ten or more	2 (0.4)	0 (0)

The prevalence of condom use by type of sexual partner is presented in Figure 3.3. Of the participants who had had sexual intercourse in the past six months, the majority had had it with their spouses, and nearly one-quarter (23.5%) had sexual contact with sex workers. Among those who had had sex with sex workers, almost all (98.3%) reported using condom during their last sexual intercourse and 88.1% reported always using a condom. By contrast, condom use with spouses was the lowest (41%). Among married participants with more than one sex partner (n=131), 27.5% reported having used condoms during their last sexual intercourse.

Figure 3.3: Prevalence of condom use by type of sexual partner



Overall 2.3% (n=12) reported having experienced sexual violence at work at the hands of an employer or colleague. All of them were men. In addition, 8.8% of participants (65 men, 1 woman) were aware of sexual violence against friends in the workplace by an employer or colleague.

3.1.8 Tuberculosis

The self-reported prevalence of TB in the participants was 1.7% (n=13) and 2.3% (n=17) did not know about it. This proportion is based on participants having been told by a health worker that they were infected at any time in the past. Moreover 6.7% (n=50) of the participants reported having had contact with someone with active TB in the past year. Around 7.7% (n=58) worked or volunteered in a setting where TB could be common, such as a homeless shelter, nursing home, group home or prison. Table 3.12 shows that loss of appetite (12.6%) and chest pain (12.4%) were the most frequent symptoms of TB experienced by the participants.

Table 3.12: Self-reported key symptoms of TB (n=751)

TB symptoms	Number (%)
Productive cough for more than two weeks	28 (3.7)
Coughing up blood	3 (0.4)
Unexplained weight loss	41 (5.5)
Fever, chills or night sweats for no known reason	44 (5.9)
Chest pain while coughing	93 (12.4)
Weakness or easily fatigued	69 (9.2)
Loss of appetite	95 (12.6)

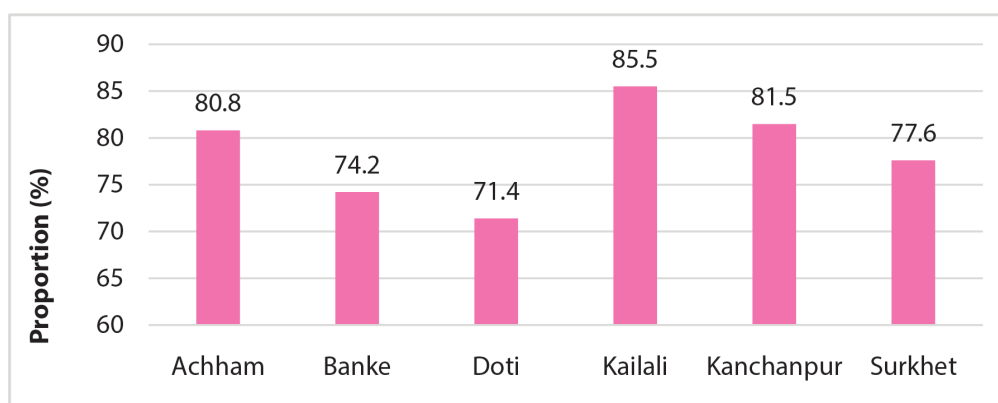
3.1.9 Non-communicable disease risk factors

3.1.9.1 Use of tobacco products

Around 55.1% (n=414) (95% CI 51.5 to 58.7) reported that they were current smokers; the majority of these (82.8%; 95% CI 78.9 to 86.3) were daily smokers. More than two-thirds (68.2%) (95% CI 64.7 to 71.5) were current users of smokeless tobacco (chewing tobacco/snuff). Altogether 78.4% (n=589) (95% CI 75.3 to 81.3) were current users of tobacco in any form. Figure 3.4 shows the prevalence of current users of tobacco in any form by district of origin.

The mean duration of smoking was 9.9 years (SD 7.0, range 1 to 35, mode 10). More participants, both men and women, reported currently using smokeless tobacco than smoking tobacco. There was a statistical difference in the prevalence of current smoking and current use of smokeless tobacco: chi-square (d.f.1) was 74.4, $P < 0.01$. Participants from Achham District had the highest rates of smoking (63.2%), and, by occupation, factory workers were more likely to be smokers (59.4%) than those who did other jobs.

Figure 3.4: Prevalence of users of any form of tobacco by origin



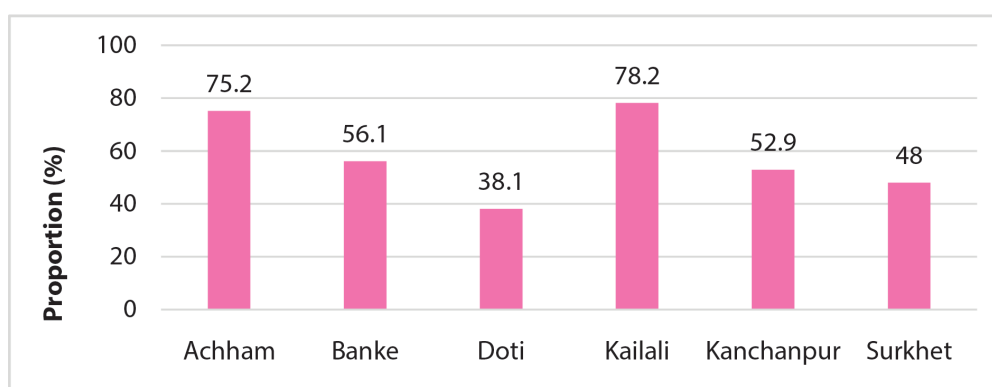
Of tobacco users (n=589), nearly half (48.0%) reported that their consumption tendency was different in India while staying for work than in Nepal. Of them, around 13.6% reported using tobacco products more frequently in India than in Nepal.

3.1.9.1 Alcohol intake

More than two-thirds (69.6%, n=523) (95% CI 66.2 to 72.9) of participants had ever consumed alcohol. More than half (58%, n=436) (95% CI 54.4 to 61.6) had consumed alcohol in the past 30 days and were thus designated as “current drinkers.”

In general, participating returnee migrants from all six districts were likely to be current drinkers, but rates were highest among those from Kailali (78.2%, n=97) and Achham (75.2%, n=94). Of all current drinkers, nearly one-fifth (19.9%) said that their alcohol intake tendency was different while they worked in India than it was in Nepal. About 16.1% reported that their alcohol intake was higher in India compared to when they were in Nepal. Figure 3.5 shows the prevalence of current drinkers by district of origin.

Figure 3.5: Proportions of current drinkers by district of origin



3.1.10 Health service-seeking behavior in India

Around 67.5% (n=507) (95% CI 64.0 to 70.8) of the participants reported that either they had been sick or that their friends had been sick while working in India. Almost all (96.9%) who had been sick in India had gone to health care centers. The proportion of communicable and infectious disease and NCD or risk factors was fairly similar (16% vs. 14.6%). Of those who had been or were ill (n=507), 74.3% reported that related health problems had not occurred or had not been diagnosed previously in Nepal. Table 3.13 lists key health problems the participants suffered while working in India.

Table 3.13: Key illness or health problems while staying in India for work

Type of illness* (N= 507)	Number (%)
Malaria	50 (9.9)
Dengue	27 (5.3)
Traffic accident	27 (5.3)
High blood pressure	27 (5.3)
Mental health issues	14 (2.8)
Tuberculosis	13 (2.6)
Typhoid	12 (2.4)
Diabetes	10 (1.9)
Stomach problems	8 (1.6)
Sexually transmitted infections	7 (1.4)
Lungs disease (COPD)	7 (1.4)

****Participants could have reported more than one type of illness***

Among those who sought health care in India (n=482), 68.9% visited private hospitals or clinics or government hospitals (48.1%) and 25.5% bought medication at a local pharmacy, although these are not mutually exclusive actions. No one reported that they had visited a traditional healer. Table 3.14 lists the health services sought in India.

Table 3.14: Type of health services used by participants in India

Type of health services (n=482)	Number *(%)
Medical checkup and treatment	337 (69.9)
Laboratory test	252 (52.3)
Optical care	38 (7.9)
Radiology	34 (7.0)
Physiotherapy	26 (5.4)
Mental health	8 (1.6)
Maternity care / antenatal checks	3 (0.6)
Other treatment or unknown	75 (15.6)
Never sought any health services	4 (0.8)

****Participants could have used more than one type of health services***

More than two-thirds (78.2%) paid the full cost of treatment themselves, but employers covered the entire cost for 11.6% (n=56) and part of the cost for 12.2% (n=59). Of all participants, only 5.5% (n=41) had health insurance. Of them, 34.1% were hotel workers and 24.4% were factory workers.

Of those seeking healthcare in India (n=482), 40.9% faced difficulties accessing services (Table 3.15): unaffordable healthcare cost, language barrier, and lack of information.

