

Review Article

Health and Wellbeing Among Nepali Migrants: A Scoping Review

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Abstract

There is limited evidence of research conducted on the health and well-being of Nepali migrants working abroad. This scoping review aims to summarise and synthesise the existing evidence available currently on the health and well-being of Nepali migrants working abroad. A scoping review was undertaken following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for scoping reviews using the five-stage protocol. We searched PubMed, Google Scholar, and NepJol for published international peer-reviewed literature. The database search identified 707 total records published between 2000 to 2022, with 69 of these assessed for eligibility. The quality of the papers was appraised by the JBI Critical Appraisal Tool or the Mixed-Method Appraisal Tool. Thirty-four studies met the inclusion criteria, 13 were qualitative, 19 quantitative, and two were mixed-methods studies. The studies covered a range of subject areas related to Nepali migrants, including their mental health, lifestyle and health-promoting behaviours, work environments and workplace accidents, health problems and access to healthcare services, awareness of sexual behaviours, and perceived risk of sexually transmitted infections and/or HIV. Evidence is scarce on the health and well-being of Nepali migrants who study and work in high-income countries along with the limitation in study design and the methodological rigor. These gaps highlight the need for more extensive, large-scale studies with improved study design across various regions to shed light on the health challenges faced by Nepali migrants.

Article History



OPEN ACCESS

Received: 14 May 2024

Accepted: 22 September 2024

Published: December 2024

DOI:

<https://doi.org/10.3126/jhp.v12i1.72699>

Keywords

Health research; migrant health and well-being study; Nepali migrants; research impact

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Introduction

Over the years, Nepal has become a major source of labour (IOM, 2022), as a significant number of people have migrated to different countries for employment and study opportunities. The 2011 census shows that almost 50% of Nepal's households has a member who is either working overseas or has returned (IOM, 2022). The most recent census (2021) reports that between 2011 and 2021, there has been an increase of 14% in Nepali living abroad (CBS, 2021). Labour migration has become a crucial livelihood strategy in a country where decently paid employment opportunities are limited (Mak et al., 2021b). Foreign employment has become an attractive source of income for skilled, semi-skilled and un-skilled Nepali workers (Chapagai et

al., 2017). For example, between 2008-2022, more than 4.7 million new labour approvals were issued to migrants wishing to work abroad, whilst remittances from migrants constituted 23.8% of Nepal's Gross Domestic Product (GDP) in 2021 (MOLESS, 2022).

The major destinations for Nepali migrants are Malaysia and the Middle East, particularly countries like Qatar, United Arab Emirates, Kuwait, Bahrain, Oman and Saudi Arabia. However, several new destinations for Nepali migrants in Central and Eastern Europe (e.g., Albania, Croatia, Poland, Romania, Cyprus, and Turkey) have also emerged recently (MOLESS, 2022).

These host countries offer a range of employment opportunities, particularly in the construction, security, hospitality, transport, and healthcare sectors. Many Nepali migrants, particularly female migrants, also work as domestic workers (Mak et al., 2021b). In recent years, there has also been an increase in the number of Nepali students studying abroad, particularly in countries like the United States, Australia, and Canada.

Nepali labour migrants, like those from other low-income countries, often face complex challenges when seeking work abroad. These challenges can include obtaining visas and work permits, as well as navigating unfamiliar legal and regulatory systems in the host country (Mak et al., 2021b). In addition, they may face discrimination and exploitation in the workplace, language barriers, occupational safety issues, challenges in accessing healthcare services, and difficulties adapting to new cultural and social environments (Regmi et al., 2019; Shakya et al., 2018).

Migration for employment or study can bring about significant improvements in a person's life, including financial and quality of life. However, it can also come with its own set of challenges and risks, and one of the major challenges faced by Nepali migrants is the risk of health problems (Adhikary et al., 2017). According to data released by the Foreign Employment Board (FEB), more than 600 Nepali migrant workers die annually since the fiscal year 2011/12. This figure increases each year, with the most recent data revealing a peak of 1,395 deaths reported in 2021/22 (MOLESS, 2022).

Numerous studies examine issues related to the health and well-being of Nepali migrant workers (Paudyal et al., 2020; Simkhada et al., 2017). However, the impact of migration health research in Nepal remains unexplored. In this context, this scoping review aims to address the research question: "What are the types of research conducted, gaps identified, and recommendations made for future research on health and migration in Nepal?" Specifically, this review seeks to establish: (a) the types of research conducted on health and migration in Nepal; (b) the organizations involved; (c) existing research gaps; (d) recommendations for future research; and (e) areas where further research is needed in the field of health and migration in Nepal.

