Review Article

Research Priorities and Needs in Global Migrant Health: A Systematic Review of Reviews

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***Aim*: Worldwide, the number of migrants is still increasing. Most research is focused on refugees and irregular migrants to high-income countries, with less focus on migrants moving between low and middle-income countries. As migrant health is a public health priority, there is a need for conducting quality research and gathering information on the health needs of migrants. This review of reviews was undertaken to find research priorities, needs, and identify gaps in the literature on migrant health.**

***Methods*: A systematic search of several databases using various combinations of search terms found 1,769 articles (after removing duplicates). Twenty-two studies were selected based on inclusion and exclusion criteria. Data were extracted and synthesised and presented in a narrative analysis of common themes.**

***Results*: Most of the included articles were systematic reviews conducted in high-income countries and among heterogenous groups of migrants. The major health themes explored in these reviews were: health service use and accessibility; mental health; perinatal health; sexual and reproductive health; and occupational health. In our systematic review, we explored challenges to and limitations of existing migrant health research and offered suggestions for future research.**

***Conclusion*: Migration and health are both complex phenomena, and so is the relationship between them. Most studies were cross-sectional; hence, there is a gap that should be filled with mixed-methods and longitudinal studies to further our knowledge of migrant health, and more research is needed on unexplored health issues. Priority should be given to conducting research in the countries of origin and in low-income countries.**

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Introduction

Migration is a global phenomenon that benefits both individuals and communities, contributing to economic and social progress[1]. The number of international migrants is still increasing, with estimates showing there are 281 million international migrants constituting 3.6% of the world's population[2]. With 146 million male migrants compared to 135 million female migrants, there are more male international migrants, and this gender gap has increased over the past 20 years[2]. Nearly 8 out of 10 international migrants are of working age (15-64 years)[2]. Most people migrate abroad for work, study, or to move with family. However, some are forced to leave their home country due to conflicts or disasters. Most international migration takes place from developing countries to more developed countries. The International Organization for Migration (IOM) noted in a 2022 report that some sixty percent of international migrants resided in three regions: North America, the Arab States, and Europe[2].

Migration is an important determinant of health and therefore a public health priority[3][4]. Health cannot and should not be confined within borders and to citizens of any host country[5]. Migrants have the right to the highest attainable standard of health, regardless of their location or migration status[1]. Meeting the Sustainable Development Goals (SDGs) and Universal Health Coverage globally becomes impossible if the dynamics of migration are not understood[6].

Migration is a complex phenomenon where the migrant goes through a number of stressors, which will ultimately influence their health outcomes[7]. Migration impacts the physical, mental, and social well-being of migrants, with high morbidity and mortality recorded among migrants, particularly among irregular or forced migrants[8]. While international migrants are often initially healthy[9][10], existing literature suggests that they are vulnerable to communicable diseases, occupational health hazards, injuries, poor mental health, diabetes mellitus, and maternal and child health problems[10]. Studies also show that migrants report worse self-rated health than non-migrants[9]. Some groups might be at particular risk of non-communicable diseases arising from obesity and insufficient physical activity[10]. Migrants may work in particularly difficult, physically demanding, and often dangerous work environments[6].

Migrants may also face barriers to accessing healthcare in host countries, including language barriers, inaccessibility of services, lack of migrant health policies, and irregular migrant status[8]. Similarly, a

review of Nepalese migrants found that individual and structural factors affected migrants' health[11]. Individual factors included language barriers, poor living conditions, low status in the community, isolation/separation from family, lack of life-skills training in a new country, lifestyle factors (smoking and drinking), lack of health insurance, and improper healthcare utilization. Structural factors included unclear government policy (host & sending country), discriminatory employer regulations, and poor working environment[11].

While a lot of research has been undertaken on migration by academics, governments, and intergovernmental organizations[2], there is a need for more quality research and accurate information on migrant health[3][6]. This is also in line with the 2008 World Health Assembly's Resolution on the Health of Migrants[8], and SDGs[12]. In light of rapid globalization and a changing world, synthesizing the evidence to see what we already know and what the remaining gaps are is important. Therefore, this review of reviews aimed to: (a) identify literature and research conducted in the field of migration and health; (b) identify research priorities, research questions, and challenges related to migration and health research; and (c) find gaps in literature and address knowledge gaps.

Methods

A systematic search was conducted in the following databases: Academic Search Complete, Complementary Index, MEDLINE Complete, PsychINFO, CINAHL Complete, Science Direct, SocINDEX, JSTOR, British Library EThOS, and SciELO. Table 1 lists search terms and combinations. The search strategies were first tested with various combinations to fine-tune the final strategy, incorporating the inclusion and exclusion criteria (Table 2).