Table 3.15: Key obstacles to accessing health care in India

Key obstacles	Number (%) (n=482)
Unaffordable cost	353 (73.2)
Language barrier	270 (56.0)
Lack of information	241 (50.0)
Complex system	142 (29.5)
Discrimination due to migrant status	88 (18.2)
Unaware of health rights	80 (16.6)
Discrimination due to socio-economic status	61 (12.6)
Long distance from work place	48 (9.9)
Fear of being unwelcomed or denied treatment	40 (8.3)
Doctors are not available	25 (5.2)
Does not like going to the doctor	10 (2.1)

****Participants could have reported more than one type of obstacles***

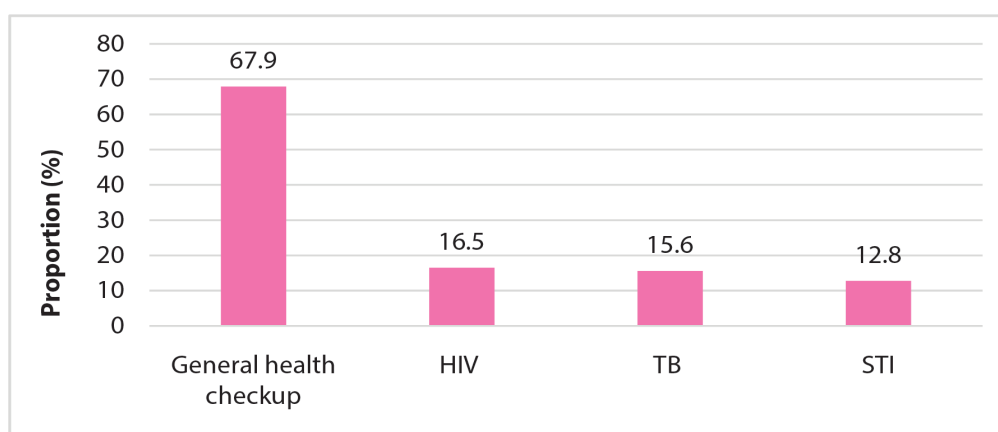
3.1.11 Health seeking behavior after return to Nepal

Participants were aware that it is necessary to perform health checkups after returning to Nepal, while 73.4% (n=551) (95% CI 70.0 to 76.5) knew this, only 14.5% (n=109) (95% CI 12.1 to 17.2) actually had a medical checkup after they returned. Those who

did not have a medical checkup gave these reasons: perceived insusceptibility (83.6%), inconvenient time (9.4%), no medical centers nearby (1.6%) and costs (1.5%).

Of those who did have a medical checkup after returning (n=109), 32.1% did so within a week of return and 44.9% within a month. The preferred localities were government hospitals (49.5%) and private hospitals or clinics (31.2%). Figure 3.6 shows the key tests performed during such examinations.

Figure 3.6: Type of tests done during medical examinations after return (n = 109)



Almost all participants (98.3%) believed their migration-related behavior and circumstances could cause them to transmit a disease to their partners or families. They thought that the key migration-transmittable diseases were HIV (93.1%), TB (73.6%), Sexually Transmitted Infections (STIs) (66.4%) and malaria (30.2%).

3.1.12 Health issues in place of origin

Participants reported that diarrhea (68.9%, n=518) and typhoid (60.3%, n= 453) were the main health problems at home. In Nepal, they usually went to government hospitals (66.0%, n=496), private clinics (20.9%, n=157) or health institutions run by NGOs (10.8%, n=81) for medical services. Table 3.16 shows the key health problems in the place of origin of the participants.

Table 3.16: Major health issues at the place of origin as reported by the participants (n=751)

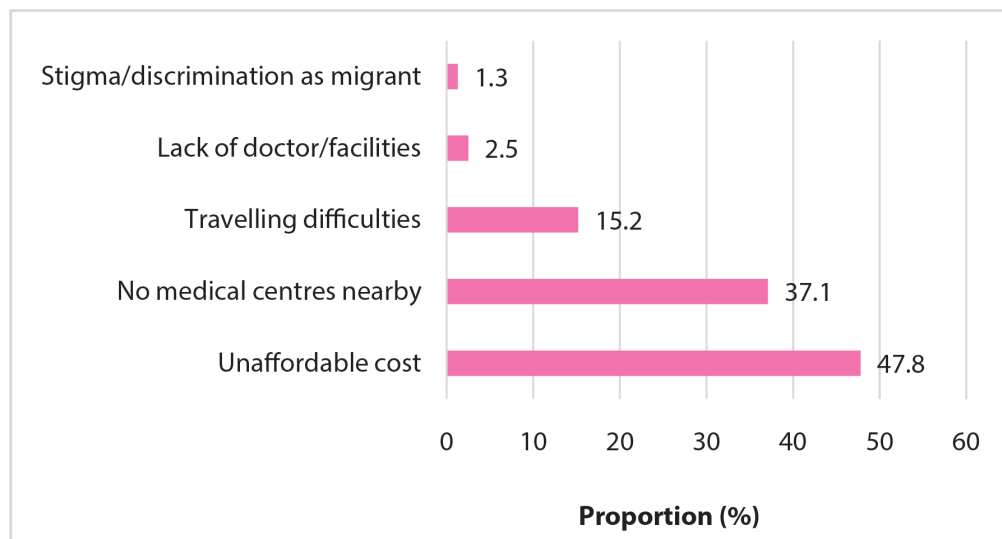
Health problems	Achham	Banke	Doti	Kailali	Kanchanpur	Surkhet	Total(n=751)
N (%)							
Diarrhea	91(17.6)	122 (23.5)	54 (10.4)	79 (15.2)	56(10.8)	116 (22.4)	518 (68.9)
Typhoid	90(19.9)	98 (21.6)	57 (12.6)	75 (16.6)	59 (13.0)	74 (16.3)	453 (60.3)
Abdominal pain	75 (21.8)	75 (21.8)	43 (12.5)	45 (13.1)	21 (6.1)	85 (24.7)	344 (45.8)
Pneumonia	59 (17.2)	102 (29.8)	31 (9.1)	26 (7.6)	53 (15.5)	71 (20.8)	342 (45.5)
Intestinal worm	71 (25.2)	86 (30.5)	28 (9.9)	20 (7.1)	17 (6.0)	60 (21.3)	282 (37.5)
TB	65 (27.4)	17 (7.2)	36 (15.2)	40 (16.9)	16 (6.7)	63 (26.6)	237 (31.5)
Malaria	68 (29.9)	29 (12.8)	28 (12.3)	36 (15.9)	15 (6.6)	51 (22.4)	227 (30.2)
Cholera	14 (6.7)	89 (42.8)	18 (8.6)	10 (4.8)	5 (2.4)	72 (34.6)	208 (27.7)
HIV/STIs	43 (22.9)	13 (6.9)	28 (14.9)	16 (8.5)	10 (5.3)	78 (41.5)	188 (25.0)
Hepatitis A / Jaundice	15 (13.3)	35 (31.0)	17 (15.0)	8 (7.1)	8 (7.1)	30 (26.5)	113 (15.0)
Eye problem	6 (6.4)	12 (12.9)	17 (18.3)	8 (8.6)	12 (12.9)	38 (40.9)	93 (12.4)

****The question asked was “what are the key health problems at your place of origin?”***

****Participants could have reported more than one health problems***

Unaffordability and unavailability of healthcare centers nearby were the main barriers to access to health services in Nepal. More than two-thirds (69.4%, n=521) had to walk for more than 30 minutes and more than one-third (36.5%, n=274) had to walk for more than an hour to reach a healthcare center. Of the available healthcare centers nearby, nearly half (48.9%, n=367) of the participants reported having facilities for testing for TB, HIV (42.1%, n=316), and STIs (40.1%, n=301). The majority (78.3%, n=588) were not aware of any health programs currently running. Key barriers to access healthcare services in Nepal are presented in Figure 3.7.

Figure 3.7: Barriers to access healthcare services by participants in Nepal



3.2 Qualitative findings

The following section presents the qualitative results of the study in two main sections. The first section describes the socio-demographic characteristics of participants (FGDs, KIIs and in-depth interviewees) and the second section summarizes the key themes generated from the thematic analysis of the focus group and interview data. The key socio-demographic characteristics of all the participants in qualitative research are listed in Appendix 5 (see tables 3.17-3.19). The quotes used below to illustrate the themes use the following identifiers: source of qualitative data, state of destination in India and district of origin in Nepal. For example, a speaker might be identified as FGD participant, Telangana, Banke.

3.2.1 Key themes

The analyses of FGDs, interviews and KIIs revealed several key themes, all of which are discussed below:

- Reasons for migration
- Perceived work environment
- Health risks faced by cross-border migrants
- Accessibility, affordability and quality of healthcare in India Barriers to accessing healthcare services in India
- Sources of health information and knowledge in India
- Accessibility and affordability of health care in Nepal
- Mechanism to control cross-border transmission of diseases/awareness program
- Suggestions to improve health and wellbeing of migrant workers

3.2.2 Reasons for migration

The FGD and interviews suggested that a lack of job opportunities in Nepal, the need to support one's family, the open border, geographical proximity, little governmental investment and low industrialization, flexibility about returning home, and influence from other people were the key reasons participants had migrated to India. The following words of FGD participants exemplify the push factors for migration.

Because we need neither tickets nor visas to go to India. If you have NPR 400-500, you can get there. (FGD participant, Telangana, Banke)

It's because we feel comfortable going and returning home on different occasions. (FGD participant, Uttarakhand, Surkhet)

We do not get jobs here, and because of unemployment, we have difficulties to feed our babies. (FGD participant, Maharashtra, Achham)

Here in our Madhesi community, most of the people are illiterate, so, they can't get work and they are forced to migrate to India. (FGD participant, Delhi, Banke)

The key informants also highlighted the reasons they had migrated, including the following:

People do not have a source of income here. There is high unemployment in the country. (KII, Health professional, Achham)

There are many reasons, such as poverty, low level of education and unemployment. Some people drop out of school at a young age and are persuaded to go India by other people. (KII, Health professional, Doti)

People can reach India by bus or train within just 24 hours. People go there as they can return home after a short stay. (KII, Local representatives, Kanchanpur)

3.2.3 Perceived work environment

Entry into the Indian labour market is not always easy for Nepali migrant workers. As is the case in other countries receiving large numbers of immigrants, Nepali migrants in India also face difficulty in adjusting to the new society and leading a safe and healthy lifestyle. Most FGD participants and KII and in-depth interviewees thought that their working environments were poor. They pointed to pressure and discrimination at work, low incomes, long working hours, language problems and accidents and injuries as common problems. Some of their comments on their work environments are below.