Methods and Materials

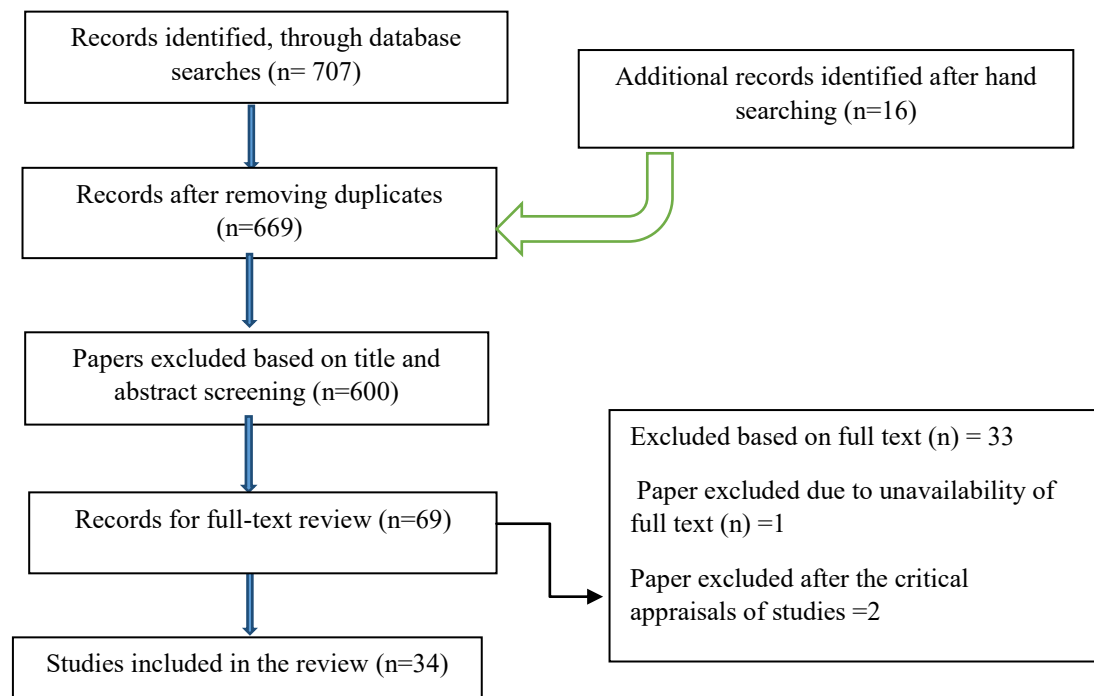
A scoping review of international, peer-reviewed research studies was undertaken according to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) extension for scoping reviews (Tricco et al., 2018) following the five-stage protocol: i) identify the research question, ii) database search, iii) screening and methodological quality appraisal, iv) data charting and synthesis of results and v) collating, summarizing, and reporting the results (Arksey and O'Malley, 2005). The quality of the papers was appraised using the Joanna Briggs Institute (JBI) critical appraisal tool 2015 and Mixed Method Appraisal Tool (MMAT) 2018 for two mixed-methods studies.

Our research question was ‘What are the types of research, gaps in research identified and future recommendations made by research conducted in health and migration in Nepal.’ A search was conducted by SB in PubMed, Google Scholar, and NepJol, using search index terms: Nepal* migrant*, lab*r migrant, migrant health research, migrant health and wellbeing study, migrant health study of Nepal*, research impact or recommendations. The objectives were to capture the following concepts: (1) types of research conducted in health and migration in Nepal; (2) research gaps; and (3) future research recommendations. To obtain the relevant studies the search approach applied adjacency (or proximity) operators to the text words. Before finalising, the search strategy was checked for sensitivity and relevance and reviewed for accuracy and consistency by the team members. The inclusion criteria were studies into Nepal’s labour migrant (men & women) health and well-being, and their health issues in English language peer-reviewed publications ranging from 2000 to 2022. Articles were excluded if they focused on migrants from countries unless the study had a sufficient sub-sample of Nepali migrants and relevant findings. Studies related to the migrants left behind spouses/relatives were also excluded, as were dissertations, conferences, grey literature and organisations’ reports. The database search was followed by hand searching of reference lists of primary papers, and title searching in Google Scholar.

Data was extracted by SB and ratified by PM who reviewed 20% of randomly selected papers. The included studies were carefully reviewed, and relevant information was extracted and charted in an MS Excel spreadsheet. The analysis process involved the identification of themes and it was presented as a narrative synthesis.

Figure 1

PRISMA Flow Diagram for Selection of Studies



Selection of Studies

The initial search yielded 707 publications from three databases: PubMed (n=60), Google Scholar (n=523), and NepJol (n=60). Sixteen results were retrieved from manual searches of reference lists and Google Scholar. A total of 69 publications were selected for full-text review, and 31 were excluded, since these discussed the health problems of left-behind spouses, elderly people and adolescents along with refugees besides Nepali migrants. Additionally, two papers did not meet the methodological criteria as set by JBI and MMAT tools. The full text of one paper could not be retrieved, which also resulted in its exclusion.