Search term 1: S1	Migra* OR Migra* worker*
Search term 2: S2	Research* OR Research* priorit* OR Research question* OR Research* area*
Search term 3: S3	Health OR issues OR risks OR diseases OR illness
Search term 4: S4	Developing countr* OR Global South OR low and middle-income countries
Search term 5: S5	Developed countr* OR Global North OR high-income countries
Search term 6: S6	Systematic reviews
Search strategy	(S1 AND S2 AND S3) AND (S4 OR S5) AND S6

Table 1. Summary of search terms and strategy

Inclusion criteria:
• Migration research conducted in high and low-income countries
• Research on different migration processes such as pre-departure, transit, destination, and return (pre-migration, movement, arrival, and integration, and return phase)
• Research on health problems and disease prevalence in migrants
• Research on social, bio-social aspects of health and migration
• Healthcare utilisation and experience of care
• Research published in low-impact journals or by scholars from the Global South, along with research from the Global North
• Research conducted from 2000 to 2022
Exclusion criteria:
• Research on brain drain, migration of doctors and nurses, medical migration
• Research about the healthy migrant
• Research discussing only the prevalence of a certain disease or condition among immigrants but not exploring reasons
• Research seeking only perceptions of health care professionals but not migrants
• Research on migration due to climate change
• Research on migration acculturation and food insecurity
• Research on refugees, war victims, human trafficking
• Articles discussing the effects of healthcare interventions
• Children, palliative care, etc.
• Research on left-behind family members
• Commentary papers, editorials

Table 2. Inclusion and exclusion criteria

Articles were reviewed by PS and SM, and the final selection was done by PM and SM based on the inclusion and exclusion criteria. Any disagreement was resolved through discussion with PS, and in case of further disagreement, the wider research team. A data extraction form was applied to the selected articles, using a form developed by PM and reviewed by PS and EvT. Data synthesis was carried out by PM

and SM and was reviewed by PS. A narrative data synthesis[13] was based on thematic analysis. As there were different kinds of studies included in the review, a narrative analysis offered the most appropriate overview. We conducted a quality assessment of each paper using the CASP checklist.

Results

An initial search identified 2,370 studies, and 1,769 remained after removing 601 duplicates. These articles were further assessed for titles to include 794 potentially relevant articles. A further 384 were excluded after reading the title, and 410 articles′ abstracts were read. A total of 278 articles were excluded after reading abstracts, leaving 132 articles. After applying exclusion criteria, 82 articles were included and read, and 18 were included. Four articles were identified by hand searching, resulting in a total of 22 articles in our scoping review (see flow diagram in Figure 1).