They give more work to Nepali but provide us with only 15 days' worth of wages and withhold the remaining 15 days of wages because they think migrant

workers will quit their jobs. (FGD participant, Maharashtra, Achham)

There was no time for lunch in the company I worked for, so I ate dinner only. (FGD participant, Himachal, Surkhet)

We are dominated because we are Nepali. They threaten us to send us home when we raise our voices. (FGD participant, Karnataka, Kanchanpur)

While working, we do not have a fixed time to eat our meals. Let me recite a rhyme: “Kahile khana bahra baje kahile rahanu bhoko, yo jindagi dukhaima bityo raigo manko dhoko.” (Sometimes I eat at noon, sometimes I remain hungry. Life went by in sorrows, dreams remained unfulfilled). (Returnee male migrant, Maharashtra, Achham)

One of colleagues at my workplace died, but his family got nothing from the company because they didn’t know about claiming compensation. (Returnee male migrant, Himanchal, Surkhet)

Indians employ Nepali people as they think we are hard workers who work for long periods. (Returnee male migrant, Maharashtra, Achham)

In contrast, below are some positive experiences about their workplaces that they shared.

Conditions differ from workplace to workplace. The working environment was good where we worked. There was no pollution, and everyone looked civilized’. (FGD participant, Maharashtra, Doti)

We do everything according to a fixed timetable. Lunch and other meal times are arranged beforehand. We did not face any discrimination for being Nepali nationals. (FGD participant, Punjab, Doti)

In the first few months, it was hard. I wanted to return home. After learning the work, however, it became easier. My employer was happy with my work and offered me an increment in salary. (Returnee male migrant, Himachal, Kanchanpur)

3.2.4 Health risks faced by cross-border migrants

Many Nepali migrants reported having many health issues. As their experience of health problems was of critical interest to the aims and objectives of this study, the findings highlight the study participants' experiences of health vulnerabilities and identify factors that participants perceived as related to these risks.

FGD participants and KII and in-depth interviewees indicated that their health risks ranged from minor risks like the common cold and fevers to serious cases causing life-long disabilities or even, in some cases, death. Not all risks were due to a poor working environment: some FGD participants and KII and in-depth interviewees noted that health problems vary according to place and weather. Participants generally agreed that Nepali migrants are at risk of STIs, including HIV; accidents and injuries, TB, malaria and typhoid than the general population

The majority of people who go to India get infected by HIV by having unsafe sex. And, unfortunately, it gets transmitted to unborn children. (FGD participant, Delhi, Banke)

The diseases commonly seen among migrant workers are tuberculosis, malaria, typhoid and stomach-related health issues. (FGD participant, Odisha, Surkhet)

I suffered from typhoid. I was admitted to a hospital for 10 days and paid the bill for myself. (FGD participant, Maharashtra, Achham)

Trauma, anxiety and difficulties are normal among Nepali migrant workers. (FGD participant, Uttarakhand, Surkhet)

One Nepali died while working in road construction in Shimla. We had to collect donations to perform his funerary rituals. (FGD participant, Maharashtra, Surkhet)

One migrant died in a traffic accident but his family got compensation as he was insured. (FGD participant, Himachal, Surkhet)

Most of the in-depth interviewees highlighted that Nepali migrant workers often suffer from TB, malaria, gastritis, asthma, typhoid, fever, heart and skin diseases and mental illness. Some of their comments follow.

Most Nepali workers fall sick because of malaria, typhoid and fever as they work in open places. Other health problems among them are tuberculosis and heart- and skin-related diseases. (Returnee male migrant, Telangana, Achham)

I also have seen people suffering from mental illness. The one I know used to work in an apartment 24-7. She had to cook and clean as well as stand guard at night. She became prone to severe mental stress because she never had leisure time. (Returnee male migrant, Delhi, Doti)

Talking about injuries, some fall off vehicles while driving, some lost their lives being chopped by a machine, and some were electrocuted. (Returnee male migrant, Punjab, Doti)

Most key informants explained that migrants are at high risk of sexually transmitted infections, including HIV/AIDS, malaria, tuberculosis and dengue while they work in India. Migrants are forced to work for little salary and to do physically demanding tasks. Because they do not get treatment on time, they suffer from health problems and sometimes even die in India. Moreover, some workers bring various diseases back to Nepal.

Several cases of HIV/AIDS and other sexually transmitted diseases have been reported in Achham. (KII, Health post-in-charge, Achham)

Some areas of Panchapuri municipality are considered pocket areas of HIV/AIDS in Surkhet District. (KII, Health worker, Surkhet).

A boy from our village died as he didn't get treatment when he fell sick. (KII, Local political leader, Achham)

3.2.5 Accessibility, affordability and quality of healthcare in India

Access to healthcare impacts one's overall physical, social and mental health status and quality of life. The FGDs, KII and in-depth interviewees shared that

they had had mixed experiences using health services in India. Participants from each category noted that health access depending on the place where the migrants lived, the nature of the companies they worked for, the intelligence of the employer, the level of income of individual migrant workers and local transportation facilities. Some FGDs participants were positive about the healthcare facilities in India, as is shown below.

Yes, there are government hospitals as well as private clinics. There are no problems to speak of regarding access to health services. (FGD participant, Delhi, Banke)

The health center in my place was good. It used to issue tickets even over the telephone. (FGD participant, Gujrat, Surkhet)

After my rib was broken while working, my company bore the cost of my treatment. (FGD participant, Gujrat, Surkhet)

The health costs of some workers are paid by companies. (FGD participant, Delhi, Achham)

When I fell sick, my employer paid for me. (FGD participant, Telengana, Banke)

A number of returnee migrant interviewees stated that most Nepali migrants visit government hospitals and health centers but that others go to private hospitals. In terms of health costs, Nepali migrants may receive a limited amount of support from the companies they work for. Choices regarding hospitals depend on how much a migrant worker can afford. Several interviewees shared that their experiences of healthcare in India were mixed.

Our employer used to bear our health expenses as we were insured. (Returnee male migrant, Delhi, Kanchanpur)

We have to bear costs ourselves. If a company is well-established, it also bears part of the cost of health treatment for its employees, but in the majority of cases, we have to pay for ourselves. (Returnee male migrant, Uttaranchal, Surkhet)

Ninety-five percent of Nepali brothers and sisters pay for health services on their own. Only in five percent of cases do employers bear the health expenses of

their workers. Health services in government hospitals are cheap but those in private hospitals are expensive and are not affordable for all Nepali migrants. (Returnee male migrant, Telengana, Achham)

If companies are good, they support their workers. For example, one diamond company has insured health of its employees. If workers claim medical expenses, the insurance company pays them. All companies do not provide insurance facilities, however. (Returnee male migrant, Telengana, Kanchanpur)

About half of the KIIs mentioned that Nepali migrants struggle to get health services because they do not have *aadhar* cards (identification number for residents in India (regardless of citizenship) who live there for minimum of 182 days in India), they are unfamiliar with locations and have little decision-making power, as is indicated below.

It is difficult for migrant workers to access health services at government hospitals if they don't have an aadhar card. (KII, Chairperson of rural municipality, Achham)

Many Nepali migrant workers do not access hospitals because they are hesitant and unfamiliar with the system. (KII, School teacher, Kailali)

One KII shared that Indian health workers treat Nepali workers fairly:

Indian health workers do not discriminate between Nepali and Indian nationals. (KII, Health post-in-charge, Achham)

Both FGD participants and in-depth interviewees were asked how healthcare workers responded to them while they were seeking treatment at health centers. Participants' responses were mixed.

They say nothing bad to patients who go to receive treatment. They do as much as they can. Otherwise, they refer them to other places. (FGD participant, Uttar Pradesh, Doti)

I suffered from illness in India. I was admitted to a hospital. I received good treatment. I did not feel discriminate against for being a migrant labour. I had heard that they behave differently to the people with look like Janajati, but I

have not faced such a situation thus far. (Returnee male migrant, Uttaranchal, Surkhet)

I visited private hospital and the behavior of the health workers was good. (Returnee male migrant, Telengana, Kanchanpur)

We are always afraid. We wonder if we will be given the wrong injection or have some organs taken out of our bodies. (Returnee male migrant, Delhi, Doti)

3.2.6 Barriers to accessing healthcare services in India

Despite the above reports of easy access to healthcare in India, some FGD participants commented that they had faced a number of barriers to accessing and using health services. Participants' dissatisfaction was associated with financial problems, language barriers, discrimination and unfamiliarity with locations.