Characteristics of Included Studies

Table 1 shows the 34 peer-reviewed manuscripts covering 13 qualitative, 19 quantitative, and two mixed methods studies. Most were conducted in Nepal (n=23) followed by the United Kingdom (n=3) and Japan (n=3), with two in India and one in Malaysia. Eleven studies were conducted with male participants, and 18 studies explored both genders with male participants outnumbering female participants. While the remaining (n=5) studies did not address the variation in gender.

The studies included Nepali migrants who had previously migrated and were now returning, those currently working in their final destinations and those who intended to migrate in the future. Studies included participants from a wide range of backgrounds, including peer educators, opinion leaders, employment agents, healthcare providers, trainers, and representatives of non-governmental organizations (NGOs) supporting migrants. The studies included migrants' mental health (n=8), risky work environment and workplace accidents (n=2), health problems and migrants' access to health care services (n=5), their awareness, sexual behaviours, and perceived risk to STIs and HIV (n=7), COVID-19 and infectious disease (n=5), health-seeking behaviour and health promotion (n=4), and chronic diseases (n=3).

Findings

Results and findings of this scoping review are presented as different themes that were identified during the process of review. In addition, gaps in research and recommendations are also reported.

Themes on Migration Health Research

There has been a growing body of research on the health of Nepali migrants with common research topics including a) mental health & well-being; b) sexual behaviour and perceived risk of STIs; c) working environment & workplace-related injuries; d) health problems & access to health services; e) health seeking & health-promoting behaviour; and, more recently, f) impact of COVID-19. These are discussed in turn below.

Mental Health and Well-being

Nepali migrants have a substantial amount of negative mental health issues while working abroad (Devkota et al., 2021; Adhikary et al., 2018; Dhungana et al., 2019). Anxiety and depressive disorders were the most prevalent psychological morbidities among migrants (Chapagai et al., 2017). The factors that are linked to poor mental health include unfavourable working conditions, long hours, unfair treatment at work, a lack of sick leave, financial hardship, high expectations from family members back home, linguistic and cultural barriers, a lack of social life abroad, loneliness, and challenging living conditions (Devkota et al., 2021; Adhikary et al., 2018; Dhungana et al., 2019; Regmi et al., 2020; Simkhada et al., 2021b). Additionally, participants' pre-existing medical conditions and the country's poor healthcare accessibility were associated (Dhungana et al., 2019). These factors have a profound impact on

their mental health, but access to mental health services for Nepali migrants abroad is poor, leaving them with limited support to address these pressing health issues (Regmi et al., 2020).

Sexual Behaviour and Perceived risk of STIs

Nepali migrants were generally aware of HIV, but some still do not fully appreciate the risk (Mukherjee and Mail, 2014; Poudel et al., 2004; Suresh, 2014). They often had misconceptions about sexual health and STI prevention, leading to risky sexual behaviour and an increased risk of contracting STIs (Mukherjee and Mail, 2014; Bam et al., 2013). Despite knowing that condoms help stop the spread of HIV and STIs, unsafe sexual behaviour is widespread among Nepali migrant workers (Sushma, 2013; Bam et al., 2013). Risky sexual behaviour was linked to several factors, including lack of knowledge and access to information about safer sex, high-risk sexual behaviours, such as multiple sexual partners and transactional sex, alcohol and drug use, visiting sex workers, friend circles and peer pressure, isolation from family and community support systems, and limited access to sexual and reproductive health services, such as HIV testing and treatment along with lengthy wait times, trouble coordinating care, and costs of testing procedures (Mukherjee and Mail, 2014; Poudel et al., 2003; Bam et al., 2013; Poudel et al., 2004).

Working Environment and Workplace-Related Accidents

Nepali migrant workers are at great risk of injury whilst working abroad (Adhikary et al., 2017), with nearly half experiencing work-related accidents (Adhikary et al., 2019). This elevated risk results from inadequate health and safety safeguards, insufficient training, risk-taking behaviours, language barriers, cultural differences, and limited access to medical facilities (Adhikary et al., 2019; Regmi et al., 2019; Adhikary et al., 2017). Additionally, numerous studies highlight migrants' engagement in physically demanding and hazardous occupations like construction, agriculture, mining, and domestic work, which increases their chance of morbidity (Adhikary et al., 2019; Joshi et al., 2011; Adhikary et al., 2017). A considerable danger stems from the absence of legislative protections and weak enforcement of labour regulations. In many cases, Nepali migrant workers are not adequately compensated for injuries or disabilities sustained on the job, and many struggle to access medical care and support their families (Joshi et al., 2011). These workers are often subjected to long working hours, low wages, and poor living conditions, further exacerbating their vulnerability to workplace accidents (Regmi et al., 2019).