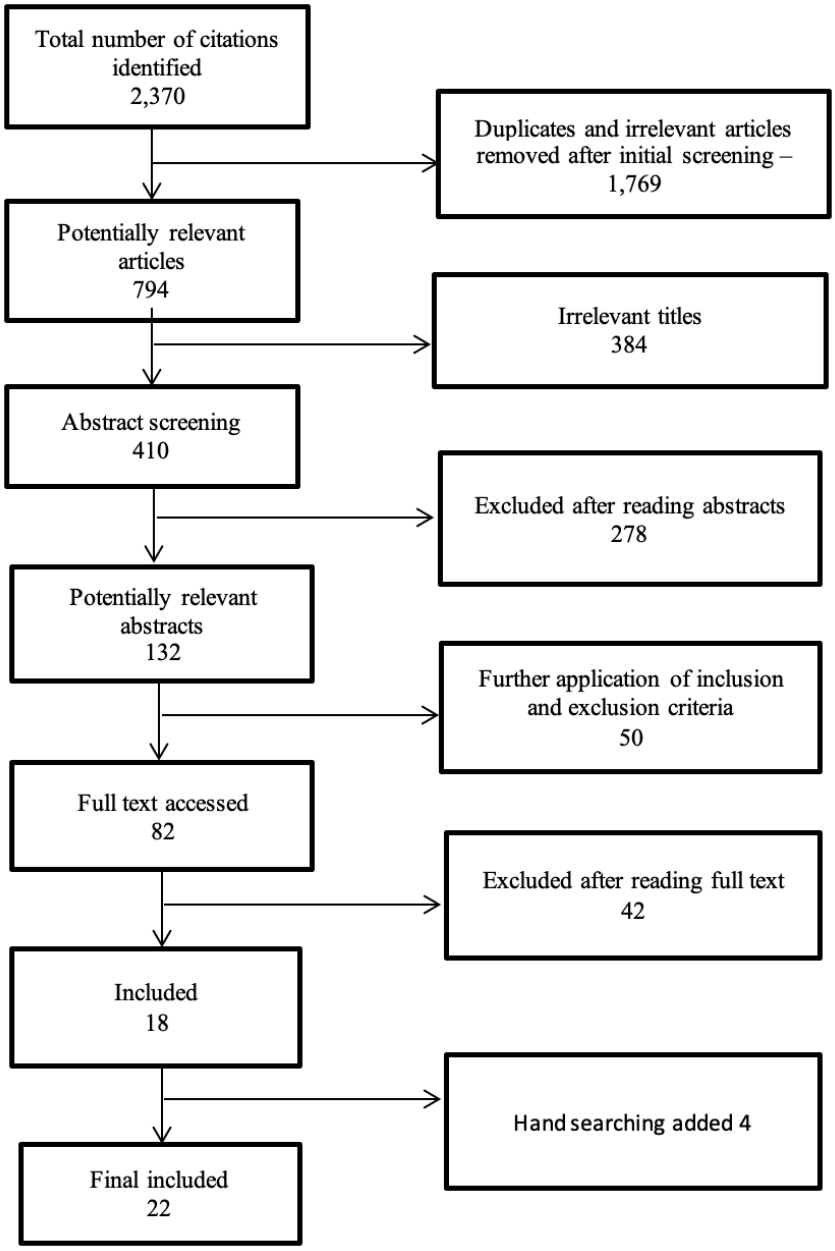

Figure 1. Flow diagram for selection of articles in review of reviews

1. Health service use and accessibility

Five reviews focused on health service use[14][15][16][17][18], mostly focusing on migrants from LMICs to HICs. The utilisation of healthcare among migrant workers was found to be lower compared to non-migrant workers[15]. Migrant workers faced various barriers to health services in host countries, including: communication[14][16][18] socioeconomic[16]; personal experiences and beliefs[16];

fear/stigma/vulnerability[17]; religion[16]; unfamiliarity with and lack of confidence in the new environment[17][18]; health system including legislation[14][18], economy[14][16][18], culture[14][16][18], geography[15][18]; and health professionals' education, practices, and preferences[16]. A review among migrants from countries with high rates of female genital mutilation (FGM) found that health workers did not have sufficient clinical knowledge or experience to deal with the unique needs of migrants with a history of FGM[17].

Limitations of the reviews were: only studies in the English language were included[16][17]; studies focusing on migrants from LICs to LMICs were lacking, undocumented/irregular migrants, and migrants working in informal economies were lacking[15]; studies adequately disaggregating findings by migrant sub-groups were lacking[18]; migrants not presenting to any healthcare services were not represented[18]; and unpublished studies might have been missed[14]. Methodological limitations included high heterogeneity across studies[14][15] and non-representative[15] or non-random[14] sampling techniques used in individual studies included in the reviews. Suggestions for future research provided included more research on: inequalities (gender, social class) in access to healthcare[14]; strategies that help migrants deal with access barriers[14]; health services use among sub-groups including informal/irregular migrant workers and at various stages of migration[15]; and the impact of health reforms on migrants[14]. Longitudinal and large-scale population-based studies exploring health services use among migrants were also recommended[15].

2. Mental health

Five reviews focused on migrant mental health[19][20][21][22][23]; most focused on migrants from LMIC to HICs. There was a high prevalence of depressive symptoms among migrants, especially from LMICs[19][20]. Immigrant women were more likely to experience depressive symptoms than native women[19][22]. The most common determinants of mental health among immigrants were: spousal[22], family[21], social relationships[22][23]; stressors related to being an immigrant in a western society and cultural influences[21][23]; irregular status[21]; and health issues, including poor access to healthcare[21]. The most common strategies to cope with mental health stressors included problem-solving, support-seeking, and accommodation[21].