In comparison to Nepal, it is difficult to seek health services in India due to the language problem and the unfamiliarity of locations. (FGD participant, Returnee male migrant, Maharashtra, Achham)

Indians dominate Nepali people, doctors neglect us, Indians cut queues, and hospitals and doctors charge high fees. (FGD participant, Returnee male migrant, Gujrat, Surkhet)

In case of any general illness we ourselves would treat ourselves. In the case of acute illness, we were told to go home and get treated. (FGD participant, Returnee male migrant, Uttar Pradesh, Banke)

Money matters the most. If you have money, you can get medicine nearby; if you don't, you can't. (FGD participant, Returnee male migrant, Telengana, Banke)

Similarly, several returnee migrants who participated in in-depth interviews mentioned that communication problems, lack of information, expensive fees, overcrowded government hospitals and not getting time off work from their employers for treatment are some of the challenges to accessing health services:

We do face different setbacks. First, we don't have enough money to get treatment in advanced hospitals. When we don't have an aadhar card, they don't admit us either. Our citizenship papers aren't useful for accessing health services. (Returnee male migrant, Delhi, Doti)

It is difficult to get leave from the workplace. (Returnee male migrant, Telengana, Achham)

If you are sick, there is no one to take care of you. Even if friends and relatives are present, they cannot give you time as they are busy at work. If someone takes care of his friend, he will be scolded by his boss for not working. (Returnee male migrant, Telengana, Kanchanpur)

A number of key informants highlighted that language barriers, not getting salaries on time and the passiveness of individual migrants also pose problems for seeking healthcare services.

In India, migrant workers have to bear the cost of treatment on their own. Delays in receiving their salaries also affects their treatment. They have to take a loan to pay for health services. (KII, Local representatives, Bheriganga Municipality, Surkhet)

It also depends on how proactive migrant workers are. Some workers may not visit health centers even if they have information about them. (KII, Health post-in-charge, Achham)

Language also creates barriers to communicating with doctors effectively. Nepali migrant workers cannot express their problems. Unlike their Indian counterparts, they hesitate to mention their problems and hide their illnesses. Thus, their treatment is not effective. (KII, Local representatives, Bheriganga Municipality, Surkhet)

3.2.7 Sources of health information and knowledge in India

Posters, pamphlets, television broadcasting, newspapers and street dramas are considered powerful tools for communicating health-related information. Participants argued that there are limited sources of health-related information

for migrants and that most are in Hindi. They shared that information is largely disseminated through print and audio-visual media.

I didn't read the Indian language newspaper, but I got some information from television. (FGD participant, Maharashtra, Doti)

We used to go out only once or twice a week and never got such information outside. (FGD participant, Delhi, Banke)

We learned information from posters written in Hindi and Marathi. Material in Nepali was not available. (FGD participant, Gujarat, Achham)

We learned from the radio, television and internet. (FGD participant, Odisha, Surkhet)

Nepali migrants in India often get health-related news from the radio, television and Facebook. Posters and pamphlets are written in local languages not in Nepali. (Returnee male migrant, Telengana, Achham)

No information that specifically targets Nepali workers is available. Nepali people get information from relatives who have been residing there for a long time. (Returnee male migrant, Mumbai, Achham)

FGD participants and in-depth interviewees were asked to elaborate about the health awareness programs in India targeting Nepali workers. Most participants revealed that no health promotion activities target Nepali migrants.

There are no migrant-specific programs related to health. (FGD participant, Odisha, Surkhet)

I have never seen such things. (FGD participant, Mumbai, Doti) We could benefit from such programs if we had access to information about them. (FGD participant, Gujarat, Surkhet)

I have not heard about or seen anything like this. However, I have seen some organizations and people raise funds to help Nepali nationals suffering from diseases. Health camps are also organized occasionally. (Returnee male migrant, Telengana, Kanchanpur)

No communication materials are produced that particularly target Nepali migrant workers. No such materials are provided to Indian nationals either. (Returnee male migrant, Uttaranchal, Surkhet)

3.2.8 Accessibility and affordability of healthcare in Nepal

FGD participants, KII and in-depth interviewees stated that government hospitals, private clinics and local NGOs do offer services but that they lack some health facilities. Some participants shared that they have easy access to health facilities whereas other participants (especially those from remote villages) mentioned difficulties accessing health services due to the lack of roads or transportation and shortages of medicines. Some responses are presented below.

There is a hospital a bit far from here, and service is easy if we have good contacts and relations with them. Health services have been politicized and patients are discriminated against. (FGD participant, Gujarat, Achham)

The staff at government hospitals always complain about shortages of different things. If you go to private clinics, you get the services that want, but they charge high prices. (FGD participant, Delhi, Doti)

Health services are not usually accessible for all people in the community. (FGD participant, Maharashtra, Achham)

There is health facility in my community but it is 6-7 km from my home. From Melkuna (Ramghat), it takes around 2-2.1/2 hours on foot. There are also private clinics but they only provide general check-ups. We have to go to Surkhet or Nepalgunj when we are seriously ill. (Returnee male migrant, Uttaranchal, Surkhet)

We have to go to Kathmandu and India for diseases which are not treated in Bayalpata. (Returnee male migrant, Maharashtra, Achham)

We can bear the cost of minor illness, but for serious illnesses, we have to go to other cities and we can't afford to. (Returnee male migrant, Uttaranchal, Surkhet)

Around 80 to 100 persons per month receive Anti-Retroviral Therapy (ART) from Purbichowki village council. From Sanagaun, there are 10 beneficiaries of ART. (KII, Health professional, Doti)

My party has been supporting some patients with chronic diseases by collecting donations. We have also provided food to them. Depending upon the problem, we have been advocating with concerned authority to provide support to such patients. We help them to bring them to the hospital in the district headquarters. For example, just a few days ago, we helped a local, Mr. — Chand, to get to Bharatpur Cancer Hospital. We provide them all the support we can. (KII, Local representatives, Surkhet)

FGD participants were also asked about the attitudes of health workers towards returnee migrants suffering from diseases to find out more about the quality of the healthcare they received after their return. A number of FGD participants believed that the quality of care is affected by the behavior of healthcare professionals and the economic situations of individual migrants.

HIV/AIDS victims are discriminated against. They are not touched or examined properly. (FGD participant, Delhi, Achham)

It is very difficult for us to manage money if a sickness is complicated. Patients with complicated diseases are asked to go to well-equipped hospitals in cities like Lucknow, but we can't afford to. (FGD participant, Gujarat, Surkhet)

One KII, who worked in an NGO, reported that his organization supported returnee migrants by providing counseling services and assisting them as needed:

If any Nepali who returns from India is injured or mentally disturbed, we provide them with counseling services. If our services don't work, we refer them to other NGO/INGOs. If returnee migrant workers want to do something inside the country, we support them in setting up sources of income in collaboration with local governments, municipalities and village councils. (KII, NGO staff, Doti)

3.2.9 Mechanism to control the cross-border transmission of diseases and awareness raising programmes

Migrating from origin to destination countries challenges the capacity of national systems to detect adverse public health events. To ensure health security at the national level, it is important to develop bilateral and multinational public health collaboration and coordination. Countries see media (audio, visual, and print) as a tool to increase awareness of the risks of communicable diseases, including STIs. FGD participants and KII and in-depth interviewees were invited to share their experiences regarding programs conducted at the local level in their communities or at the national level to control the cross-border transmission of diseases and to mitigate or prevent the health vulnerabilities associated with migrants. Most FGD participants shared that local health posts, NGOs and other community organizations run health awareness programs targeting health problems faced by migrant workers:

Yes, in border areas, we are warned not to visit sex workers and send money Nepal with bank to bank transfer. (FGD participant, Maharashtra, Doti)

HIV check-up programs used to be conducted but they have been discontinued. (FGD participant, Maharashtra, Achham)

Health posts do organize awareness programs. (FGD participant, Maharashtra, Doti)

Yes, some activities focused on migrant returnees are conducted. For example, an NGO performs HIV tests on migrant returnees. A radio program that benefits migrant workers is broadcast. (Returnee male migrant, Uttaranchal, Surkhet)

Blood samples of migrant returnees used to be tested. A new organization called Needs Nepal has been established. It creates awareness among returnee migrants, particularly about the need for health check-up. (Returnee male migrant, Delhi, Doti)

Though this health post has not conducted any such programs itself, we have collaborated with other non-governmental organizations to inform people about HIV at various transit points. (KII, Health Professional, Doti)

We have organized awareness programs on this issue. We produced several materials on the possible health problems migrant workers might face in their destination countries and our volunteers and staff informed them about those problems. We also made them aware that they ought to get their health checked after returning from India. (KII, Needs Nepal NGO staff, Doti)

Some organizations have performed street dramas and other awareness programs, including some in coordination with schools, in order to raise health awareness. (KII, Teacher, Kailali)

In contrast, a number of returnee migrants and KII participants shared that there are no awareness programme focusing on migrant workers in their communities, for example:

No special programs have been run especially targeting migrant workers. However, health check-ups are provided to returnee migrants. (Returnee male migrant, Maharashtra, Achham) No such information has been provided to people here so far. (KII, Local representative, Kanchanpur)

3.2.10 Suggestions for improving the health and wellbeing of migrants

International human rights law has long established the right of everyone to enjoy the highest attainable standard of physical and mental health. Migrants in destination countries, however, often find it difficult to maintain their health and wellbeing. Thus, all study participants were asked how to improve the health and wellbeing of Nepali migrants in India. Most suggested that employers, the Indian and the GoN all have roles to play to protect migrant workers from health risks.