Health Problems and Access to Health Services

Due to the nature of their work, living and working conditions, Nepali migrant workers often have a variety of health difficulties, including respiratory illness, chronic diseases, kidney disease, cardiovascular diseases, musculoskeletal disorders, and mental health issues (Joshi et al., 2011; Devkota et al., 2021; Pradhan et al., 2019; Dhakal and Singh, 2020). CKD is a serious concern among Nepali migrants, due to long work hours, a lack of timely medical care, a low daily water intake, restricted access to toilets, and excessive use of painkillers (Dhakal and Singh, 2020; Aryal et al., 2021).

At the same time, Nepali migrants report having limited access to health services (Adhikary et al., 2020; Shakya et al., 2018; Regmi et al., 2019). While some working in India mentioned that they are fairly treated in accessing health services (Adhikary et al., 2020), Nepali migrants working in Japan and UK report that they had poor access to health care (Shakya et al., 2018; Simkhada et al., 2021a). Language barriers, lack of good knowledge about the healthcare system in their host country, ineligibility of public healthcare services, and lack of health

insurance are the barriers to limited access to healthcare services (Shakya et al., 2018; Simkhada et al., 2021a; Adhikary et al., 2020). Besides taking advice from health care practitioners self-medication and taking medical advice from family and friends are very popular among the Nepali migrants (Simkhada et al., 2021a).

Health-Seeking Behaviours and Health Promotion

Nepali migrants have unique health-seeking and health-promoting behaviours shaped by their experience in new countries. Spiritual development is one of the most frequent health-promotion strategy (Bhandari and Kim, 2016). This is followed by interpersonal interactions, nutrition, health responsibility, and stress management (Bhandari and Kim, 2016).

In the UK, Nepali migrants generally have good health status and appropriate health-seeking behaviour, although there is room for improvement. For example, only a small percentage of Nepali in the UK are registered with a dentist and were actively involved in the exercise, whilst factors such as education and emigrant status were positively associated with good health in this population (Simkhada et al., 2021a; Adhikary et al., 2008).

One important aspect of Nepali migrants' health behaviours is the role of coping strategies in managing stress. Problem-solving, information seeking, support seeking, negotiation, escape, remove oneself from stressors through denial were used by migrants (Mak et al., 2021a).

Impact of COVID-19

Overall migrants have a limited understanding of the COVID-19 threat and its associated risks (Khanal et al., 2021). Most migrants state that COVID-19 has severely impacted their physical and mental health, family stability, and financial security in their host countries (Bhandari et al., 2021). Social media platforms like Facebook, YouTube, and online news portals have contributed to rumours and misinformation, exacerbating the well-being and community relationships of returning migrants and marginalized communities, resulting in fear and social isolation (Regmi et al., 2022). Furthermore, stigma and discrimination associated with the fear of transmission of COVID-19 are largely evident among the locals in the country of destination, the latter are subject to frequent discrimination against migrants, while returnee migrants report having similar difficulties in their home towns, where they are not welcomed out of the concerns that they may carry and spread the virus (Khatriwada, 2020; Regmi et al., 2022).

Gaps in Research Identified

This scoping review identified substantial research gaps as summarized below. The areas in which gaps exist often warrant further study to glean a comprehensive understanding of the health burden endured by Nepali working overseas.

Geographical Gaps

The analysis of 34 studies shows a paucity of studies on Nepali labour migrants and students residing in Australia, South America, and North America. The review indicates a pressing need to extend future research to regions where Nepali migrant populations receive less attention to date. Specifically, research on location in these regions should incorporate issues of lifestyle, access to health care, utilization and availability of social services along with the investigation of the labour-related accident, mental status of Nepali students abroad as well as mental burden associated with onerous labour, and its psychological toll on factory workers.

Gender and Trafficking in Migration Research Gaps

During our review, we note there is a significant disparity in the number of studies on female migrants in comparison to male. The recommendation is that future studies give greater

or even equal consideration to female migrants, as their experiences and challenges may differ. Moreover, as there is a dearth of evidence on trafficking in migration, it is essential to conduct more research to gain a better understanding of this important issue.

Sexual Health and Behavioural Patterns

Although there exists ample literature assessing sexual behaviours amongst cross-border migrants in India, these studies have not extended beyond the Southeast. This would be particularly beneficial in the effort to understand the HIV-related risks of migrants, especially amongst migrants with high-risk behaviour, such as those interacting with sex workers and/or multiple partners.

Mental Health and Psychological Support

There is insufficient literature documenting the psychological burden of Nepali migrants beyond the Middle East and Malaysia. Studies on key factors associated with suicidal ideation, harmful behaviour, and stress in the migrant setting may elucidate the intricacies of mental suffering away from home. Analysis of pre-departure perceptions is not documented, and there are not enough studies on which specific factors are associated with poor mental health in repatriated migrant workers. It would be useful to understand the variations in health needs and ease of access to psycho-social support and social services among Nepali migrants in different countries.

