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Health problems among Nepalese migrant workers in Malaysia

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ABSTRACT

Background: Migrant workers significantly contribute to the development of destination countries, while countries of origin benefit from remittances and skills transfer. With the rising number of labour migrants, many face challenges such as health problems and work-related injuries. However, there is lack of studies exploring such problems faced by the labour migrants. This study aims to assess the health problems faced by Nepalese labour migrants in Malaysia and identify associated factors.

Methodology A cross-sectional study was conducted among 325 Nepalese labour migrants who had worked in Malaysia and were selected conveniently. Data were collected using a semi-structured questionnaire through face-to-face interviews. Multivariate analysis was conducted on variables with p-values < 0.2 from bivariate analysis to identify significant predictors.

Results Among 325 respondents, 47.7% reported experiencing health problems during their stay in Malaysia. Most (94.2%) had sought healthcare services, including government hospitals, private clinics, or company clinics. Factors such as number of roommates, overcrowded sleeping conditions, lack of cleanliness and hygiene, unclean toilets, lack of drinking water, and years lived in Malaysia were significantly associated with health problems.

Keywords: Labour migrants, Malaysia, Health problems, Cross Sectional Study, Remittance

1.0 Introduction

Human migration is the movement of people from one place to another with the intention of settling, permanently or temporarily in a new location. The globalization has created new opportunities for a global labor market and a complex net of connections and transactions has been made between different nations across the world. In the Southeast Asia, export of labor has become a way for families to improve their way of living (Castro, n.d.). The UN Convention on the Rights of Migrants defines a migrant worker as a person who is to be engaged, is engaged or has been engaged in a remunerated activity in a state of which he or she is not a national (Migrant | United Nations Educational, Scientific and Cultural Organization, n.d.).

As in South Asian countries, most labor migrants from Nepal are male, but men seeking migration permits fell by 5.83% points in 2016/17, while women's participation grew by 8.8% (Baruah & Arjal, 2018). Industrialized countries are interested in the recruitment of migrants from poor countries for physical labour, and the migrants are often provided with short term contracts (Joshi et al., 2011a). Migrants often face serious obstacles to good health due to discrimination, language barriers, legal status and other economic and social status (Nygren-Krug & World Health Organization., 2003).

According to the International Organization for Migration (2009), there are about 192 million people living outside their place of birth, which is about three per cent of the world's population

(Nepal Migration Year Book 2009 NIDS NCCR North-South, n.d.). Although India is the most popular destination for international migration from Nepal, its share has been decreasing with the rise of labour migration to other destination countries, namely the Gulf Cooperation Council (GCC) countries and Malaysia for the past few decades. According to Department of Foreign Employment (DOFE) database, 786,564 labour permits have been issued to over one hundred destination countries in the past consecutive fiscal year 2015/2016 and 2016/2017. Out of total labour permits issued to the migrants, 29.88 % were for Malaysia, followed by Qatar (at 21.57 %), Saudi Arabia (20.37 %), United Arab Emirates (UAE) (10.62 %), Kuwait (2.54 %), Republic of Korea (1.32 %), Bahrain (0.86 %) and Oman (0.63 %) (NCCR North-South, n.d.; Government of Nepal Ministry of Labour and Employment Labour Migration for Employment, n.d.).

Most of the Nepalese migrants in the gulf countries are involved in heavy manual labour on road building sites or construction sites, often in high temperature (Joshi et al., 2011a). Nepalese migrant workers return home with mental and physical health problems and there are more than 1000 deaths per year in the destination countries (excluding India) (Simkhada et al., n.d.).

Malaysia is a middle-income country whose economy has transformed into an emerging multisector economy and since the 1970s it has been facilitated largely by imported migrant workers. Malaysia is a net importer of foreign labour, with documented migrant workers accounting for about 15% of the total workforce. The country primarily receives labour from five nations, mainly Indonesia, Nepal, Bangladesh, and Myanmar (Loganathan et al., 2019). Malaysia has a higher standard of living compared to other neighboring countries in the South East Asian and West Asian region. The main factors for choosing Malaysia as a destination country are perception of abundant opportunities, high wage levels and attractive job offers (Adhikary et al., 2011).

