



## Health and wellbeing of Nepalese migrant workers in Gulf Cooperation Council (GCC) countries: A mixed-methods study

Priyamvada Paudyal<sup>a,b,\*</sup>, Sharada Prasad Wasti<sup>c</sup>, Pimala Neupane<sup>d</sup>, Kavian Kulasabanathan<sup>a</sup>, Ram Chandra Silwal<sup>e</sup>, Ram Sharan Pathak<sup>f</sup>, Anjum Memon<sup>b</sup>, Carol Watts<sup>g</sup>, Jiblal Sapkota<sup>d</sup>, Sudip Ale Magar<sup>h</sup>, Jackie Cassell<sup>b</sup>

<sup>a</sup> Institute for Global Health and Wellbeing, School of Medicine, University of Keele, United Kingdom

<sup>b</sup> Department of Primary Care and Public Health, Brighton and Sussex Medical School, Brighton, United Kingdom

<sup>c</sup> School of Human Sciences, University of Greenwich, United Kingdom

<sup>d</sup> Central Department of English, Tribhuvan University, Nepal

<sup>e</sup> Green Tara Nepal, Kathmandu, Nepal

<sup>f</sup> Central Department of Population Studies, Tribhuvan University, Nepal

<sup>g</sup> School of Media, Arts and Humanities, University of Sussex, United Kingdom

<sup>h</sup> Ministry of Health and Population, Nepal

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### ABSTRACT

**Introduction:** Migrant workers support low- and middle-income economies through remittances, often bearing considerable health risks with long-term consequences. This study aims to understand the health and wellbeing issues of Nepalese migrant workers in Gulf Cooperation Council (GCC) countries, a major destination for low-skilled Nepalese workers.

**Methodology:** We conducted a mixed-methods study in Dhading district of Nepal. A pilot survey was carried out with returnee migrants from GCC countries to understand key health and wellbeing issues faced by workers. In addition, in-depth interviews were conducted with a subset of these returnee migrants and their families, and related stakeholders. These aimed to understand broader societal and policy implications in relation to labour migration. Quantitative data from the survey were analysed using descriptive statistics and thematic analysis was used for qualitative interviews.

**Results:** 60 returnee migrants (58 males, 2 females) took part in the survey (response rate, 100%). Median age of the survey participants was 34 (IQR, 9) years and 68% had completed school level education. Returnee migrants reported suffering from various physical and mental health issues during their stay in GCC countries including cold/fever (42%), mental health problems (25%) and verbal abuse (35%). 20 participants took part in the qualitative study: 10 returnee migrants (8 males, 2 females), four family members (female spouses) and six key stakeholders working in organizations related to international migration. Interview participants reported severe weather conditions resulting in physical health problems (e.g. pneumonia, dehydration and kidney disease) as well as mental health issues (including anxiety, loneliness and depression). Participants raised concerns about the usefulness and appropriateness of pre-departure training, and the authenticity of medical tests and reports in Nepal. Female migrants reported facing stigma after returning home from abroad. Language difficulties, alongside issues related to payment, insurance and support at work were cited as barriers to accessing healthcare in destination countries.

**Conclusion:** Our study shows that Nepalese migrant workers experience severe weather conditions and suffer from various physical and mental health issues, including workplace abuse and exploitation. The study highlights an urgent need for strategies to enforce compulsory relevant pre-departure orientation and appropriate medical screening in Nepal, and fair employment terms and full health insurance coverage in destination countries.

\* Corresponding author at: Institute for Global Health and Wellbeing, School of Medicine; University of Keele, David Weatherall Building; Room 1:101, ST5 5GB, United Kingdom.

E-mail address: [P.Paudyal@keele.ac.uk](mailto:P.Paudyal@keele.ac.uk) (P. Paudyal).

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Greater collaboration between the Nepalese government and GCC countries is needed to ensure necessary legislation and regulatory frameworks are in place to safeguard the health and wellbeing of migrant workers.

## 1. Introduction

Labour migrants account for nearly two-thirds of the estimated 272 million international migrants and contribute significantly to the growth and development of both the host and origin country (IOM, 2020). However, migrant workers - especially those working in low-skilled jobs - often face poor working and living conditions. They encounter greater exposure to health risks during migration for work, which may undermine their future wellbeing and lifetime contribution to the economy (IOM, 2020; Paudyal et al., 2020).