COVID-19 and Infectious Diseases

The impact of COVID-19 on migrant communities including displacement and limited work opportunities is poorly studied. Studies into problems and threats that are received by Nepali migrants in the wake of the pandemic, particularly as it pertains to mental and physical health, are needed. Further studies on infectious diseases more broadly are also needed. For example, there is a drastic increase in the prevalence of infectious diseases in Malaysia, but its impact on migrant Nepali workers is not properly assessed (Sahimin et al., 2017).

Non-communicable Diseases

Migrants are at increased risk of non-communicable diseases (NCDs) (Agyemang and van den Born, 2018), however, evidence on the prevalence and risks of NCDs amongst Nepali migrants is lacking. Specific areas of focus which are, to date, lacking, include chronic kidney disease amongst all Nepali migrant workers, kidney health, cardiovascular health the impact of fatal heat exposure, prevalence of diabetes, hypertension and its risk factors and cancer information.

Recommendations

Research Recommendations

Further research is needed to address the psychological burdens associated with migration, particularly among Nepali repatriates. Such studies need to be conducted on a large scale to explore migrants' ability to cope with the many stressors they encounter and should include both males and females, to assess gender variations. Other variables such as social support, health literacy, benefits and barriers to care, and cultural conflict in the host country should be considered when assessing the myriad factors affecting migrants' health outcomes and behaviours.

This review also suggests a gap in understanding cultural forces which both promote and challenge healthy behaviours. Further studies are needed to explore the impact of caste and ethnic discrimination at work. We expect that this may not only be revealing in terms of the

mental well-being of migrant workers but may shed valuable light on their physical health. Perhaps such research can help to promote cross-cultural perspectives in the healthcare setting.

Our scoping review identifies a need for further research regarding the prevalence and management of communicable and NCDs amongst resettled Nepali migrants. This area of interest will benefit from a larger and more detailed body of literature to determine the contributing factors for increasing disease rates and health problems.

Policy Recommendations

Our findings suggest inadequate health protection globally for migrants, especially in the workplace; it is crucial that host governments can effectively manage and support migrant workers. Therefore, we propose the introduction and enforcement of new policies to ensure universal health coverage for labour migrants. This may aid in the prioritization of cross-cultural perspectives when writing and implementing progressive foreign policy. It is also important that governments and community-based organisations (CBOs) take responsibility for migrant well-being by ensuring them the resources to cope with challenges associated with migration, including but not limited to, linguistic barriers, social and familial isolation, worse mental and physical health, and high level of stress. We recommend that the Government of Nepal improve the system of compensation for migrant workers who suffer injuries or disabilities whilst working abroad, perhaps with a compulsory levy paid by employment agencies/brokers.

Implementation Recommendations

First, mental health components need to be included in the pre-departure orientation curriculum for future migrants. There is an urgent need to provide better, more focused, and more up-to-date pre-travel training to new migrant workers leaving Nepal. Concerning immediate life threats, public health authorities whose countries or labour positions harbour risk of toxic ingestion or intense heat stroke should implement health education programs for incoming workers. This is particularly important in Malaysia in the context of toxoplasmosis and contaminated meat, and extremely warm climates more broadly. For physicians and policymakers to appropriately assess life threats more specific ICD codes for causes of death are required.

Prevention and protection measures are recommended to promote healthy behaviours as the COVID-19 pandemic continues to loom. We also recommend the dissemination of information regarding HIV and AIDS to those migrating to a country where there is a significant risk of infection.

Comprehensive and timely support needs to be provided in contexts where the host and native governments are in communication. This is particularly important in countries where there are high rates of immigration from Nepal, such as Malaysia, the Gulf countries, and India. We propose that strengthening these partnerships will help ensure that Nepali migrants can easily access critical health services and that they are well-informed about available services for migrants.

Discussion

This scoping review identified key types of research: mental health and well-being, work environment, access to health care services, health-seeking and health-promoting behaviours, and impact of COVID-19. Different gaps were identified including those related to geographical region, sexual health and behavioural patterns, psychological support, and infectious diseases including COVID-19. In addition, various future recommendations were

identified including research recommendations, policy-related recommendations and implementation recommendations.

Most included studies were either quantitative cross-sectional studies or qualitative which could not find the causality of the problems identified among the Nepali migrants, as identified elsewhere (Meyer et al., 2017; Martin and Sashidharan, 2023). Moreover, most quantitative studies used non-probability sampling methods, which can result in selection bias, again as reported elsewhere (Wandschneider et al., 2020; Martin & Sashidharan, 2023).

As majority of participants were male migrants, the findings indicate a potential limitation in understanding the health and well-being issues specific to female migrant workers. To achieve a comprehensive understanding of the topic, future research needs to aim to include both genders. This is important because male and female migrants may experience different health problems. Additionally, another systematic review also highlighted the need for further research to explore the impact of gender across different phases of the migration journey and the varied health experiences of male and female migrants (Wandschneider et al., 2020).