Migrant workers are a vulnerable group, often exposed to poor living and working conditions, facing discrimination and social exclusion, and lacking the power to negotiate for healthcare in destination countries (Loganathan et al., 2019). The perception that migrants are merely short-term labour investment and a commodity leads to health and occupational safety often being neglected by employers. Migrants are subjected to neglect, discrimination, ostracism and exploitation, the effects of which can curtail migrants' life expectancies, increase mortality and directly affect social, physical and mental well-being. The good health of migrants has obvious intrinsic benefits, but is also essential if migrants are to fulfill the considerable potential economic and social benefits and contributions to their home and destination countries. Migrants should be able to live and work in safe and healthy conditions, enjoy access to health services and expect health outcomes similar to that of the rest of the population of their destination country (Org et al., 2016).

2.0 Objective

The objectives of this study are to estimate the prevalence and patterns of specific health problems and injuries among Nepalese migrant workers in Malaysia, to describe healthcare-seeking and insurance coverage, and to analyze associations between living/working conditions and health problems.

3.0 Methodology

This study adopted a cross-sectional research design using a quantitative approach. It was conducted within the premises of the Department of Foreign Employment, commonly known as "Shram Gram," located in Tahachal, Kathmandu, Nepal. This office operates under the Ministry of Labour, Employment and Social Security and is responsible for issuing labour permits and overseeing foreign employment procedures. The research was carried out over a period of six

months, from 1st September 2019 to 28th February 2020. The study population consisted of Nepalese labour migrants who had worked in Malaysia and met specific inclusion criteria: (i) having at least six months of work experience in Malaysia, (ii) having returned to Nepal within the past 12 months, and (iii) providing consent to participate. A total of 325 participants were selected using convenience sampling due to the mobile nature of the migrant population.

Data collection was conducted through face-to-face interviews using a semi-structured questionnaire, after obtaining written permission from the Department of Foreign Employment and written consent from each participant. The questionnaire was divided into five key domains: (1) socio-demographic information including age, gender, marital status, education, ethnicity, and religion; (2) health-related problems, injuries, and health service utilization, including place of treatment, reasons for not seeking treatment, and discrimination during service use; (3) work-related aspects such as job type, work shift, working hours per day, days off per week, availability of first aid and safety measures, and provision of health and safety training; (4) accommodation-related conditions covering type of accommodation, number of roommates, cleanliness, availability of drinking water, toilet facilities, and ventilation; and (5) personal behavior and lifestyle factors such as food hygiene, exercise, alcohol and tobacco consumption, and use of non-medicinal drugs.

Ethical clearance was obtained from the Institutional Review Committee (IRC) of B.P. Koirala Institute of Health Sciences (approval number: 059/076/077). Pretesting of the questionnaire was conducted with 10% of the total sample size among participants not included in the final study, and necessary modifications were made to ensure validity and reliability. The questionnaire was developed and translated into Nepali with expert input, and validated for content accuracy. To minimize interviewer variation, all data was collected by the researcher. Daily data checks ensured completeness and accuracy, and entries were made into Microsoft Excel 2011. Participants were informed of the study's purpose, assured of confidentiality, and given the right to withdraw at any point without consequence.

4.0 Results

Majority of the respondent are male (99.4%), while only small portion of them were female (0.6%) (Table 1). Nearly three-quarters of them were married (76.6%) and 23.4% were unmarried. Moreover, 81.5 % were Hindu, followed by 13.06% were Buddhists and 2.8 % were Muslim. Around 31% and 23% of the participants belong to disadvantaged Janajatis and upper caste groups respectively. Among the rest, 17.8% were disadvantaged non-Dalit Teria caste groups, 15.7% were Dalit, 8.9% were relatively advantaged Janajatis and 3.4% were religious minorities.

Regarding educational status and permanent address, 9.8% of the respondents had no formal schooling. Among those who had formal education, 52.9% had completed secondary education, 26.2% had completed primary education, 10.2% had completed intermediate education, and 0.9% had attained a bachelor's degree or higher. Likewise, 27.4% were from Madhesh Pradesh, 24.6% were from Bagmati Pradesh, followed by Koshi Pradesh (19.7%), Lumbini Pradesh (16%), Gandaki Pradesh (3.4%) and Sudurpaschim Pradesh (3.1%). The mean age of the respondents was 30.38 years, suggesting that most belonged to the young adult age group, which is more likely to migrate for employment.