Nepal has a long history of labour migration, and numbers have increased over the last two decades. In 2003–04, a total of 106,660 approvals for labour migration were issued by the Nepalese government, and this number increased by more than two fold to 236,209 in 2018–19 (GoN, 2020). Labour migration is a gendered phenomenon, with male workers accounting for more than 90% of labour migrants. Almost 80% of migrant work permits issued by the Nepalese government in 2018–19 were for workers aged 18–35 years. The Gulf Cooperation Council (GCC) countries (Saudi Arabia, Kuwait, United Arab Emirates, Qatar, Bahrain, and Oman) and Malaysia are the most common destinations, with 88% of the migrants currently working in these countries (GoN, 2020). It is estimated that 83% of Nepalese labour migrants living in GCC countries intend to continue living outside Nepal, and a significant proportion (58%) of those who had recently returned to Nepal after living in GCC countries plan to re-migrate in the future (Williams et al., 2010). Unemployment, food insecurity, increased living costs and promise of economic prosperity have been cited as the main reasons for migration (Singh, 2015). Labour migration is an increasingly important contributing factor to Nepal's economy; more than a quarter of Nepal's gross domestic product (GDP) is made up of remittances from abroad (GoN, 2020).

The Foreign Employment Promotion Board of Nepal has implemented mandatory pre-departure orientation training since 2004 for aspiring migrant workers (GoN, 2020). In addition, workers undergo pre-departure medical screening at government-approved centers. The orientation programme was recently updated by the Nepalese government following criticism for failure to protect its migrant workers from threats to their health, including serious injuries and death (Mandal, 2021; Regmi et al., 2020). These risks are particularly high in GCC countries where workers are engaged in activities considered 'difficult, dirty, and dangerous (3Ds)' (Joshi et al., 2011). The workers are engaged in low-skilled occupations such as construction, manufacturing and hospitality and are exposed to various health risks including extreme heat, long working hours, abusive working environments and forced labour (IOM, 2020). More than 7000 Nepalese workers have died in the last decade (>4 million visa approvals issued) in GCC countries and Malaysia. Many more have returned home with long-term disability and chronic disease (GoN, 2020). Our recently published systematic review highlighted occupational hazards, mental health, sexual health, infectious diseases and barriers to healthcare access as key issues amongst Nepalese workers in GCC countries and Malaysia (Paudyal et al., 2020). Although several studies have been published on the health and wellbeing of Nepalese migrant workers, the value of these studies is limited by the data largely drawn from arrival screening in destination countries with a focus on infection risks posed by the Nepalese migrants to the host population (Nimir et al., 2008; Abu-Madi et al., 2016). Studies previously published in Nepalese settings have focused on specific health issues and lack details on comprehensive health issues experienced during and beyond migration (Joshi et al., 2014a; Adhikary et al., 2019). This study aimed to address this gap through detailed exploration of the health and wellbeing issues of Nepalese migrant

workers in GCC countries, a major destination for low-skilled Nepalese workers.

## 2. Methodology

### 2.1. Study design and setting

A mixed-methods study consisting of a pilot survey and qualitative interviews was conducted between July and October 2019 in Thakre, Rural Municipality in Dhading district, Nepal. The site was purposively selected for its high number of migrants to GCC countries and its proximity to the Kathmandu valley. A mixed-methods approach was chosen as this design enables better understanding of factors influencing health and behaviour in a societal and policy context (Brown et al., 2015). Data collection and analysis for the qualitative and quantitative components were conducted separately and an integrated conclusion was then drawn from the findings of the two components.

### 2.2. Study participants

A quantitative pilot survey was conducted with returnee migrants from GCC countries. Outgoing and returnee male and female Nepalese migrant workers (aged 18 years or over) with at least six months of work in one of the GCC countries, and who were in Nepal at the time of recruitment, having returned to Nepal within the last 12 months (for any reason including annual leave and holidays) were eligible to participate. For the qualitative element, three different stakeholder groups were recruited. These included a subset of the migrant workers who had completed the pilot survey and their immediate families (living in the same household), and stakeholders working in organizations related to international migration. All the study participants were aged 18 or over.

### 2.3. Sample size and sampling techniques

The survey sample size was determined using the approach of Sim and Lewis - which describes the need for at least 50 respondents to a pilot study in order to produce precise estimates of the standard deviation required for a power calculation (Sim and Lewis, 2012). Hence, a pilot survey was conducted with 60 migrant workers. Qualitative data were collected from interviews with 20 purposively selected participants: 10 returnee migrants, four family members (female spouses) and six key informants working in organisations related to international migration. Participants for both components were sampled purposively at the household-level using the existing network of our NGO partner, Green Tara Nepal. Prior to the interview, participants were provided with an information sheet in Nepalese which included the information regarding the purpose of the study, why they had been invited to participate, confidentiality, and the voluntary nature of their participation.