Research on Nepali migrants has focused predominantly on mental health, indicating a correlation between migration and mental well-being. However, there is insufficient literature documenting the psychological burden of Nepali migrants beyond the Gulf countries and Malaysia. It will be useful to understand the variations in health needs and ease of access to health care and social services among Nepali migrants across different countries.

The study revealed that Nepali migrant workers are vulnerable to a range of occupational hazards, including poor workplace safety and excessive heat exposure, resulting in the deaths of three to four workers every week (Pradhan et al., 2019). Cardiovascular health problems were found to be a major cause of these deaths, with many being listed as cardiac arrest due to the lack of a clear definition for the causes of death (Pradhan et al., 2019; IOM, 2022). To address this issue, the Foreign Employment Board (FEB) needs to adopt the scientific classification and categorization of causes of death as defined by the International Classification of Diseases (ICD). This will ensure that clinicians are not misled by ambiguous categorizations and that appropriate preventive measures can be put in place.

Conclusion

This scoping review identifies a growing body of research conducted on the health of Nepali migrants, although there is a dearth of literature on NCDs such as chronic kidney diseases, cancers and chronic respiratory illnesses. There is also a need for more research on the health and well-being of Nepali migrants beyond the current main destination countries and with a bigger focus on female migrants. The gap in literature underscores the need for more extensive, large-scale studies with improved study design across various regions to shed light on the health challenges faced by Nepali migrant workers.

Since Nepali migrants face a variety of challenges when working overseas, comprehensive and timely support needs to be provided in contexts where the host and native governments are in communication. This is important in countries where there are high numbers of Nepali migrant workers. Extra care and support ought to be provided to vulnerable populations, whose circumstances may not otherwise afford comprehensive and autonomous care.

Acknowledgements

The authors would like to express their gratitude to Bournemouth University for providing the financial support required to conduct this scoping review. They also wish to thank Mr Sudim Sharma for his invaluable help in organizing the manuscript during its initial stages.

Additionally, special thanks go to Livia Cox for her valuable contributions in suggesting recommendations.

Conflict of Interest

The authors declare no conflict of interest concerning the research, authorship and publication of this article.

Funding

The author received financial support from Bournemouth University to conduct the scoping review.

References

- Adhikary, P., Aryal, N., Dhungana, R.R., KC, R.K., Regmi, P.R., Wickramage, K.P., Duigan, P., Inkochasan, M., Sharma, G.N., Devkota, K., van Teijlingen, E., & Simkhada, P. (2020) Accessing health services in India: experiences of seasonal migrants returning to Nepal. *BMC Health Service Research*, 20(1): 992. <https://doi.org/10.1186/s12913-020-05846-7>
- Adhikary, P., Keen, S. & van Teijlingen, E. (2019). Workplace accidents among Nepali male workers in the middle east and Malaysia: A qualitative study. *Journal of Immigrant and Minority Health*, 21(5): 1115-1122. DOI: [10.1007/s10903-018-0801-y](https://doi.org/10.1007/s10903-018-0801-y)
- Adhikary, P., Sheppard, Z.A., Keen, S., & van Teijlingen, E. (2017). Risky work: Accidents among Nepali migrant workers in Malaysia, Qatar and Saudi Arabia. *Health Prospect: Journal of Public Health*, 16(2): 3-10. DOI: [10.3126/hprospect.v16i2.18643](https://doi.org/10.3126/hprospect.v16i2.18643)
- Adhikary, P., Sheppard, Z.A., Keen, S., & van Teijlingen, E. (2018). Health and well-being of Nepali migrant workers abroad. *International Journal of Migration, Health & 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 Nepali migrants in the UK. *BMC International Health and Human Rights*, 8(1): 1-8. <https://doi.org/10.1186/1472-698X-8-6>
- Agyemang, C., & van den Born, B.J.(2018). Non-communicable diseases in migrants: an expert review. *Journal of Travel Medicine*, 26(2): 1-9. DOI: <https://doi.org/10.1093/jtm/tay107>
- Arksey, H., & O'Malley, L. (2005). Scoping studies: towards a methodological framework. *International Journal of Social Research Methodology*, 8(1): 19-32. <https://doi.org/10.1080/1364557032000119616>
- Aryal, N., Sedhain, A., Regmi, P.R., KC, R.K., & van Teijlingen, E. (2021). Risk of kidney health among returnee Nepali migrant workers: A survey of nephrologists. *Asian Journal of Medical Sciences*, 212(12): 126-132. <https://doi.org/10.3126/ajms.v12i12.39027>
- Bam, K., Thapa R., Newman M.S., Bhatt, L.P., & Bhatt, S.K. (2013). Sexual behavior and condom use among seasonal Dalit migrant laborers to India from Far West, Nepal: a qualitative study. *PLoS One*, 8(9): e74903. <https://doi.org/10.1371/journal.pone.0074903>
- Bhandari, D., Kotera, Y., Ozaki A., Abeysinghe, S., Kosaka, M., & Tanimoto, T. (2021) COVID-19: challenges faced by Nepali migrants living in Japan. *BMC Public Health* , 21(1): 752. <https://doi.org/10.1186/s12889-021-10796-8>
- Bhandari, P., & Kim, M. (2016) Predictors of the Health-Promoting Behaviors of Nepali Migrant Workers. *The Journal Nursing Research*, 24(3): 232-239. DOI: <https://doi.org/10.1097/jnr.000000000000120>
- Central Bureau of Statistics. (2021). National Population and Housing Census 2021 National project. Thapathali, Kathmandu Nepal, 595. https://censusnepal.cbs.gov.np/results/files/result-folder/National%20Report_English.pdf
- Chapagai, M., Pant, S.B., Tulachan, P., & Dhungana, S., (2017). Psychiatric morbidity among repatriated Nepali foreign labor migrants-a hospital based study. *Journal of Institute of Medicine Nepal*, 41(1).
- Devkota, H.R., Bhandari, B., & Adhikary, P. (2021). Perceived mental health, wellbeing and associated factors among Nepali male migrant and non-migrant workers: A qualitative study. *Journal of Migration and Health*, 3: 100013. <https://doi.org/10.1016/j.jmh.2020.100013>