Figure 1, shows the various health issues of the respondents during their stay in Malaysia. Out of 325 respondents, 155 (47.7%) had some kind of health problems. Among those, 54.2% of the respondents had health problem related to unclassified sign and symptoms such as fever, headache and dizziness. This proportion is followed by problems related to respiratory diseases

Table 1: Socio-demographic Characteristics of the respondents (n=325)

Characteristics	emographic Characteristics of the responde Categories	Percent			
Characteristics	Categories	Frequency (n)	(%)		
	18-25 years	77	23.7		
	26-35 years	183	56.3		
Age	36-45 years	59	18.2		
	46 years and older	6	1.8		
	Mean <u>+</u> SD	30.38 <u>+</u>	30.38 <u>+</u> 6.14		
Gender	Male	323	99.4		
	Female	2	0.6		
	Koshi Pradesh	64	19.7		
	Madhesh Pradesh	89	27.4		
	Bagmati Pradesh	80	24.6		
Permanent	Gandaki Pradesh	19	5.8		
address	Lumbini Pradesh	52	16.0		
	Karnali Pradesh	11	3.4		
	Sudurpashchim Pradesh	10	3.1		
	No formal Schooling	32	9.8		
	Primary Level	85	26.2		
Education	Secondary level	172	52.9		
	Intermediate Level	33	10.2		
	Bachelors and beyond	3	0.9		
	Unmarried	76	23.4		
Marital Status	Married	249	76.6		
	Dalit	51	15.7		
	Disadvantaged Janajatis	100	30.8		
	Disadvantaged non-Dalit Terai castes	58	17.8		
Ethnicity	Religious Minorities	11	3.4		
	Relatively Advantaged Janajatis	29	8.9		
	Upper Caste Groups	76	23.4		
	Hindu	265	81.5		
Religion	Buddhist	41	21.6		
	Muslim	9	2.8		
	Christian	5	1.5		
	Others (Kirati)	5	1.5		

like asthma, cough/cold and lung infections; and 16.1% of the respondent said they had suffered health problems related to digestive system (gastritis, stomach-ache and other infections).

Additionally, there were 11.0% who suffered with musculoskeletal and connective tissue related problems (i.e. backache, joint pain and fractures), 9.7% with infectious/parasitic (i.e. dengue, malaria and typhoid). The proportion of those facing injuries, poisoning and other condition related to external causes (heat stroke, accidents due to inanimate objects, food poisoning, and other effects of heat), and skin and subcutaneous (i.e. allergy, sunburn and other skin infection) related health problems were 3.9%.

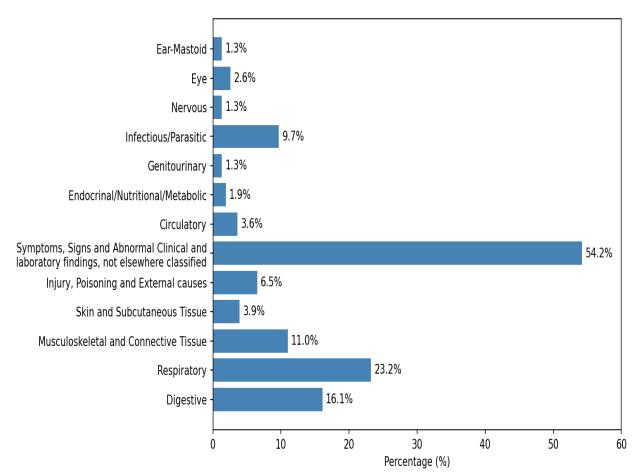


Figure 1: Proportion of the respondents facing various types of health problems during their stay in Malaysia (n=325).

Furthermore, there were 2.6% who faced circulatory health problems (like; Hypertension); 2.6% were who faced eye-related problems and 1.3% ear and mastoid related health problems. Likewise, 1.9% had faced health problems related to endocrinal, nutritional and metabolic (diabetes mellitus and high cholesterol), and 1.3% nervous system related problems (i.e. insomnia and other disorders).

Almost 48% of the respondents reported that they had some kind of health problems during their stay in Malaysia (Table 2). Out of 325 respondents 12 (3.7%) had faced some kinds of accidents. Out of 155 respondents who faced some kind of health problems 146 (94.2%) sought healthcare facilities like government hospital, private clinics/hospital and company's clinics. Respondents who had not sought healthcare facilities were 9 (5.8%) respondents, among them 4 (44.4%) said that they had tolerated/adjusted, 4 (44.4%) said they had done home treatment or self-medicated and remaining one said he did not get time for treatment. Most of the respondent (97.5%) had health insurance provided by company (96.5%) and private insurance (3.5%).