### 2.4. Data collection

Quantitative data were collected using the structured questionnaires (Appendix A) whereas qualitative data were collected using an interview topic guide (Table 1 and Appendix B) administered by trained interviewers. Previous surveys conducted in this population focused on specific health issues such as accident, injury or sexual health and lacked a comprehensive overview on health and wellbeing (Joshi et al., 2014a; Adhikary et al., 2019). Therefore, the questionnaire was designed to cover a wide range of topics including information on socio-demographic characteristics, migration status, health and

**Table 1**  
Topic Guide for interview participants.

<u>Topic guide for migrant workers:</u>
<ul style="list-style-type: none"> <li>• Nature of work and work environment in destination country</li> <li>• Major health problems seen amongst Nepalese migrants in GCC countries</li> <li>• Barriers and facilitators to healthcare access in the destination country</li> <li>• Health and safety related orientation/checkups in Nepal</li> <li>• Health and safety related orientation/checkups in GCC countries</li> <li>• Integration after returning back to Nepal and current health status</li> </ul>
<u>Topic guide for left-behind family:</u>
<ul style="list-style-type: none"> <li>• Impact of family member's migration on left-behind family</li> <li>• Barriers and facilitators to healthcare access in Nepal</li> <li>• Management of health-related issues in family member's absence and current health status</li> <li>• Major health problems seen amongst returnee Nepalese migrants from GCC countries</li> </ul>
<u>Topic guide for stakeholders</u>
<ul style="list-style-type: none"> <li>• Major health problems seen amongst Nepalese migrants working in GCC countries</li> <li>• Barriers and facilitators to healthcare access in the destination country</li> <li>• Organisational involvement in tackling health problems faced by migrants</li> <li>• Ways to improve health of migrants and their families in destination/origin country</li> </ul>

well-being issues during work abroad, workplace abuse, information on pre-departure medical exams and trainings, and healthcare access in destination countries. The survey tool was developed based on the previous studies on Nepalese migrant workers (Joshi et al., 2011; International Organisation for Migration 2015; Adhikary et al., 2019). The questionnaire was firstly developed in English, translated into Nepali and back translated into English to verify its accuracy prior to its administration. Both the survey and interviews were conducted face to face in a private location to maintain confidentiality, the location was chosen according to the participants' preference (either at their home or at community centers or at their workplace).

The survey and the qualitative interviews were conducted by SW and PN. SW is an experienced researcher and has published extensively on qualitative and quantitative methodology (Simkhada et al., 2018; Wasti et al., 2012). PN was new to research methodology, and was trained for interviewing and obtaining consent by SW and PP. Both researchers were not familiar with the study participants and trained to maintain neutrality throughout the survey and interview process. The researchers were trained to offer emphatic listening to the participants and redirect or terminate the interview if participants displayed any signs of distress or discomfort. If needed, the researchers had the capacity to direct participants to health services in the local area, liaising with the partner NGO. The interviews were conducted in Nepali language by the trained native researchers and interviews were audio recorded.

**2.5. Data analysis**

The quantitative data were analysed in SPSS (version 26) using descriptive summary statistic. Thematic content analysis was used to manually analyse the qualitative data as the process seeks to understand experiences, thoughts, or behaviors in the data (Braun and Clarke, 2012). The process involves systematically categorising and coding the data, highlighting, and linking themes within the texts using six steps: familiarization, coding, generating themes, reviewing themes, defining and naming themes, and writing up. The familiarisation process involved reading and re-reading the transcripts for comprehensive understanding of the data. Once the familiarisation process was complete, initial codes were generated manually. After this initial coding, meetings of the research team were held to discuss the range of codes that had been used and a series of high-level codes were finalised. An interpretative approach was used for generating themes. The approach focuses on creating meaning from the data rather than technically putting spoken words on paper. Data saturation was achieved when no new codes or themes emerged from the data (Braun and Clarke, 2012). The

themes were reviewed to ensure that they were coherent and a detailed analysis of each theme was developed before producing the final report. The quotes presented in this paper best represented the range of ideas voiced around key themes.

**2.6. Ethical approval**

The study protocol was approved by the Nepal Health Research Council (Ref. No. 5313/2019) and Brighton and Sussex Medical School Research Governance and Ethics Committee (ER/BSMS3653/4). Individual written consent was obtained prior to the survey and interview, no personal identifiers were recorded in the electronic dataset to maintain anonymity.