- Dhakal, N., Bhurtyal, N., Singh, P., & Shah Singh, D. (2020). Chronic kidney disease in migrant workers in Nepal. *Kidney International Reports*, 5: S58.
- Dhungana, R.R., Aryal, N., Adhikary, P., KC, R.K., Regmi, P.R., Devkota, B., Sharma, G.N., Wickramage, K., van Teijlingen, E., & Simkhada, P. (2019). Psychological morbidity in Nepali cross-border migrants in India: a community based cross-sectional study. *BMC Public Health*, 19(1): 1534. <https://doi.org/10.1186/s12889-019-7881-z>
- International Organization for Migration. (2022). Exploring the landscape of health related information of migrants and its management in Nepal: A scoping study. *IOM UN Migration*, pp. 49. Retrieved from: <https://migrationhealthresearch.iom.int/exploring-landscape-health-related-information-migrants-and-its-management-nepal-scoping-review>
- 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. <https://doi.org/10.1186/1472-698X-11-3>
- Khanal, S.P., van Teijlingen, E., Sharma, M.K., Acharya, J., & Sharma, S. (2021). Perceived threats towards COVID-19 pandemic among Nepali migrant workers returned from India. *Journal of Health Promotion*, 9(01): 87-99. <https://doi.org/10.3126/jhp.v9i01.40970>
- Khatiwada, P.P. (2020). Impact of COVID-19 on Nepali migrant workers and social safety schemes at destination. *Journal of Social Protection*, 1(0): 11-25. <https://doi.org/10.3126/jsp.v1i0.38208>
- Mak, J., Zimmerman, C., & Roberts, B. (2021a). Coping with migration-related stressors - a qualitative study of Nepali male labour migrants. *BMC Public Health*, 21(1): 1131. <https://doi.org/10.1186/s12889-021-11192-y>
- Mak, J., Zimmerman, C., & Roberts, B. (2021b). I had tears in my eyes but I just left without looking back. A qualitative study of migration-related stressors amongst Nepali male labour migrants. *Journal of Migration and Health*, 4: 100042. <https://doi.org/10.1016/j.jmh.2021.100042>
- Martin, F., & Sashidharan, S.P., (2023). The mental health of adult irregular migrants to Europe: A systematic review. *Journal of Immigrant and Minority Health*, 25(2): 427-435. <https://doi.org/10.1007/s10903-022-01379-9>
- 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. <https://doi.org/10.1080%2F00332747.2017.1354608>
- Ministry of Labour, Employment and Social Security. (2022). Nepal labour migration report. Kathmandu, Nepal, pp. 224. https://moless.gov.np/storage/files/post_files/Nepal%20Labour%20Migration%20Report_2022.pdf
- Mukherjee, K. (2014). Knowledge, attitude, practices and access to care for HIV/AIDS among Nepali migrants in Mumbai. *The Health Agenda*, 2(1).
- Paudyal, P., Kulasabanathan, K., Cassell, J.A., Memon, A., Simkhada, P., & Wasti, S.P. (2020). Health and well-being issues of Nepali migrant workers in the Gulf Cooperation Council countries and Malaysia: a systematic review. *BMJ Open*, 10(10): e038439. <https://doi.org/10.1136/bmjopen-2020-038439>
- Poudel, K.C., Jimba, M., Okumura, J., Joshi, A.B., & Wakai, S. (2004) Migrants' risky sexual behaviours in India and at home in far western Nepal. *Tropical Medicine and International Health*, 9(8): 897-903. <https://doi.org/10.1111/j.1365-3156.2004.01276.x>
- Poudel, K.C., Okumura, J., Sherchand, J.B., Jimba, M., Murakami, I., & Wakai, S. (2003). Mumbai disease in far western Nepal: HIV infection and syphilis among male migrant-returnees and non-migrants. *Tropical Medicine and International Health*, 8(10): 933-939. <https://doi.org/10.1046/j.1365-3156.2003.01110.x>
- Pradhan, B., Kjellstrom, T., Atar, D., Sharma, P., Kayastha, B., Bhandari, G., & Pradhan, P.K., (2019). Heat stress impacts on cardiac mortality in Nepali migrant workers in Qatar. *Cardiology*, 143(1): 37-48. <https://doi.org/10.1159/000500853>
- Regmi, P.R., Aryal, N., van Teijlingen E., Simkhada, P., & Adhikary, P. (2020). Nepali migrant workers and the Need for pre-departure training on mental health: A qualitative study. *Journal of Immigrants and Minority Health*, 22(5): 973-981. <https://doi.org/10.1007/s10903-019-00960-z>