Table 2: Health problems and health service utilization by the respondents (n=325)

•	S and hearth service utilization by	•	,	
Characteristics	Categories	Frequency (n)	Percent (%)	
Faced Health	Yes	155	47.7	
Problems	No	170	52.3	
Accidents	Yes	12	3.7	
	No	313	96.3	
Sought Healthcare (n=	Yes	146	94.2	
155)	No	9	5.8	
Place of sought	Government hospital	37	25.3	
healthcare services (n=146)	Private hospital/clinics	42	28.8	
(II 110)	Company's clinic	67	45.9	
Reason for not seeking	Adjusted /Tolerated	4	44.4	
healthcare (n=9)	Self-medicated/home treatment	4	44.4	
	No time	1	11.2	
Discrimination faced	Never	91	62.3	
during healthcare service utilization	Sometimes	46	31.5	
(n=146)	Often	5	3.4	
	Always	4	2.7	
Health insurance	Yes	317	97.5	
	No	8	2.5	
Main source of health	Private insurance	11	3.5	
insurance(n=317)	Company provided	306	96.5	

Participants working in craft and related trade work (55.6%), and service and sales (61.5%) suffered more from health problems than elementary occupation (49.2%), and agriculture related works (44.4%). Likewise, availability of first aid and safety measures showed lesser health problems faced (46.6%) by the respondents in comparison to absence of and safety measures first aid (54.5%), but there was no association found between health problems and other work-related characteristics such as their latest job, years lived in Malaysia, hours of work per day, days of holiday in a week, availability of first aid and safety measures and provision of health and safety training (Table 3).

Most of the respondents (56.3%) suffered from health problems who did not practice food hygiene regularly. Respondents who were doing exercise (56.9%) less suffered from health problems but there was no association found between any personal and lifestyle factors related to food and exercise, and health problems faced by the respondent during their stay in Malaysia (Table 4).

Table 3: Association between work-related characteristics and health problems faced by the

respondents during their stay in Malaysia (n=325)

Characteristics	Categories	Health problem	P value		
		Yes (%)	No (%)		
Latest job in Malaysia	Elementary occupation	94 (49.2)	97(50.8)		
	Agriculture related	8 (44.4)	10(55.6)	0.254	
	Craft and related trade work	10 (55.6)	8(44.4)	0.354	
	Plant and machine operator/assem bler	15 (34.1)	29(65.9)		
	Professional/of ficial/managers	6 (50.0)	6(50.0)		
	Clerical	6 (37.5)	10(62.5)		
	Services/sales	16 (61.5)	10(38.5)		
Years lived in	Median (IQR)	5.00 (7.00-3.00)	4.00 (6.00-3.00)	0.054	
Malaysia	Mean Rank	173.34	153.57		
Hour of work	Median (IQR)	12.00 (12.00-10.00)	12.00 (12.00-10.00)		
(per day)	Mean Rank	162.49	164.37		
Work Shift	Day	92 (48.7)	97 (51.3)		
	Night	6 (42.9)	8 (57.1)		
	Shift Change	57 (46.7)	65 (53.3)	0.882	
Days of holiday	Median (IQR)	1.00 (1.00-1.00)	1.00 (1.00-1.00)		
(per week)	Mean Rank	163.44	162.60	0.914	
Availability of	Yes	131 (46.6)	150(53.4)		
First Aid and Safety Measures	No	24 (54.5)	20 (45.5)	0.328	
Provision of	Yes	86(48.9)	90(51.1)		
Health and Safety Training	No	69(47.6)	80 (53.7)	0.646	

Table 4: Association between dietary habits, physical activity and Health problems of the respondents during their stay in Malaysia (n=325)

Characteristics	Categories	Health problem	P value	
		Yes	No	
Number of meals (per day)	Median (IQR) Mean rank	3.00(3.00- 3.00)	3.00(3.00- 3.00)	0.378
		166.51	159.80	
Enough amount of food	Yes	152(47.6)	167(52.4)	
	No	3 (50.0)	3 (50.0)	0.909
Meals (mainly)	Vegetarian	38(50.07)	37(49.3)	
	Non-vegetarian	58(48.3)	62(51.7)	0.755
	Both in similar amount	59(45.4)	71(54.6)	
Maintenance of Food	Always	146(47.2)	163 (52.8)	
Hygiene	Not always	9(56.3)	7(43.8)	0.482
Exercise (other than	Yes	25 (43.1)	33(56.9)	
work)	No	130(48.7)	137(51.3)	0.440
Reason to exercise (n=58)	Health and fitness Others	20 (45.5) 5 (35.7)	24 (54.5) 9 (64.3)	0.522