The Nepali government has to conduct different programs such as seminars, workshops, and awareness-raising campaigns as well as adopt and implement policies. (FGD participant, Himanchal, Surkhet)

Information should be provided at the border through posters. Blood-testing camps should be organized at least once every six or seven months. (FGD participant, Uttar Pradesh, Doti)

The Nepali government should introduce special programs for migrant workers. (Returnee male migrant, Maharashtra, Achham)

People with poor economic conditions go to India. If they develop a disease when they return to Nepal, arrangements for checking their health should be made. For example, if an HIV-infected patient gets timely treatment, at least the virus won't be transmitted to other people. (FGD participant, Delhi, Banke)

I want ill people to get the facilities and services they need. Information should be available in border areas. Migrant workers should be allowed to bring their hard-earned money home without any difficulties. No migrant worker should face looting or robbery on their way home. No matter how, whether collaborating with the government or by some other means, returnee migrants should not face any problems at all. (KII, Social worker, Kanchanpur)

National-level collaboration would be very helpful. Here in Nepal, regardless of nationality, migrants have access to health services but the situation in India is different. There it is necessary to have an aadhar card to get affordable health service. (KII, Health professional, Doti)

The qualitative research suggested the following specific improvements be made in Nepal:

There should be a compulsory health check-up upon returning from India. (Returnee male migrant, Maharashtra, Achham)

The Nepal government should coordinate with the Indian government and should initiate a solution to these problems. (FGD participant, Delhi, Achham)

The government should create employment opportunities here in Nepal. This measure would avert the health problems and mental stress faced by migrant workers. No problems would arise if employment was available in Nepal. (Returnee male migrant, Delhi, Doti)

Development infrastructure should be established in the locality. (KII, Health professional, Achham)

4. CHAPTER FOUR: SUMMERY, DISCUSSION AND RECOMMENDATIONS

4.1 Summary of major findings

The returnee migrant workers participated in this study had worked in nearly all of the states of India but Maharashtra, Gujarat, and Delhi were the key destination states. Most migrants worked in factories or hotels or as watchmen. Mosquito-related illnesses (malaria and dengue) comprised the greatest proportion of health problems while in India. Of all participants, 10.2% (n=77) had these illnesses. Work-related accidents and falls (2.5%), hypertension (1.5%), and diabetes (1.5%) were key existing health problems among the participants. Around 1.7% (n=13) of the participants self-reported having been informed by a health worker that they had had TB at some time in the past. The nature of this study prevented us from establishing a cause-effect relationship with work-related circumstances, however. Of those who had an illness, 74.3% (n=378) reported that their health problems had not been previously diagnosed in Nepal. Those who worked in the Indian states of Gujarat, Punjab, and Delhi; who hailed from Kanchanpur, Kailali, and Doti; and who worked in factories were most likely to have existing health problems. Most (76.9%, n=577) believed that working and living conditions in India were the main reason for their existing health problems. The qualitative analysis also found that cross-border migrants are at high risk of STIs, accidents and injuries, TB, malaria and typhoid.

Mental distress was observed in 13.4% (n=101) of the participants. Participants from Doti and Surkhet districts and factory workers had the highest rates. The self-reported prevalence of malaria was 0.8% (n=6). Participants knew that malaria is transmitted by mosquito bites (97.4%, n=645) and more than two-thirds always used preventive measures against malaria. Of the men and women who had had sexual intercourse in the past six months (67.4%, n=489 and 52%, n=13 respectively), more than a quarter reported having had more than one partner. Although condom use was reported to be high in last sexual contacts with sex workers and friends (98.3%), only 41% used condoms with spouses during the last sexual intercourse. Among married participants with more than one sex partner, only 27.5% (n=36) reported having used a condom during their last sexual intercourse.

The prevalence of tobacco use, either cigarettes or smokeless tobacco, was high (78.4%, n=589), as was current alcohol use (58%, n=436). Heavy workloads, long working hours,

poor pay and lack of spare time were reported as the leading causes of mental health problems in the qualitative part of the study.

When they were ill in India, most participants (68.9%, n=332) went to private hospitals or clinics. More than one-quarter faced difficulties accessing health services in India. High costs, language barriers, and lack of information were the key barriers. Only 5.5% (n=41) of participants were covered by health insurance. Other barriers to seeking care in India included financial problems, discrimination due to being a migrant, lack of the *Aadhar* card, delayed treatment, communication problems and unfamiliarity with locations. The problems migrants experienced after returning home to Nepal were similar to the general health system problems in rural areas of Nepal.

4.2 Discussion

4.2.1. TB in migrants:

The number of self-reported cases of active TB was much higher in the present study, 1700 per 100,000, than the national estimate on TB incidence, 154 per 100,000 (World Health Organization, 2016). The preponderance of evidence indicates that cross-border migrants have a high risk of TB (Barwise et al., 2013; Deiss et al., 2009) mainly because of several embedded issues, including the social and economic inequalities that characterize the migration process (Barwise et al., 2013; Dara et al., 2017; Dara et al., 2012). The risk starts from the place of origin, where poor health status, low health literacy and lack of access to quality healthcare are characteristic, and is exacerbated during and after transit because of the increased likelihood of infection, transmission and interrupted treatment (Dara et al., 2012; Lu et al., 2015). Similarly, culture and lifestyle, economic, and health challenges not only sustain migrants' vulnerability to TB, but also reduce the likelihood of screening, diagnosis, and adherence to medication in the host country (Dara et al., 2017; Dara et al., 2012).

4.2.2. Mosquito borne diseases and migrants:

Interestingly, cross-border migrants in India identified mosquito-borne illnesses as the most common health problem. Srivastava and colleagues (2011) reported that “malaria in migrant workers is always a major problem to control due to their temporary stay in shelters, and other operational constraints.” Although cases of malaria have been steadily declining in Nepal, districts with high rates of migration to India, such as Kailali, Kanchanpur, Surkhet, Dhanusa, Kapilvastu, and Rupandehi, are still considered to be “malaria districts,” and about half of all malaria cases reported in Nepal each year are imported by migrants (Department of Health Services, 2017). Interestingly, the majority of participants knew the source of malaria transmission. The high rates of infection suggest that they were not able to implement what they knew or that, in practical terms, it was difficult for them to control mosquito bites given what their living and working conditions were like.

4.2.3. Psychology and mental illness in migrants:

In the present study, 13.4% of the participants suffered from some form of mental ill health. Nepal does not have any national-level estimates on the burden of psychological and mental illness, nor does any study estimate the prevalence of psychological disorders in its migrant population. Thus, the present study is not able to compare directly with those of other studies in Nepal. However, a few sub-regional studies reported higher proportions of mental disorders than found in this study. For example, a study conducted in a rural community of Baglung District reported the 37.5% of the participants had psychiatric issues (Khatti et al., 2013). However, Khatti et al.’s study used a much lower cut-off value (a threshold of 3 in GHQ 12) than this study (our threshold was 6). Similarly, studies from Western Nepal reported the prevalence of conspicuous psychiatric morbidity and depression as 35.4% and 33.7% respectively (Kohrt et al., 2009; Upadhyaya & Pol, 2003). Both studies also used a different measurement scale with this study. Despite the potentially huge burden of mental health problems in migrants, neither mental health nor

migration health components have been incorporated in Nepal's 2014 health policy.

Evidence suggests that migration is a stress-inducing phenomenon (Butler et al., 2015; Meyer et al., 2017). Migrants have to cope with psychologically distressing conditions like a lack of preparedness and difficulty adjusting to a new environment, conditions which may trigger depression and anxiety (Butler et al., 2015; Virupaksha et al., 2014). According to a recent report by the Transcultural Psychosocial Organization Nepal, the mental health of Nepali migrants is associated with many complex interrelating psychological, social and cultural factors of an individual and collective nature (Koirala et al., 2017). More specifically, exploitative treatment, abuse, enforced cultural isolation, undermining of cultural identity and disappointment for not achieving expectations are some of the major stressors for mental health in migrants (Anbesse et al., 2009; Meyer et al., 2017). Separation from family and disruption of familiar relationships during and after migration are also identified as key factors triggering psychological and mental health problems among Nepali migrants (Koirala et al., 2017). Worries about how to deal with health problems are accentuated by the lack of health insurance. As Adhikary et al. (2017) highlight, only a few migrants have some kind of health insurance: in their study just 5.5% did.

Migrants may adopt their own ways of coping strategies and develop resilience to deal with mental health stressors. Indeed, high neighborhood ethnic density, considerable social support and smooth acculturation are associated with low risk of mental health problems among migrants (Arévalo et al., 2015; Butler et al., 2015). In addition, social and emotional support from relatives and friends, both at home and in the host country, help protect against anxiety and depressive symptoms (Pannetier et al., 2017).

4.2.4. Sexual health and migration:

Nearly one-third of the participants reported having had more than one sexual partner. Sexual health is an issue most studied among Nepali migrant workers (Simkhada et al., 2017). The vast majority of the participants in this study were married (81.6%), and their sexual behavior abroad can, on one hand, be viewed from the perspective of loneliness and desire when separated from their sexual partner. On the other hand, it is possible, too, that migrants who have multiple sexual partners abroad are demonstrating what is called “situational disinhibition” (Pannetier et al., 2017) and are taking more risks because they are away from familial and social control. About one-quarter of the participants reported having sexual relationships with sex workers in India and had more than one sexual partner. Such risky sexual behavior not only exposes labour migrants to HIV and STI infection but also elevates the risk of transmitting HIV or STI to their spouses as condom use with them was relatively low (41%), particularly among those who had had more than one sexual partner (27.5%). This percentage is, however, higher than the most recent IBBS study in Nepal, which reported that 93% of male labour migrants did not use a condom with their wives (National Centre For AIDS & STD Control, 2015). One possible explanation for low condom use by this population is the cultural context: sex and sexuality are not openly discussed by most Nepali (Regmi et al., 2011). A handful studies of the wives of migrant workers also reported that low literacy and cultural practices like gender discrimination mediated against safe sex practices among migrant wives (Aryal et al., 2016; Thapa, Bista, et al., 2016; Thapa, Pathak, et al., 2016).