**3. Results**

**3.1. Results from the pilot survey**

**3.1.1. Demographic characteristics and work history**

A total of 60 returnee migrant workers (58 males, 2 females) were recruited for the survey (response rate, 100%). The median age of the participants was 34 (IQR:9) years. More than two-thirds (68%) had completed school level education and 38.3% were current smokers (Table 2). Participants, on average, had remained abroad for over three and half years. One third (35%) worked in Saudi Arabia, with the next most common destination countries being the United Arab Emirates and Qatar (both 25%). More than a quarter (28.3%) worked in the manufacturing industry while the next most common area of

**Table 2**  
Socio-demographic characteristics of the survey participants (N = 60).

Variables	Number	Percentage (%)
<b>Gender</b>		
Male	58	96.7
Female	2	3.3
<b>Age (years)</b>	Median (IQR) 34 (9)	Ranges (23–51)
<b>Religion</b>		
Hindu	51	85.0
Buddhist	9	15.0
<b>*Caste</b>		
Bramin/Chhetri	38	63.3
Janajati/Dalit	22	36.7
<b>Educational attainment</b>		
No formal education	5	8.3
Primary/Secondary	41	68.3
Higher secondary and above	14	23.4
<b>Marital status</b>		
Currently married	55	91.7
Widowed/ Never married	5	8.3
<b>Currently Smoking</b>	23	38.3
<b>Currently drinking alcohol</b>	27	45.0
<b>Last worked country</b>		
Saudi Arabia	21	35.0
UAE	15	25.0
Qatar	15	25.0
Kuwait	6	10.0
Bahrain	3	5.0
<b>Total time worked abroad (months)</b>	Mean (SD) 45 (47)	Ranges (18–120)
<b>Last worked job</b>		
Manufacturing/factory-based	17	28.3
Hospitality	14	23.3
Driver	12	20.0
Construction/farming	8	13.3
Others (e.g. Cleaner/ Security / Housemaid)	9	15.0
<b>Working hour per day (hours)</b>	Median (IQR)10 (3)	Range (8–18)
<b>Plan to go abroad again for work</b>	18	30.0

\* ethnic groups in Nepal.

employment was hospitality sector (23.3%). The median number of workhours per day was 10 (IQR: 3) and almost one-third (30%) intended to return to GCC countries for work (Table 2).

### 3.1.2. Health and healthcare access

About half (52%, n = 31) of the participants reported suffering ill-health during their work abroad. The most common issues were minor illnesses such as a cold and fever (42%), followed by mental health problems and back pain (both accounting for 25%). More than one third of workers (35%) reported facing verbal abuse, followed by emotional and physical abuse (Table 3).

About half (52%) of respondents visited healthcare services when they felt sick while abroad. Language, migration status and cost were mentioned as the key barriers hindering access to healthcare facilities. Three-quarters (75%) of respondents stated they currently have good health (Table 3).

### 3.1.3. Pre-departure medical check-up and mandatory training

All participants except one reported undergoing a health check-up in Nepal prior to their departure to work abroad. Only half of respondents (n = 30) attended mandatory pre-departure training. Of those who attended, only 30% reported that they received health-related communication materials to take away with them after the training session.

## 3.2. Results from the qualitative study

A total of 20 participants were interviewed for the study; 10 returnee migrants, four family members (female spouses) and six key informants working in organisations related to international migration (Table 4). The median age of the participants was 32 years (IQR 20).

Three key themes were identified from the data analysis (Fig. 1). These were: (1) health related issues, (2) system related issues in the origin country and (3) barriers to healthcare access in destination countries. Health related issues were mainly focused on work environment and physical health issues, mental health issues, sexual health issues and stigma related to the migration. In relation to the system

**Table 3**  
Health and wellbeing status of migrants (n = 60).

Variables	Number	Percentage (%)
<b>Suffered from illness in the last destination country</b>	31	51.7
<b>Types of illness*</b>		
Minor health problems (fever, common cold)	25	41.7
Back pain	15	25.0
Anxiety/depression	15	25.0
Skin infection	8	13.3
Gastroenteritis	7	11.7
Pneumonia	6	10.0
Typhoid	5	8.3
Workplace injuries/road traffic accident	4	6.7
Sexually transmitted infection	1	1.7
<b>Types of workplace abuse*</b>		
Verbal	21	35.0
Emotional	9	15.0
Physical	2	3.3
<b>Sought healthcare in the last destination country</b>	31	51.7
<b>Barriers to seek healthcare in the destination country*</b>		
Language barrier	41	68.3
Unaffordable cost/insurance did not cover/no insurance	21	35.0
Discrimination due to migration status/social status	14	23.3
Others (long distance, do not like visit to doctor, complex system)	4	6.7
<b>Current Status of General Health</b>		
Very Good/Good	45	75.0
Fair	13	21.7
Poor/very poor	2	3.4

\* Multiple responses.

**Table 4**  
Characteristics of the interview participants.

Variables	Participants (n = 20)
<b>Gender</b>	
Male	12
Female	8
<b>Age</b>	
Median Age (IQR)	32 (20 years)
Age ranges	23–53 years
<b>Marital status</b>	
Married	19
Unmarried	1
<b>Levels of education</b>	
Higher secondary	10
Bachelor and above	10

related issues, authenticity of the medical examinations and tests, concerns regarding the pre-departure training as well as the social contexts of migration were discussed. Insurance coverage, language, and wage support issues were identified as barriers to healthcare access in destination countries.