Table 5: Association between substance use (alcohol and tobacco) and health problems of the respondents during their stay in Malaysia (n=325)

Characteristics	Categories	Health proble	P value	
		Yes	No	
Alcohol intake	Yes	79 (45.9)	93 (54.1)	
	No	76 (49.7)	77 (50.3)	0.50
Frequency of	Daily	3 (37.5)	5 (62.5)	
alcohol intake	2 or 3 times a week	8 (47.1)	9 (52.9)	
	Once in a week	16 (48.5)	17 (51.5)	
	Once in 2week	6 (50.0)	6 (50.0)	0.980
	Once in a month/Occasionally	46 (45.1)	56 (54.9)	
Tobacco intake	Yes	94 (47.5)	104 (52.5)	
	No	61 (48.0)	66 (52.0)	0.922
Frequency of tobacco intake	Daily	51 (45.5)	61 (54.5)	0.124
	Occasionally	10 (66.7)	5 (33.3)	

Table 5 shows respondent not taking alcohol had slightly higher absence from health problems (50.3%), in comparison to not taking alcohol and having health problems (49.7%). Likewise, The prevalence of health problems was almost identical among tobacco users (47.5%) and non-users (48.0%). But there was no association found between alcohol intake, frequency of alcohol intake, tobacco intake and frequency of tobacco intake.

Table 6: Association between accommodation factors and health problems in respondents during

their stay in Malaysia (n=325)

Characteristics	Categories	Health prob	P		
			No	value	
Types of	1 3 1	153 (47.5)	169 (52.5)		
Accommodation	(building /apartment/ room/ hostel)	2 (66.7)	1 (33.3)	0.607	
	Own apartment/room on rent				
Numbers of	Median (IQR)	4.00(10.0-	4.00(8.00-		
Roommates	Mean Rank	2.00)	2.00)	0.022	
		175.36	151.73		
Sleeping in	Yes	80 (57.1)	60 (42.9)		
overcrowded place	No	75 (40.5)	110 (59.5)	0.003	
Lack of cleanliness and	Yes	77 (55.8)	61 (44.2)		
hygiene	No	78 (41.7)	109 (58.3)	0.012	
Lack of clean toilet	Yes	80 (55.6)	64 (44.4)		
	No	75 (41.4)	106 (58.6)	0.011	
Lack of drinking water	Yes	24 (68.0)	11 (31.4)		
	No	131 (45.2)	159 (54.8)	0.009	
Lack of	Yes	17 (54.8)	14 (45.2)		
ventilation/sunlight	No	138 (46.9)	156 (53.1)	0.402	
Language barrier	Yes	81 (47.1)	91 (52.9)		
	No	74 (48.4)	79 (51.6)	0.819	

Accommodation factors such as numbers of roommates, sleeping in overcrowded, lack of cleanliness and hygiene, lack of clean toilet and lack of drinking water were found to be significantly associated with health problems in respondent during their stay in Malaysia. Other factors such as types of accommodation, lack of ventilation or sunlight, and language barrier were found to have no significant association with health problems faced by the participants during their stay in Malaysia (Table 6).

Binary logistic regression was applied between the outcome variable (Health Problems) with explanatory variables to estimate adjusted Odds Ratio (OR) with 95% Confidence Interval (CI). Explanatory variables with p<0.20 in bivariate analysis were taken for multivariate analysis. Binary logistic regression was used to identify strong predictors of presence of Health Problem.

The covariates entered in logistic regression were: year lived in Malaysia, numbers of roommates, frequency of tobacco intake, sleeping in overcrowded place, lack of cleanliness and hygiene, lack of clean toilet, lack of drinking water and transportation facilities. The final model of binary logistic regression showed that only year lived in Malaysia was significant predictors for suffering from health problems during their stay in Malaysia after adjusting for confounders (Table 7).

 Table 7: Binary logistic regression analysis showing predictors associated with health problems

among the respondents (n=325)

Variables	Categories	Odds	95% CI for OR			P-value	
		Ratio (OR)	L	ower	Į	Jpper	
Year lived in Malaysia		1.145	1.014		1.294		0.029
Numbers of roommates		1.009	0.986		1.032		0.453
Frequency of	Daily	0.432	0.432 0.128			1.454	0.175
tobacco intake	Occasionally	Ref					
Sleeping in	No	0.913		0.261		3.197	0.886
overcrowded place	Yes	Ref					
Lack of cleanliness	No	0.762		0.098		5.901	0.759
and hygiene	Yes	Ref					
Lack of clean toilet	No	1.426		0.174		11.669	0.741
	Yes	Ref					
Lack of drinking	No	0.434		0.113		1.677	0.226
water	Yes	Ref					

5.0 Discussions

This study explored the socio-demographic, health-related, occupational, lifestyle, and accommodation factors associated with health issues among Nepalese labour migrants in Malaysia.