4.2.5. Smoking and alcohol intake:

The self reported prevalence of smoking and use of smokeless tobacco in the present study was three times higher than the national prevalence, which is 18.5% and 17.8% respectively for adults in Nepal aged 15 to 69 years (Aryal et al., 2013). The prevalence of alcohol use in the present study was four times higher than the national adult prevalence of 17.4% (Aryal et al., 2013). The

positive correlation between status as a migrant and smoking and alcohol intake is well-established (Ma et al., 2004; Madsen et al., 2005). Participants in the present study might have faced social and psychological stresses due to the factors such as health problems, changes in lifestyle, insecure employment, poor working conditions, and long working hours. Such stresses might have triggered an increased urge for to use tobacco or drink alcohol. It is also likely that the SES status of study participants was lower than the national average, a fact, too, that helps partly explain the high intake of tobacco and alcohol.

4.2.6. Accessing to health care services:

Around two-fifths of the participants experienced difficulties accessing healthcare in India, mainly due to the unaffordable cost, language barrier, and lack of information. The SDGs point out the vulnerability of migrant workers to health risks due to poor healthcare access and emphasize the need to improve migrants' access to safe, effective, and affordable healthcare services. Access could be improved significantly by enhancing inter-country coordination at the governmental and non-governmental levels. By working together, Nepal and India could produce strict provisions regarding health insurance and set up facilitative mechanisms to provide information and translation services.

A major strength of this study is that it used a mixed-method approach combining both quantitative and qualitative methods. To our knowledge, this is the first study to comprehensively assess the health risks of Nepali cross-border migrants to India. Since the trend of seasonal migrant workers going to India is not likely to change in the near future, the findings will have long-term implications for policy, practice and research, especially as we included returnee migrants from both urban and rural areas. The response rate was very high (99.3%), possibly because participants were approached at home and often had time on their hands. It is also possible that many of the participants had never been asked about their health risks by any researchers anywhere.

We acknowledge that the study did have some limitations. First, as it was a cross-sectional survey it is difficult to establish a causal relationship between

cross-border migration and the identified health risks. A longitudinal study could provide such information with more certainty. Second, the fact that a significant proportion of our participants had a low level of literacy and consequent health literacy, questions were related to their situations in India, answers were self-reported, and we were not able to triangulate their responses, we acknowledge the possibility of that the findings were affected by recall and social desirability biases. Third, we selected participants from districts with high rates of migration to India, and our findings may not be easy to extrapolate to the country as a whole. Finally, due to the absence of information on households with migrants working in India, we could not randomly select the participants which might have induced selection bias.

4.3. Recommendations

The following recommendations were made on the basis of the study findings:

4.3.1. Migrant sensitive health system:

Migrants and mobile population face various types of barriers in accessing health services. Some of the most important barriers are: (1) physical geography; (2) exclusion from the formal healthcare system leading to financial hardship; (3) linguistically and culturally adjusted health system in the destination; and (4) legal status, marginalization and discrimination. These risks increase exponentially, if the health system does not have the capacity to understand and/or tackle the health needs of migrants. Therefore, efforts should be made to systematically incorporate the needs of migrants into health financing, policy, planning, implementation and evaluation. The migrant sensitive health systems should incorporate the needs of migrants to facilitate their access to health services at each stage of migration process - the pre-departure phase, the journey itself, at the place of destination and return to the place of origin. The following are specific recommendations on migrant sensitive health system.

- a. The GoN should invest in the health promotion and prevention for migrants along with strengthening the capacity of the service providers for provision of

quality services to seasonal migrants to India. The approach should be changed to patient-centered rather than disease-centered traditional approaches. Workshops and capacity building sessions should be organized at local levels and provincial governments' level so that the federal system better understands the health issues and needs of migrants and plan accordingly.

- b. Health information and communication at the local and provincial health providers should be improved. The provincial health authorities should initiate culturally and linguistically sensitive strategic behavior and communication (SBC) health materials targeting communities with higher trend of seasonal labour migrants and their families. Such SBC materials should focus on specific health issues during the course of migration to India, including communicable diseases such as HIV/AIDS, STIs, Hepatitis, TB, Malaria, Dengue fever and other important diseases prevalent in the major destinations in India; non-communicable diseases; occupational hazards; mental health problems including physical and sexual violence and general travel tips. It should also highlight the non-negotiable importance of condom use and safer sexual practices.
- c. The Federal MoHP, in coordination with the Ministry of Labour Employment and Social Security (MoLESS), should expand pre-departure programmes such as pre-departure orientation, health examination, and enrollment in the foreign employment welfare funds, for the seasonal migrants bound to India as there are considerable number of migrants to India who are vulnerable to health problem but have not been reached for health assessment and orientation.
- d. As part of media advocacy, popular local and national media, particularly television and radio, should be optimally mobilized to disseminate health messages targeting migrants in the community and in transit. Emphasis should also be placed on providing applicable information to the spouses of male seasonal migrants to India, as they often care for dependents of migrants.
- e. Apart from traditional media and advocacy tools, the GoN should initiate harnessing the potential use of information and communication technologies to improve access to health information and services to such mobile population

by developing application, conveying messages in social media like Facebook and YouTube. This can easily reach the target population with minimal investment and efforts.

- f. Since the 1978 Declaration of Alma-Ata, the role and contribution of the community towards the primary health care and many public health interventions have been well recognized and the role of civil society to address HIV epidemic is one of such examples. Therefore, to better foster the capacity of the local communities to build resiliencies and improve coping mechanism in the migrants' communities, the GoN should engage them in health system and its strengthening.
- g. The GoN should keep prioritizing migrants as one of the key affected population from Malaria and migrant-specific transmission reduction strategies such as establishing cross-border check posts and collaborating to conduct screening at check points, cross-notification of cases, coordination of entomological, monitoring and vector-control measures and harmonized SBC for migrants in the bordering districts should be given a priority as planned by Nepal Malaria Strategic Plan (2014-2025).
- h. The findings point to the need of orientating migrant workers on sexual health and safe sex practices and to continuing promoting safe sexual practice and HIV testing among migrants and their spouses. Along with orientation and awareness programmes, consistent condom use should be promoted. Furthermore, the National HIV Strategic Plan (NHSP) 2016-2021 acknowledges that the HIV response for migrants and their spouses is inadequate. In addition to facility-based HIV testing, community-based mobile units for rapid diagnostic testing such as a "test for triage" model could be intensified in areas with large populations of migrants. The AIDS epidemic model exercise (2015) recommends increasing prevention coverage of the migrant population in Nepal to 53%. In particular, mass media and strategic behavioral and communication (SBC) strategies should promote condom use by migrants prior to departure and HIV/STI test after return, especially in the communities with higher migration rates to India. National Center for AIDS and STC Control (NCASC) should initiate an

HIV intervention targeting migrants.

- i. Most of the activities are currently targeting for the prevention of Tuberculosis, sexually transmitted infections and vector borne illnesses such as Malaria, Dengue and Kalazar-like illnesses; however, new and emerging diseases such as cardio-metabolic diseases and their risk factors have largely been overlooked. Therefore, focus should be there to minimize the risk for non-communicable diseases as well.

4.3.2. Policy and legal framework:

Lack of inclusion of the health needs of migrants in the policy and legal framework of the country has an untoward effect on the overall health and wellbeing of migrants and their families. It also greatly impacts in providing with the constitutionally mandated fundamental health rights. In this prospect and in the light of our study the following are the specific policy and legal recommendations:

- a. In light of the high unemployment rate among young population in Nepal, cross-border seasonal migration and circular migration to India for employment will continue in the near future, hence efforts should be made to systematize the migration process so that this will further enhance the process to safeguard the health rights of individuals and the families involved in the process.
- b. The GoN must formulate policies to address its obligation to implement many major international resolutions on migration health to which it is a signatory, including: (1) provide constitutionally mandated fundamental health rights; (2) rectify the International Health Regulations, 2005, without affecting trade, tourism, or transit; (3) rectify the commitment the country to formulate migrant sensitive health policies made in 2008 at the 61st World Health Assembly resolution 17 (WHA 61.17); (4) ensure universal health coverage (UHC) as per Sustainable Development Goal (SDG) 3.8; and (5) in accordance with the Global Action Plan 2019–2023 adopted by the WHO's 72nd general assembly (WHA 72) held recently, support individuals, dependent families,

communities, and Nepal's health system by reducing various health-related risks that arise for migrants in the different stages of migration (before departure, during travel, while living in the country of destination, and while returning home) and in the course of internal migration. Ratification of these international commitments will improve migrants' health as well as overall public health of the country.

- c. Identify health issues faced by people of either countries and formulate policies/strategies and plans to improve health vulnerabilities of India bound seasonal migrants of Nepal by initiating inter-country collaboration, dialogues with India to review nearly century old India-Nepal Friendship treaty and include health component that can improve the health protection and promotion of Nepali citizen if they faces any problem related to his/her life and health risks.
- d. The GoN should consider the problems faced by India bound seasonal migrants and formulate comprehensive cross-border policies to include them under the umbrella of protection and promotion. This can be done by including issue as an agenda for South Asian Association for Regional Cooperation (SAARC) process.
- e. The GoN is one of the countries that adopted Global Compact for Safe, Orderly and Regular Migration (GCM) and made significant contribution to the GCM both as a state and Chair of the Colombo Process (CP). In addition to this, Nepal is also a member country to Abu Dhabi Dialogue, Bali Process, SAARC (current Chair) and Global Forum on Migration and Development. Despite these efforts, there is no intra-regional migration and cross-border mobility agreement in the region. Therefore, necessary actions need to be taken forth to bring these vulnerable population in the political discourse and dialogues so that the health rights and social security schemes can be ensured.