### 3.2.1. Health related issues

Participants spoke about several physical and mental health related issues as well as abuse and stigma.

**Work environment and physical health.** Migrant workers reported working outdoors in the open in extreme heat but living in airconditioned indoor settings with cold temperature. Participants stated that working and living in these extreme temperature variations was putting a huge strain on their physical health: “Migrants have different problems such as skin disease and pneumonia due to the very hot environment outside and very cold indoor temperatures. Many friends were sick due to pneumonia and some had to return home” (P 5).

This was echoed by another participant who felt the inability to cope with the extreme temperature difference resulted in some deaths: “Another issue is temperature where outside is too hot or 50–55° and inside is cold because of air conditioning use. Some died as they were unable to adjust the temperature difference, they were found dead in their sleep” (P 6).

Despite working in excruciating heat, participants mentioned that they had limited access to drinking water. Dehydration caused by working in high temperatures was thought to be related to kidney failures in workers: “Water is expensive there and they won’t drink adequately. Due to the high cost, the company also does not provide water. Many workers are forced to return home due to kidney problems...kidney failure is an issue these days...and the numbers are increasing” (P 18).

**Mental health and related issues.** Migrant workers stated that they experienced a range of mental health issues during their time abroad. They reported suffering from loneliness and disorientation, mainly due to their inability to understand the local language: “I felt so lonely and found it hard to tolerate...I cried for months and months. I could not understand a single word, was not sure whether they were talking about harming me physically or killing me” (P 8).

One of the interviewees highlighted that they are regularly involved in rescuing migrant workers with mental health problems: “We rescued male workers who were screaming and crying in the airport. We took them for counselling to help with their mental health. After that we handed them over to their family” (P 19).

Another explained how migration changes family dynamics and impacts on mental wellbeing: “Some of the migrants’ wives left, some got divorced and some have boyfriend and so on. In the end, the husbands have neither money nor family after returning from work abroad. Their whole life’s efforts to hold the family together are in vain, and they fall in depression. We have seen many of these cases in the community” (P 18).

Family members of migrant workers also discussed the impact of



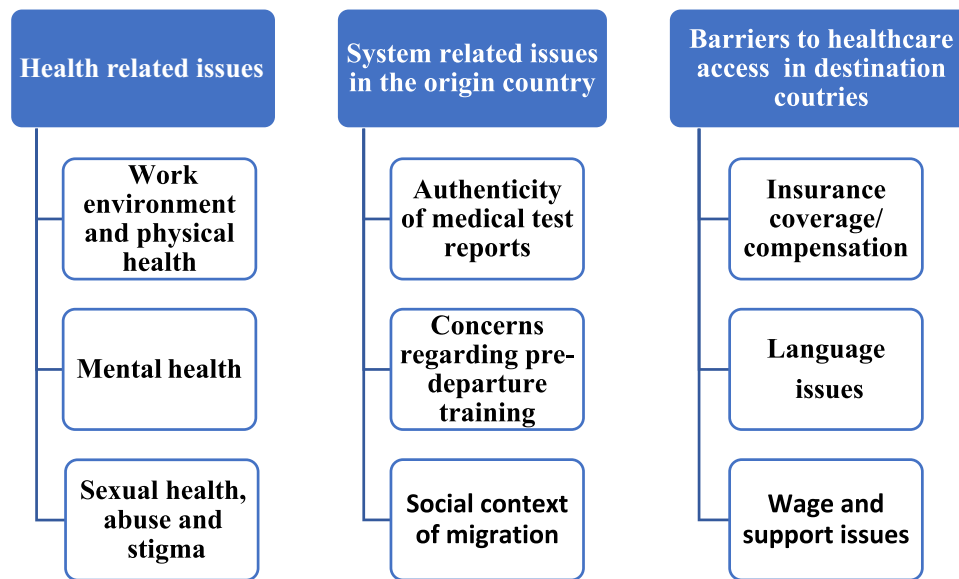


Fig. 1. Key themes of migrant's health and wellbeing issues.

migration on their mental wellbeing: “I feel lonely and tensed in his [husband] absence. I feel uneasy when there is a dispute in the family, people treat me strangely at home during his absence...” (P 14).