5.1 Socio-demographic Characteristics

More than half of the participants (56.3%) were aged 26–35, aligning with national data (47.2%) from the Department of Foreign Employment and other studies among migrants in Gulf countries (53.4%) (IOM et al., 2003; Joshi et al., 2014). A significant male dominance (99%) was reported, mirroring national data (90.7%) and other studies showing 92.4% male migrants (IOM et al., 2003; Joshi et al., 2014). Most respondents hailed from Madhesh Pradesh (27.4%) and Bagmati Pradesh (24.6%), consistent with migration trends reported nationally (Ministry of Labor - Government of Nepal, 2018).

Educationally, 52.9% had secondary education, higher than the study done on 'labour migrant in three gulf countries (29%) and middle East countries (76.2%) (Adhikary et al., 2018a; Joshi et al., 2011a). About 76.6% were married, which largely matches with studies from Gulf countries

(80.6%) and the Middle East (91.3%) (Adhikary et al., 2018b; Joshi et al., 2011a). Ethnicitywise, 23.4% belonged to upper caste groups, similar to prior findings (26.8%) but lower than those reporting 40–49.2% (Adhikary et al., 2018b; Adhikary et al., 2008). Religiously, the majority (81.5%) were Hindu, which aligns with national and previous study percentages (*Nepal Migration Year Book 2009 NIDS NCCR North-South*, n.d.).

5.2 Health Problems and Service Utilization

Nearly 47.7% experienced health problems, slightly fewer than in Gulf country studies. The most common were non-specific symptoms such as fever, headache, and dizziness (54.2%). While usually short and self-limiting, these may recur due to occupational exposures like heat, stress, long working hours, inadequate rest and overcrowded living conditions. Other frequently reported problems included respiratory (23.2%), digestive, and musculoskeletal issues, consistent with earlier reports related to Gulf countries (83.1%) (Joshi et al., 2011b). Services were mostly accessed through company clinics (45.9%) or private facilities (25.3%), while government hospital visits (28.8%) were lower than in Joshi et al.'s study (59.9%) (Joshi et al., 2011a).

Barriers to healthcare included self-medication, time constraints, and systemic issues like discrimination and financial hardship also reported in Malaysia and Japan-based studies (Loganathan et al., 2019; Shakya et al., 2018). Migrants preferred private clinics due to perceived non-discriminatory practices, as opposed to government hospitals requiring document checks (Loganathan et al., 2019). Although 97.5% had insurance, many were unaware of how to claim it, which is a common issue noted in other research (Baruah & Arjal, 2018; Joshi et al., 2011a; Loganathan et al., 2019). Likewise study by Bener in Qatar on migrants from different countries showed only 10.28% had medical insurance (Bener, 2017), while another study showed 62.3% had health insurance (Joshi et al., 2011a). About 3.7% experienced workplace accidents, mostly cuts and minor injuries similar to previous findings (Joshi et al., 2011a).

5.3 Work-related Factors

Most migrants worked in elementary occupations (58.8%), which aligns with national trends (59.52%) and Gulf-based studies (54.9%) (Ministry of Labor - Government of Nepal, 2018) ;(Joshi et al., 2011a). About 33.2% had been employed abroad for four or more years. Longer durations were significantly associated with health problems (p=0.029), in agreement with earlier research (Adhikary et al., 2018a). Day shifts were more common, although many reported irregular schedules. Rotating night shifts are associated with higher risk of metabolic syndrome, but limited data is available for labour migrants (Khosravipour et al., 2019).

Work hours exceeded 8 hours/day for 93.8% of respondents, consistent with reports by Bener (Bener, 2017); (Adhikary et al., 2018b). Long work hours were linked to suicidal ideation in UAE-based studies (Al-Maskari et al., 2011). While 75.7% had one weekly holiday, 11.4% worked all seven days, a concern also observed in other studies. Most (86.5%) reported access to safety equipment and first aid provisions at work higher than Bener's study (63.6%) (Bener, 2017).