4.3.3. Monitoring migrant health through better data management practices and research: to better understand the health needs and barriers of migrants; to avoid falling into empirical imprecise approaches to address such needs and barriers; and to support and sustain evidence-informed national and

international health policies and planning, national management information systems and various researches play a vital role. The information and data collected at local, provincial and federal level should be adequate, standardized and comparable. Data should be comparable and standardized to comply with regional and global recommendations and practices. Then, only the national and international health policies and planning be able to holistically plan for the health needs of migrants.

- a. The GoN should develop and implement surveillance mechanism as a part of the national health surveillance system mainly at the six points of entries namely: Kakarbhitta (Jhapa), Province No. 1; Birgunj (Parsa), Province No. 2; Belhia (Rupandehi), Province No. 5; Jamunaha (Banke), Province No. 5; Mohana (Kailali), Karnali Pradesh; and Gaddachauki (Kanchanpur), Sudurpashchim Pradesh, to generate evidences for disease-risk distribution and risk reduction in the context of the SDG.
- b. The GoN and researchers should include migrants and ensure disaggregated migration data while conducting census, demographic health surveys or any kinds of public health research to cover the scope of migration, migrants' health seeking behaviour, risks and access to and use of health services. The information or data should also be sub-categorized based on the country of destination for customizing targeted health interventions to tailor the need of migrants to India and other countries.
- c. Cross-country and cross-regional migration health studies should also be prioritized to identify key indicators that are acceptable and useable across the region; and to identify the techniques of promoting the inclusion of migration variables in existing censuses, national statistics, targeted health surveys and routine health information systems, as well as in statistics from sectors as housing, education, labour and migration.
- d. Due to a huge number of migration between Nepal and India, the GoN should also initiate a surveillance mechanism from population mobility perspective to understand the people's movement across the border and disease-risk distribution, so that the health system can be prepared for any possible health

emergency and disaster management.

- e. More research is required to understand India-bound seasonal migrant women's experiences, given the male-dominated sample in this study and the general shortage of studies on female migrants; and to understand the health status of cross-border irregular migrants, who are rarely covered in current literature.

4.3.4. Partnerships, network and multi-country frameworks:

The nature of migratory process is complex and so is migration health. Therefore, effective management of migrants' health issues requires a multi-sectoral partnerships and coordination among various stakeholders and also a multi-country frameworks at the global, regional, inter-regional and national levels, as well as with sectors and institutions involved in the migration process. In the context, necessary arrangement should be made to further build and scale up partnership with local levels and provincial governments, civil society organizations, networks of migrant communities, academia and the private sector to be engaged on migration and health-related activities so that the migrants have sustained access to health services at origin, transit, during travel and upon return. The following are specific recommendations on partnerships, networks and multi-country frameworks.

- a. The GoN needs to replicate its public-private partnership models in areas with high outflow of seasonal migration to India. In the context of universal health coverage, this will help in strength the capacity of the government to tackle migrant's health issues and engage private sectors to in this new field.
- b. Interactions should take place in the form of discussions, meetings and conferences with representatives from government, private agencies, NGOs/INGOs and migrants to come up with a comprehensive policy and implementation mechanism relating to addressing the health vulnerabilities of migrants.
- c. The GoN, chiefly MoHP, should coordinate and harmonize the inter-ministerial efforts and cooperation - notably those of the Ministry of Foreign Affairs, Ministry

of Home Affairs, Ministry of Federal Affairs and General Administration, MoLESS and others to facilitate the foreign employment process that promotes health and wellbeing of migrants. The National Human Rights Commission and the National Women Commission should also be included in this national level broader coordination to strengthen monitoring mechanism of health rights of all kinds of migrants including trafficked people.

- d. The GoN should consider the problems faced by undocumented migrants and form comprehensive policies to include them under the umbrella of protection and promotion. This can be achieved if the Kathmandu Declaration of the 18th Summit meeting of SAARC is adopted by this region. In the declaration, health is one of the themes and an importance has been given to achieve universal health coverage. Similarly, the CP importantly outlines migrants' health as an additional priority for consideration, regional cooperation and collaborations need to be further strengthened in order to protect the health rights of migrants and their families.
- e. As Nepal is hosting the SAARC Tuberculosis and HIV/AIDS Center (STAC) and has been taking a lead to discuss, share ideas and seek solutions to TB, HIV/AIDS and other respiratory diseases prevalent within the region. Therefore, STAC should host intra-regional meetings and workshops to develop cross-border and intra-regional strategies to tackle TB and HIV related migrants' health issues.
- f. As the Indian Government has aimed of eliminating TB by 2025 (10 years ahead of the End TB Strategy by 2035), the GoN should initiate discussion with India to improve access to TB care and services in both the countries for migrants. Some of the initiations could be to introduce treatment referral cards valid for both countries so that people under treatment can continue medication and benefit.

4.3.5. Reform of existing case-management practice:

Existing case management practices in Nepal is mostly facility based rather than community based. From the public health point of view, if services are tailored to reach out to the communities then all five elements of (1) health promotion; (2) prevention; (3) curative services; (4) rehabilitation; and (5) palliative care can be merged to reduce the health vulnerabilities and improve overall health of migrants and their communities. In this era of information and communication technology, health system should reform from traditional to techno-friendly health care services to identify patient in the community, identify resources, advocacy, coordination, monitoring, and evaluation of care; data collection and analysis of information for the community-based patient-centered case management practice. This can be one of the innovative approaches to identify highly vulnerable migrants with their health issues and plan for the targeted interventions in the community.

REFERENCES:

- Adhikary, P., Keen, S., & van Teijlingen, E. (2011). Health issues among Nepali migrant workers in the Middle East. *Health Science Journal*, 5, 169-175.
- Adhikary, P., Sheppard, Z., Keen, S., & van Teijlingen, E. (2017). Risky work: accidents among Nepali migrant workers in Malaysia, Qatar and Saudi Arabia. *Health Prospect*, 16(2), 3-10.
- Anbesse, B., Hanlon, C., Alem, A., Packer, S., & Whitley, R. (2009). Migration and mental health: a study of low-income Ethiopian women working in Middle Eastern countries. *International Journal of Social Psychiatry*, 55(6), 557–568.
- Arévalo, S. P., Tucker, K. L., & Falcón, L. M. (2015). Beyond cultural factors to understand immigrant mental health: neighborhood ethnic density and the moderating role of pre-migration and post-migration factors. *Social Science & Medicine*, 138, 91–100.
- Aryal, K. K., Neupane, S., Mehata, S., Vaidya, A., Singh, S., Paulin, F., ... Lohani, G. R. (2013). Non-communicable diseases risk factors: STEPS survey Nepal 2013. Kathmandu, Nepal: Nepal Health Research Council.
- Aryal, N., Regmi, P. R., van Teijlingen, E., Dhungel, D., Ghale, G., & Bhatta, G. K. (2016). Knowing is not enough: migrant workers' spouses vulnerability to HIV. *SAARC Journal of Tuberculosis, Lung Diseases & HIV/AIDS*, 13(1), 9–15.
- Bam, K., Thapa, R., Newman, M.S., Bhatt, L.P., & Bhatta, S.K. (2013). Sexual Behaviour and Condom Use among Seasonal Dalit Migrant Laborers to India from Far West, Nepal: A Qualitative Study. *PLoS ONE*, 8 (9), e74903.
- Barwise, K., Lind, A., Bennett, R. & Martins, E. (2013). Intensifying action to address HIV and tuberculosis in Mozambique's cross-border mining sector. *International Journal of Health Services*, 43(4), 699–719.
- Bhattarai, Raju (2007). Open borders, closed citizenships: Nepal labor migrants in Delhi. In *International Migration, Multi-Local Livelihoods and Human Security: Perspective from Europe, Asia and Africa* (The Netherlands: Institute of Social Studies).
- Butler, M., Warfa, N., Khatib, Y., & Bhui, K. (2015). Migration and common mental disorder: An improvement in mental health over time?. *International Review of Psychiatry*, 27(1), 51–63.
- Cousins, S. (2016). Nepal's silent epidemic of suicide. *The Lancet*, 387, 16.

- Daniel, W.W. (1999). *Biostatistics: A foundation for analysis in the health sciences* (7th ed.). New York: John Wiley & Sons, 1999.
- Dara, M., De Colombani, P., Petrova-Benedict, R., Centis, R., Zellweger, J.-P., Sandgren, A., ... Bahtijarevic, R. (2012). Minimum package for cross-border TB control and care in the WHO European region: A Wolfheze consensus statement. *European Respiratory Journal*, 40(5), 1081–1090.
- Dara, M., Sulis, G., Centis, R., D'Ambrosio, L., De Vries, G., Douglas, P., ... Migliori, G. B. (2017). Cross-border collaboration for improved tuberculosis prevention and care: policies, tools and experiences. *The International Journal of Tuberculosis & Lung Disease*, 21(7), 727–736.
- Deiss, R., Garfein, R. S., Lozada, R., Burgos, J. L., Brouwer, K. C., Moser, K. S., ... Strathdee, S. A. (2009). Influences of cross-border mobility on tuberculosis diagnoses and treatment interruption among injection drug users in Tijuana, Mexico. *American Journal of Public Health*, 99(8), 1491–1495.
- Department of Health Services. 2017. Glimpse of annual report 2016/2017. https://dohs.gov.np/wp-content/uploads/2018/04/Glimpse_FY_%202073-74.pdf
- Hennink, M. M. (2007). *International focus group research: A handbook for the health and social sciences*. Cambridge: Cambridge University Press.
- International Organization for Migration. (2015). *Health vulnerabilities of migrants from Nepal: Baseline assessment*.
- Joshi, S., Simkhada, P., & Prescott, G. J. (2011). Health problems of Nepali migrants working in three Gulf countries. *BMC International Health & Human Rights*, 11, (3), 10.
- Johnson, R. B. & Onwuegbuzie, A. J. (2004). Mixed-methods research: a research paradigm whose time has come. *Educational Researcher*, 33(7), 14-26.
- Khaled, S.M. (2019). Prevalence and potential determinants of subthreshold and major depression in the general population of Qatar, *Journal of Affective Disorders*, 252:382-303.
- Khattri, J. B., Poudel, B. M., Thapa, P., Godar, S. T., Tirkey, S., Ramesh, K., & Chakraborty, P. K. (2013). An Epidemiological Study of Psychiatric Cases in a Rural Community of Nepal. *Nepal Journal of Medical Sciences*, 2(1), 52–56.