**Sexual health, abuse and stigma.** Participants also spoke about a range of sexual abuse and exploitation at workplace. One participant spoke about sexual violence and the subsequent consequences, including unintended pregnancies: “Due to our patriarchal mind set, our understanding is that men do not face sexual violence issues, but we had rescued one male migrant who suffered from group sexual abuse...In another case, the female migrant jumped off from the 6th floor building to escape form sexual abuser and suffered multiple fractures... many females had to return to Nepal due to unwanted pregnancies” (P 18).

Another participant spoke about discriminatory behaviours and perceptions towards women migrant workers within society in Nepal. They expressed concerns over how female migrants are stigmatised by the society upon their return home: “Society's perception is different towards unmarried girls who return from foreign employment. We are blamed and questioned about our virginity and fertility. Just because we went to work abroad, people perceive that we won't be able to have children” (P 9).

### 3.2.2. System related barriers in the origin country

Several system related factors in Nepal were mentioned as barriers to workers' health and wellbeing.

**Concerns regarding the authenticity of medical tests reports in Nepal.** Participants expressed concerns towards the agencies that recruit and deploy the migrant workers. They blamed the agencies for sending workers that are medically unfit for work, causing unnecessary burden to both migrants and their families: “Some of the recruitment agencies are sending [workers] with failed medical test reports. When they perform those tests again in the Gulf or Malaysia and if they fail over there, they are bound to return back to Nepal” (P 2).

Participants further described the stress caused by deceptive recruitment practices in Nepal. One participant elaborated, explaining: “Nepal medical test reports have raised question marks on many occasions, and another issue is about calcification cases...pneumonia calcification [calcification on chest radiography] is a common condition in Nepal... medical exam centers (in Nepal) suggest drinking yogurt and banana for those with calcification believing that this will make the spot disappear in X-Ray film. Then they qualify them (workers) for departure. When workers are re-checked in destination countries and if the authorities see that spot, the

workers are considered not fit for work and will be sent back to Nepal...This stressful situation results in multiple health risks such as depression, and some even committed suicide” (P 19).

**Concerns regarding pre-departure training.** The majority of migrant workers said they did not attend the mandatory pre-departure training and instead submitted a forged attendance certificate prepared by recruitment agencies: “I did not attend any training in Nepal but the recruitment agency said that we need to prepare a certificate of attendance [fake] to obtain labour permit” (P 6).

They highlighted unethical practices by the recruitment agencies: “They [recruitment agency] filled [out] an orientation form [on my behalf], submitted the application and collected documents for the visa process. They simply said this [pre-departure training] is an unimportant thing” (P 2).

Those who attended the training also found the training was not always relevant or helpful: “I took three days training...training was too generic and there was nothing special, they just talked about the country information, importance of local language and places to go for health service etc.” (P 4).

Participants raised concerns regarding the appropriateness of the training modality and content, and competency of the trainers; “All workers...doctor, pilot, charter accountant and labour migrants...all are taught in the same class...we are not sure whether they all are equally understanding or not. This is another concern” (P 17). “Pre-departure classes are still useless... I got chance to observe one of the orientation sessions. I saw that the trainer had never been to any country, did not know the culture, geography, etc. of any country, and the information provided in the class was only theoretical” (P 18).

**Social context of migration.** Participants, especially, representatives of migration related organisations spoke about migrant family's perceptions of GCC countries as a place to correct health and behavioural issues: “[Name] was alcoholic in Nepal, his family members sent him to Saudi thinking that he will stop drinking but he carried on drinking alcohol” (P 16).

The same participant further commented on the common misconception about mental wellbeing in relation to migration: “There is this misconception that those who have depression or a mental disorder will have improved health in Saudi but this further creates problems. Such an individual finds it hard to adjust abroad and a number of suicide cases have increased recently” (P 16).

Another participant also added “In Nepal, when families have trouble

managing the behavioural problem of a family member, they send them to Gulf or Malaysia where they believe that rules and regulation are strict" (P 18).

### 3.2.3. Barriers to healthcare access and lack of support in destination countries

Limited health insurance coverage, difficulty with the local language and lack of support on issues of wage and working conditions were reported as the main barriers to access healthcare services in the destination countries.

**Health insurance coverage and compensation.** Participants reported that insurance scheme provided by their employer was limited to basic coverage for minor health problems but not for major treatments: "I have an insurance card which covers basic services but not big surgery. If I need to have surgery, I should come back to Nepal" (P 4).

Difficulties in getting compensation were also highlighted: "If workers die outside of the workplace, it is declared as a 'natural death' and insurance companies do not pay compensation. We do not have a system to further explore the reason behind the deaths of Nepali workers. Company won't have additional system to verify the deaths" (P 18).

**Language issues.** Language difficulty was mentioned as one of the key barriers in seeking healthcare in destination countries. Participants repeatedly stated that workers were unable to understand the local language and were reluctant to visit health facilities: "Workers may not get appropriate services because they have a language gap between doctor and patients who won't understand each other's language... and they hesitate to visit the health service provider" (P 16).