- Regmi, P.R., Dhakal Adhikari, S., Aryal, N., Wasti, S.P., & van Teijlingen E. (2022). Fear, stigma and othering: The impact of COVID-19 rumours on returnee migrants and Muslim populations of Nepal. *International Journal of Environmental Research and Public Health*, 19(15). <https://doi.org/10.3390%2Fijerph19158986>
- Regmi, P.R., van Teijlingen E., Mahato, P., Aryal, N., Jadhav, N., Simkhada, P., Zahiruddin, Q.S., & Gaidhane, A. (2019). The health of Nepali migrants in India: A aualitative study of lifestyles and risks. *International Journal of Environmental Research and Public Health*, 16(19). <https://doi.org/10.3390/ijerph16193655>
- Sahimin, N., Lim, Y.A.L, Ariffin, F., Behnke, J.M., Basanez, M.G., Walker, M., Lewis, J.W., Noordin, R., Abdullah, K.A., & Zain, S.N.M. (2017). Socio-demographic determinants of Toxoplasma gondii seroprevalence in migrant workers of Peninsular Malaysia. *Parasit Vectors*, 10(1): 238. <https://doi.org/10.1186/s13071-017-2167-8>
- Shakya, P., Tanaka, M., Shibnuma, A., & Jimba, M. (2018). Nepali 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, B., Sah, R.K., Mercel-Sanca, A., van Teijlingen, E., Bhurtyal, Y.M., & Regmi, P. (2021a). Perceptions and experiences of health and social care utilisation of the UK-Nepali population. *Journal of Immigrants and Minority Health*, 23(2): 298-307. <https://doi.org/10.1007/s10903-020-00976-w>
- Simkhada, B., Vahdaninia, M., van Teijlingen E., & Blunt, H. (2021b). Cultural issues on accessing mental health services in Nepali and Iranian migrants communities in the UK. *International Journal of Mental Health Nursing*, 30(6): 1610-1619. <https://doi.org/10.1111/inm.12913>
- 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). <https://doi.org/10.1093/jtm/tax021>
- Joshi, S., Prescott, G.J., Simkhada, P., Sharma, N., & Bhurtyal, Y.M. (2014). Knowledge and risk perceptions about HIV/AIDS among Nepali migrants in Gulf countries: a cross-sectional study. *Health Science Journal*, 8(3): 0-0.
- Dahal, S., Pokharel, P.K., & Yadav, B.K. (2013). Sexual behaviour and perceived risk of HIV/AIDS among returnee labour migrants from overseas in Nepal. *Health Science Journal*, 7(2): 0-0.
- Tricco, A.C., Lillie, E., Zarin, W., O'Brien, K.K., Colquhoun, H., Levac, D., Moher, D., Peters, M.D.J., Horsley, T., Weeks, L., Hempel, S., Akl, E.A., Chang, C., McGowan, J., Stewart, L., Hartling, L., Aldcroft, A., Wilson, M.G., Garritty, C., Lewin, S., Godfrey, C.M., Macdonald, M.T., Langlois, E.V., Soares-Weiser, K., Moriarty, J., Clifford, T., Tunçalp, Ö., & Straus, S.E. (2018). PRISMA extension for scoping reviews (PRISMA-ScR): checklist and explanation. *Annals of Internal Medicine*, 169(7): 467-473. <https://doi.org/10.7326/m18-0850>
- Wandschneider, L., Batram-Zantvoort, S., Razum, O., & Miani, C. (2020). Representation of gender in migrant health studies - a systematic review of the social epidemiological literature. *International Journal for Equity in Health*, 19(1): 181. <https://doi.org/10.1186/s12939-020-01289-y>