5.4 Lifestyle and Personal Factors

Most participants reported having sufficient and hygienic food. This contrasts with the Indian migrant population where poor diet was more prevalent (86.9%)(Begam & Mini, 2016). Only 17.8% engaged in exercise, higher than previous studies reporting 7% (Adhikary et al., 2018b).

Alcohol consumption (53%) was comparable to Adhikary's study (50.1%), but much higher than among Indian migrants in the Gulf (8.9%) (Begam & Mini, 2016). Nepal's national rate is 23.9%. Tobacco use was reported by 39.1%, which is lower than Adhikary's findings (66%).

5.5 Accommodation Factors

Nearly all respondents (99.1%) lived in employer-provided housing higher than the rates reported by Seshan (50%), Bener (70.1%), and Gardner (88%). Around 35.1% stayed with six or more roommates, with the mean number being 8.66. Still, most found the accommodations comfortable, safe, and hygienic. Cleanliness, hygiene, and overcrowding had significant associations with health problems, aligning with Bener's findings (Bener, 2017; Seshan, 2012; Gardner et al., 2013).

6.0 Conclusion

Almost half of Nepalese migrant workers had experienced health problems and injuries or accidents during their stay in Malaysia. Headache, fever, respiratory diseases, gastrointestinal diseases, musculoskeletal diseases and injuries were the most common health problems experienced by them. Majority of the respondents (94.2%) sought healthcare services during their stay where most of them (45.9%) had sought in company's clinic for the healthcare services. Most of them (62.3%) had never faced any kinds of discrimination during the healthcare service utilization.

The factors such as numbers of roommates, sleeping in overcrowded place, lack of cleanliness and hygiene, lack of clean toilet, lack of drinking water, year lived in Malaysia have been found significantly associated with the migrants suffering from the health problems. More research is required on Nepalese migrant workers in the gulf countries and Malaysia in the various health topics mainly sudden deaths, occupational injuries and safety practices, risk factors or musculoskeletal problems.

This study has few limitations. First, the findings are based on self-reported data regarding health problems, lifestyle, and accommodation factors, which may introduce information bias, as participants' responses may not fully reflect their actual conditions. Additionally, recall bias is a concern, since participants were required to recall experiences from a broad time range spanning from seven months to ten years even though efforts were made to minimize it. The use of a non-probability sampling method (convenient sampling) further limits the generalizability of the results to the wider population of Nepalese labour migrants. Lastly, as a cross-sectional study, it cannot establish causal relationships. Future research using longitudinal or cohort designs is recommended to explore cause-and-effect associations more robustly.

References

- Adhikary, P., Keen, S., & Teijlingen, E. Van. (2011). Health Issues among Nepalese migrant workers in the Middle East. *Health Science Journal*, *5*(3), 169–175.
- Adhikary, P., Sheppard, Z. A., Keen, S., & Van Teijlingen, E. (2018a). Health and well-being of Nepalese migrant workers abroad. *International Journal of Migration, Health and Social Care*. https://doi.org/10.1108/IJMHSC-12-2015-0052
- Adhikary, P., Sheppard, Z. A., Keen, S., & Van Teijlingen, E. (2018b). Health and well-being of Nepalese migrant workers abroad. *International Journal of Migration, Health and Social Care*, 14(1), 96–105. https://doi.org/10.1108/IJMHSC-12-2015-0052
- Adhikary, P., Simkhada, P. P., van Teijlingen, E. R., & Raja, A. E. (2008). Health and lifestyle of Nepalese migrants in the UK. *BMC International Health and Human*