- Kohrt, B. A., Speckman, R. A., Kunz, R. D., Baldwin, J. L., Upadhaya, N., Acharya, N. R., ... Worthman, C. M. (2009). Culture in psychiatric epidemiology: using ethnography and multiple mediator models to assess the relationship of caste with depression and anxiety in Nepal. *Annals of Human Biology*, 36(3), 261–280.
- Koirala, N., Regmi, S., Sharma, V., & Khalid, A. (1999). Sensitivity and validity of the General Health Questionnaire (GHQ-12) in a rural community setting in Nepal. *Nepali Journal of Psychiatry*, 1(1):34-40.
- Koirala, P., Gautam, K., Regmi, U., Sharma, N., & Koirala, S. (2017). Labor migration: Psychological and social-cultural impact. Kathmandu, Nepal. Retrieved from <http://tponepal.org/labor-migration-psychological-and-socio-cultural-impact/>.
- Lu, H., Chen, J., Wang, W., Wu, L., Shen, X., Yuan, Z., & Yan, F. (2015). Efforts to reduce the disparity between permanent residents and temporary migrants: Stop TB experiences in Shanghai, China. *Tropical Medicine & International Health*. 20(8), 1033–1040.
- Ma, G. X., Tan, Y., Toubbeh, J. I., Su, X., Shive, S. E., & Lan, Y. (2004). Acculturation and smoking behavior in Asian-American populations. *Health Education Research*, 19(6), 615–625.
- MacKenzie Bryers, H., van Teijlingen., E., & Pitchforth, E. (2014). Advocating mixed-methods approaches in health research. *Nepal Journal of Epidemiology*, 4(5), 417-422.
- Madsen, M. H., Grønbaeck, M., Bjerregaard, P., Becker, U. & Study, T. G. P. (2005). Urbanization, migration and alcohol use in a population of Greenland Inuit. *International Journal of Circumpolar Health*, 64(3), 234–245.
- McLellan, E., Macqueen, K. M. & Neidig, J. L. (2003). Beyond the qualitative interview: Data preparation and transcription. *Field Methods*, 15, 63-84.
- Meyer, S. R., Lasater, M. & Tol, W. A. (2017). Migration and Mental Health in Low-and Middle-Income Countries: A Systematic Review. *Psychiatry*, 80(4), 374–381.
- Ministry of Finance, Government of Nepal. (2015). Economic survey, fiscal year 2014/15. Retrieved from [http://www.mof.gov.np/uploads/document/file/Final%20Economic%20Survey%202071-72%20English%20\(Final\)_20150716082638.pdf](http://www.mof.gov.np/uploads/document/file/Final%20Economic%20Survey%202071-72%20English%20(Final)_20150716082638.pdf).
- Ministry of Labor & Employment, Government of Nepal. (2018). Labor migration for employment: a status report for Nepal: 2015/2016—2016/2017. <https://asiafoundation.org/wp-content/uploads/2018/05/Nepal-Labor-Migration-status-report-2015-16-to-2016-17.pdf>

- National Centre For AIDS & STD Control. (2015). Integrated Biological and Behavioral Surveillance (IBBS) Survey among Male Labor Migrants in Western, Mid- and Far-Western Region, Round 5. Kathmandu, Nepal.
- National Centre For AIDS & STD Control. (2017). Factsheet 2: Cumulative HIV cases in Nepal [online]. Retrieved August 6, 2018, from <https://www.ncasc.gov.np/WAD2017/>
- National Centre For AIDS & STD Control. (2018). Factsheet 1: HIV epidemic update in Nepal [online]. Retrieved July 8, 2019, from <https://www.ncasc.gov.np/WAD2018/FACTSHEET-2018-FINAL/Factsheet-2018-final.pdf>
- Pannetier, J., Lert, F., Roustide, M. J., & du Loû, A. D. (2017). Mental health of Sub-Saharan African migrants: The gendered role of migration paths and transnational ties. *SSM-Population Health*, 3, 549–557.
- Patel, V., Araya, R., Chowdhary, N., King, M., Kirkwood, B., Nayak, S., Simon, G., & Weiss, H.A. (2008). Detecting common mental disorders in primary care in India: A comparison of five screening questionnaires. *Psychological Medicine*, 38, 221–228.
- Pope, C., Ziebland, S., & Mays, N. (2000). Analysing qualitative data. *British Medical Journal*, 320, 114–116.
- Regmi, P. R., van Teijlingen, E. R., Simkhada, P., & Acharya, D. R. (2011). Dating and sex among emerging adults in Nepal. *Journal of Adolescent Research*, 26(6), 675–700.
- Simkhada, P.P., Regmi, P.R., van Teijlingen, E., & Aryal, N. (2017). Identifying the gaps in Nepali migrant workers' health and well-being: A review of the literature. *Journal of Travel Medicine*, 24(4), 1–9.
- Srivastava, H.C., Chandrashekar, P., Kurien, G., Sreehari U., & Yadav, R.S. (2011). Malaria in seasonal migrant population in Southern Gujarat, India. *Tropical Biomedicine*, 28(3), 638–645.
- Thapa, S., Bista, N., Hannes, K., Buve, A., Vermandere, M., & Mathei, C. (2016). Vulnerability of wives of Nepali labor migrants to HIV infection: Integrating quantitative and qualitative evidence. *Women & Health*, 1–22.
- Thapa, S., Pathak, S., Leppin, A., Buve, A., Hannes, K., Kandel, G., & Mathei, C. (2016). Factors associated with condom use for HIV prevention among Nepali labor migrant couples. *AIDS Education & Prevention*, 28(2), 180–190.

- Upadhyaya, K. D., & Pol, K. (2003). A mental health prevalence survey in two developing towns of western region. *Journal of Nepal Medical Association*, 42(150), 328–330.
- UNDESA (2017). Trends in International Migrant Stock: The 2017 Revision. Datasets for the 2017 Revision available at <http://www.un.org/en/development/desa/population/migration/data/estimates2/estimates17.shtml> (UNDESA, 2017a)
- Vaidya, N.K., & Wu, J. (2011). HIV epidemic in Far-Western Nepal: Effect of seasonal labor migration to India. *BMC Public Health*, 11, 310.
- van Teijlingen, E. R., & Hundley, V. (2001). The importance of pilot studies. *Nursing Standard*, 16(40), 33-36.
- Virupaksha, H. G., Kumar, A., & Nirmala, B. P. (2014). Migration and mental health: An interface. *Journal of Natural Science, Biology & Medicine*, 5(2), 233.

Appendix 1: Characteristics of participants (Table 3.17-Table 3.19)

Table 3.17: Characteristics of focus group participants (n=41)

	FGD1	FGD2	FGD3	FGD4	FGD5	FGD6
Gender	Male	Male	Male	Male	Male	Male
Age	20-38	22-37	22-40	21-43	19-44	21-48
Ethnicity	Chhetri-8	Chhetri-3, Dalit-3	Chhetri-4 Dalit-3	Dalit-6	Dalit-8	Chhetri-4 Hill Dalit-2
Place of origin	Achham	Doti	Kailali	Banke	Surkhet	Kanchanpur
Job in India	Hotel-6 Driver-1 Security gaurd-1	Labour-6	Labour-6	Hotel-2 Labour-4	Hotel-2 Labour-4 Agriculture-1 Security guard-1	Hotel-3 Watchman-3 Factory worker-1
State of India for work	Delhi-2 Gujrat-2, Mumbai-4	Maharastra-3 Punjab-1, Uttarpradesh-2	Delhi-2 Punjab-2, Mumbai-3	Delhi-2, Gadwal-1, Rupaidiha-1, Nanapaara-1	Maharastra-1 Gujrat-3 Mumbai-1 Simla-1 Uttarakhanda-1 Odisha-1	Mahrastra-2 Punjab-1 Kerala-2 Tamilnadu-1 Karnatak-1
Length of stay (yrs)	0.5-8.0	6.0-20	2.0-8.0	0.5-1.0	0.5-2.0	0.7-1.3

Table 3.18: Characteristics of interview participants (n=12)

Characteristics	12 Returnee migrants
Gender	12 male
Age	Age range 23-58 years
Occupation	Labour, factory workers
Duration of work	6 months to 39 years
The place in India	Mumbai-5, Gujarat-1, Delhi-3, Himanchal-2

Table 3.19: Characteristics of KII participants (n=12)

Characteristics	12 participants
Gender	10 male, 2 female
Age	Age range 23-58 years
Roles	Health professionals, NGO staff, Local representatives, School teachers
Duration of work	1-12 years



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