**Wage and support issues.** Participants discussed wage-related issues including discrepancy in contracts, often resulting in lower wage than agreed initially. They expressed concerns that the migrants are forced to work extra hours and are unable to contact the Nepalese embassy if problems arise in the destination country: "Main problems of workers are not getting salary as contracted, forcing them to do extra work, and their passport is held by the owner. So, they cannot go to the [Nepalese] embassy if they have any problem" (P 20).

One of the participants felt that the Nepalese embassy staff were unresponsive to workers' needs and did not provide requisite support: "I did not know whom to speak to. Some of the Nepalese spoke to the embassy [Nepal Embassy in Gulf States] but the embassy did not respond and support them (P 1).

## 4. Discussion

Our study shows that workers experience severe weather conditions resulting in issues with physical health such as dehydration and kidney failure as well as mental health issues including workplace abuse and exploitation. The study also found that sexual abuse is not confined to females, although the stigmatising effect of migration in relation to future marriage and reproduction seems to be gender specific. Social drivers of migration mean that particularly vulnerable people may be migrating and are at high risk of poor health outcomes in destination countries. Participants raised concerns regarding lack of authenticity of medical tests and quality of pre-departure trainings in Nepal, together with a lack of pay as contracted and support related issues in destination countries.

### 4.1. Comparison to the existing literature

A quarter of the participants in our survey reported mental health related issues, participants in the qualitative component also reported issues, including feelings of loneliness, hopelessness, and homesickness. Separation and lack of companionship were important factors impacting

the wellbeing of both migrant workers and their left-behind families, mainly their female spouses. These findings corroborate with a previously conducted study in GCC countries which reported that a quarter of labour migrants to Malaysia, Qatar and Saudi Arabia experience mental health issues (Adhikary et al., 2018). Other studies have also highlighted higher risk of depression, anxiety, suicidal ideation and suicide attempts amongst these workers (Aryal et al., 2016). Similar findings have been reported in the left-behind families, particularly amongst wives and mothers of migrant workers (Devkota et al., 2021). The findings of this study also align with those from our previous review (Paudyal et al., 2020) as well as the findings of another review on migrant workers in GCC countries from a range of low- and middle-income countries (Kronfol et al., 2014). The later review highlights that the workers faced significant mental health problems including adjustment disorders, mood disorders, psychosis and suicide. The Nepalese government's 2020 labour migration report indicates that suicide is a major cause of mortality amongst Nepalese migrant workers in GCC countries and Malaysia, with suicide contributing to 11% of total deaths in the last decade in this population ( $n = 7461$ ). In the current context of the high unemployment rate in Nepal, labour migration is expected to continue to rise in the future. Therefore, strategies are needed to prioritize the mental health and wellbeing of both workers and their left-behind families.

More than one-third of the migrant workers in our survey reported facing verbal, emotional and physical abuse. Previous studies have also reported work place harassment including verbal, sexual and physical abuse, false allegations, deprivation of food, and economic exploitation, particularly playing out along dimensions of race and gender (Unnikrishnan et al., 2010; Arachchi 2013; IOM 2015; Green and Ayalon, 2018; Simkhada et al., 2018; Nisrane et al., 2019). Social isolation, limited opportunity for job mobility in destination countries, and financial difficulties in affording return to Nepal have been cited as some of the reason migrants continue to work despite abuse and exploitation in the workplace. It is important that employment policies be strengthened for the provision of safe work conditions, fair pay and the opportunity for voluntary return without penalties (Mak et al., 2017, 2019)

Around half of respondents reported they did not receive healthcare while sick during their stay abroad. Language barriers, unaffordable service costs and limited insurance packages were frequently reported as the major barriers to accessing health services. These findings are consistent with previous studies in Nepalese migrant workers and with studies of migrant workers from other low- and middle-income countries (Gibson, 2014; Joshi et al., 2014b; Simkhada et al., 2017; Adhikary et al., 2018; IOM 2020; R. et al. 2020). Although Nepal has introduced several new policies relating to the migration process, there remains a lack of legal provisions protecting workers, particularly once they have departed Nepal. Better advocacy is required from relevant international organizations such as the International Labour Organization (ILO) and International Organization of Migration (IOM) to lobby GCC countries to protect the health, wellbeing and human rights of migrant workers (Mak et al., 2019).