- Rights, 8(1), 6. https://doi.org/10.1186/1472-698X-8-6
- Al-Maskari, F., Shah, S. M., Al-Sharhan, R., Al-Haj, E., Al-Kaabi, K., Khonji, D., Schneider, J. D., Nagelkerke, N. J., & Bernsen, R. M. (2011). Prevalence of depression and suicidal behaviors among male migrant workers in United Arab Emirates. *Journal of Immigrant and Minority Health*, 13(6), 1027–1032. https://doi.org/10.1007/s10903-011-9470-9
- Baruah, N., & Arjal, N. (2018). Nepalese Labor Migration: A Status Report The Asia Foundation. *InAsia*, 1–10. https://asiafoundation.org/2018/06/06/nepalese-labor-migration-a-status-report/
- Begam, N. S., & Mini, G. (2016). Impact of Migration on Non-Communicable Disease Risk Factors: Comparison of Gulf Migrants and their Non-migrant Contemporaries in the District of Origin in Kerala, India. *International Archives of BioMedical and Clinical Research*, 2(2), 59–64. https://doi.org/10.21276/jabcr.2016.2.2.13
- Bener, A. (2017). Health status and working condition of migrant workers: Major public health problems. *International Journal of Preventive Medicine*, 8(68). https://doi.org/10.4103/ijpvm.IJPVM 396 16
- Castro, A. I. (n.d.). *Philippines, the world's largest labor exporter-a story about the left-behind children*. Retrieved April 19, 2019, http://www.diva-portal.org/smash/get/diva2:860854/FULLTEXT01.pdf
- Gardner, A., Pessoa, S., Diop, A., Al-ghanim, K., Trung, K. L. E., & Harkness, L. (2013). *A Portrait of Low-Income Migrants in Contemporary Qatar. I*(June), 1–17.
- Government of Nepal Ministry of Labour and Employment Labour Migration for Employment. (n.d.). Retrieved March 23, 2019, https://nepal.iom.int/jupgrade/images/stories/CoM/LabourMigration_for_Employment-A StatusReport for Nepal 201516201617 Eng.PDF
- IOM, WHO, & UN. (2013). International Migration, Health and Human rights. *International Migration, Health and Human Rights*, 1–60. https://doi.org/10.1037/e569712006-004
- Joshi, S., Prescott, G. J., Simkhada, P., Sharma, N., & Bhurtyal, Y. M. (2014). Knowledge and risk perceptions about HIV/AIDS among Nepalese migrants in Gulf countries: A cross-sectional study. *Health Science Journal*, 8(3), 350–360.
- Joshi, S., Simkhada, P., & Prescott, G. J. (2011a). Health problems of Nepalese migrants working in three Gulf countries. *BMC International Health and Human Rights*, 11(1), 3. https://doi.org/10.1186/1472-698X-11-3
- Joshi, S., Simkhada, P., & Prescott, G. J. (2011b). Health problems of Nepalese migrants working in three Gulf countries. *BMC International Health and Human Rights*, 11(3). https://doi.org/10.1186/1472-698X-11-3
- Khosravipour, M., Shahmohammadi, M., & Athar, H. V. (2019). The effects of rotating and extended night shift work on the prevalence of metabolic syndrome and its components. *Diabetes and Metabolic Syndrome: Clinical Research and Reviews*, 13(6), 3085–3089. https://doi.org/10.1016/j.dsx.2019.11.006
- Loganathan, T., Rui, D., Ng, C. W., & Pocock, N. S. (2019). Breaking down the barriers: Understanding migrant workers' access to healthcare in Malaysia. *PLoS ONE*, *14*(7), 1–24. https://doi.org/10.1371/journal.pone.0218669

- Migrant | United Nations Educational, Scientific and Cultural Organization. (n.d.). Retrieved April 11, 2019, from http://www.unesco.org/new/en/social-and-human-sciences/themes/international-migration/glossary/migrant/
- Ministry of Labor Government of Nepal. (2018). Government of Nepal Ministry of Labour and Employment Labour Migration for Employment. https://asiafoundation.org/wp-content/uploads/2018/05/Nepal-Labor-Migration-status-report-2015-16-to-2016-17.pdf
- Nepal Migration Year Book 2009 NIDS NCCR North-South. (n.d.). Retrieved March 23, 2019, www.nccr-north-south.unibe.ch
- Nygren-Krug, H., & World Health Organization. (2003). *International migration, health & human rights*. World Health Organization.
- Org, O., Tulloch, O., Machingura, F., & Melamed, C. (2016). *Briefing Shaping policy for development Health, migration and the 2030 Agenda for Sustainable Development. July.* https://www.odi.org/sites/odi.org.uk/files/resource-documents/10759.pdf
- Seshan, G. (2012). Journal of Arabian Studies: Arabia, the Gulf, and the Red Sea Migrants in Qatar: A Socio-Economic Profile Migrants in Qatar: A Socio-Economic Profile. October 2014, 37–41. https://doi.org/10.1080/21534764.2012.735458
- Shakya, P., Tanaka, M., Shibanuma, A., & Jimba, M. (2018). Nepalese migrants in Japan: What is holding them back in getting access to healthcare? *PloS One*, *13*(9), e0203645. https://doi.org/10.1371/journal.pone.0203645
- Simkhada, P. P., Regmi, P. R., Van Teijlingen, E., & Aryal, N. (n.d.). *Identifying the gaps in Nepalese migrant workers' health and well-being: a review of the literature*. https://doi.org/10.1093/jtm/tax021