Labour migration could provide important examples for female empowerment, with female migration challenging deeply rooted patriarchal norms. Migrant women are often stigmatised at the individual (including self-stigmatization), societal and structural level, while labour migration is frequently perceived to be associated with prostitution and promiscuity (Mak et al., 2019). Although the recent official figure suggests female migration constitutes only around 8.5% of the total migrant workforce, the Amnesty International reported the true figure may be around 30% (AmnestyInternational 2011) due to irregular migration through unofficial channels- female workers comprise 90% of irregular migrant workforce (Worec, 2012). Given the complexity and scale of this problem, it is important that the Nepalese government takes appropriate steps towards implementing gender non-discriminatory migration policies, monitor and evaluate the current recruitment and employment process, and raise awareness to reduce stigma towards

female migrants.

Another finding from our study is the social context of labour migration. Migrants' families believe that behavioural problems of family members might be corrected by sending them to the strict environment of GCC countries. Similar findings were reported in another study where participants were encouraged, and sometimes even forced to migrate as a result of their drug or alcohol consumption habit (Thapa et al., 2019). Social drivers of migration mean that already vulnerable populations are taking risks, exposing themselves to further potential harm. It is important that family members are also fully aware of the potential health risks of migration to GCC countries. This involves challenging commonly held misconceptions that GCC countries are appropriately placed to solve addiction and mental health related problems.

Our survey showed that only half of respondents had attended the mandatory training. This was similar to the findings from the IOM study reporting 45% attendance (IOM, 2015). Participants in our study perceived the orientation programme as a formality for documentation purposes, questioning the credibility of the training provided and the competency of the trainers. The orientation centres are mostly located in the capital Kathmandu, making it difficult for migrant workers from remote areas to travel and bear the additional cost of food, accommodation and opportunity cost of missed wages. These programmes should be implemented at a local level and tailored to the specific needs of migrant workers. Greater emphasis should be placed on the issues related to adaptability and familiarisation with the destination country as well as highlighting how to mitigate potential health risks. They must also include information about healthcare services abroad (Regmi et al., 2020). Our study participants raised additional concerns about the authenticity of pre-departure medical examinations. They criticized recruitment agencies for sending workers who were medically unfit abroad for work, only to be subsequently returned back to Nepal, causing unnecessary burden to migrants and their families.

#### 4.2. Strengths and limitations of the study

The mixed-methods design brings together the qualitative and quantitative components to generate an integrated set of evidence for addressing the research question. The design allows thorough explanation of different perspectives, each of the two approaches complementing the limitations of the other (Regnault et al., 2018). The study included participants who had returned to Nepal in the last 12 months, reducing the likelihood of recall bias. In addition, the qualitative component explored the views of the left-behind families and related stakeholders. This enabled us to understand the broader societal and policy level issues more deeply, in relation to labour migration to GCC countries. However, the study has several limitations. The study site was purposively selected and covered only one rural municipality of one district. Thus, the findings should be generalized cautiously. The quantitative component was a small pilot survey, and we were unable to conduct regression analyses to identify predictors of health and well-being related issues. Despite these limitations, we believe the findings from this mixed-methods study provide valuable information towards improving the health and wellbeing of Nepalese migrant workers in GCC countries (Table 5).

#### 5. Conclusion

Our study shows that Nepalese migrant workers experience severe weather conditions and suffer from various physical and mental health issues, including workplace abuse and exploitation. Given the current context of the high unemployment rate in Nepal, labour migration will continue to rise in the future. Strategies to prioritize the health and wellbeing of Nepalese migrant workers and their left-behind families are urgently needed. Further research should examine the social drivers of migration, scale of abuse and discrimination in workplace including

**Table 5**

Recommendations for policy and practice.

- The Nepalese government should liaise with governments of destination countries to strengthen provision of safe working conditions, fair employment terms, full health insurance coverage and compensation for workers, together with option for voluntary return without facing financial penalties.
- The concerns regarding pre-departure medical check-up and orientation training necessitates a crucial scrutiny of these programmes.
- Pre-migration support needs to be provided to migrant workers to better equip them with practical knowledge around migration:
  - basic language skill
  - destination country specific cultural and legal awareness
  - awareness around potential health risks associated with migration
  - how to access healthcare facilities in destination countries
- The current stigma around female migration demands active interventions to safeguard migrant women against violence and exploitation. This includes policy interventions and, where necessary, material support for women from governments, both Nepalese and destination side.
- Nepalese government should better regulate the recruitment agencies by regularly monitoring and evaluating the current recruitment and employment processes.

unequal power dynamics between migrant workers and their employers, and stigma in relation to female labour migration.

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#### Authors' contribution

PP and JAC designed the study. PP, JAC, AM, JLS, and CW obtained the funding for the study. PP, SW, KK and AM designed the data collection tools. SW, PN and RS collected the data. PP and SW drafted the manuscript with input from all the authors. All authors read and approved the final version of the manuscript.

#### Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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#### Supplementary materials

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