Limitations of the reviews on mental health were: heterogeneity of included individual studies (e.g., study population from different study settings)[19][20]; few population-based studies meaning overestimation

of outcomes[19]; more observational studies increasing the possibility of bias and confounders[20]; publication bias[19] and selection bias[22]; use of screening tools rather than diagnostic interviews to assess mental health status[20]; lack of validated screening instruments to measure PPD[22]; risk factors for mental health outcomes such as length of stay in the host country and reason for migration not adequately explored[19][22][23]; and variation in the definition of variables used in individual studies[20][21]. Findings from the reviews may not be generalizable[22], for example, to immigrants from HICs coming to reside in other HICs[23] and migrating from LMICs to LMICs[20]. Suggestions for future research included focusing on: risk factors of PPD[19]; experiences of mental health problems among immigrant women in different LMICs[20][22] and HICs[23]; anxiety/anxiety disorders[20][22]; psychotic/bipolar diseases[20]; and culturally appropriate interventions to manage mental disorders among migrants[20]. Methodologically, meta-analysis is needed to precisely determine the prevalence of postpartum mental health problems[22] and mixed-methods studies are needed to explore coping with mental health problems by migrant men and women in different contexts[21].

3. Perinatal health

Four reviews focused on perinatal health[24][25][26][27]; most reviews focused on migrants from LMICs to HICs. Findings showed that there was inequity in perinatal health across Europe[24]. Migrant women in HICs were more likely to have inadequate prenatal care, and this differed by country of origin[26]; similarly, for the risk of infant mortality and preterm birth[25]. Nutrient intake among pregnant women was often insufficient, with inadequacies[27]. Dietary and physical activity behaviours were influenced by post-migration environments, culture, religion, and food or physical activity-related beliefs and perceptions[27].

Limitations of the included reviews were: lack of data on migrant subgroups[24][25]; heterogenous study designs[25]; heterogenous definitions of migration[25]; only published literature included[25]; lack of data comparing migrant and host-country populations[27]; and reliance on self-reported responses, increasing the likelihood of recall bias[27]. Suggestions for future research on perinatal health of migrants included: more studies on pregnancy outcomes[24] and use of postnatal care (PNC)[26] in sub-groups of migrant mothers (e.g., race, ethnicity, and country of origin), particularly qualitative studies[26]; more studies on the availability, accessibility, acceptability, and quality of PNC and the impact of these factors on utilisation[26]; more studies on dietary and physical activity behaviours in pregnant women, including

the influence of socio-demographic and migration-related factors[27]; more studies on the effect of racism on perinatal health of immigrant mothers[24]; and more studies on language ability, length of time in the receiving country or immigration status, country of birth, etc., and perinatal health of migrants[25].

4. Sexual and reproductive health

Two reviews focused on the sexual and reproductive health (SRH) of migrants[28][29]. Migrant female sex workers (FSWs) were at an increased risk of acute sexually transmitted infections (STIs)[29]. Migrant FSWs working in lower-income countries were at a higher risk for HIV than local FSWs, whereas migrant FSWs working in higher-income countries were at less risk[29]. Migrants experienced several barriers in accessing SRH services, including stigma, direct and indirect costs, difficulties in navigating health systems, and lack of cultural competency within health services[28].

The limitations reported by Platt *et al*. included: causality of mechanisms by which migration influences HIV risk could not be established as included studies were observational; only studies in the English language were included; and findings disaggregated by migrant sub-groups, including by temporal/seasonal work, by country of origin, or by type of migration (rural-to-urban or urban-to-urban), could not be captured[29]. The limitations reported by Rade and colleagues included: exclusion of grey literature; findings not generalizable to all sub-Saharan and South-East Asian migrants residing in HICs; barriers specific to undocumented migrants not included; and perspectives of healthcare providers not included[28]. Suggestions for future research among migrant FSWs included: studies considering factors that could affect/mediate the link between migration and HIV/STIs, such as age of sexual debut, pre-migration sex work, injecting drug use, location of sex work, etc.; studies on the mental health of FSWs; and violence among migrant FSWs; studies comparing risks among migrant and local FSWs[29]. Methodological suggestions included more qualitative and mixed-methods studies; more studies in North America; and quantitative work to be informed by qualitative data on broader health issues[29]. Suggestions for future research on SRH among migrants include: studies on migrant sub-groups, including by country, gender, and age; and research on additional barriers and facilitators to accessing SRH services[28].

5. Occupational health

Two reviews focused on occupational health[30][31], both were migrants from lower-income countries to HICs, and both found adverse work-related health outcomes. Hargreaves *et al.* studied migrants in manual occupations and found a high prevalence of morbidity, injury, and accidents, and migrants suffering from body aches, musculoskeletal pain, joint pain, dermatological problems, oral/dental problems, and depression, stress, and other mental health problems[31]. Whereas a study of female domestic workers (FDWs) reported migrants experiencing physical, verbal, and sexual abuse, musculoskeletal strain, respiratory difficulty, and infectious diseases[30].

The limitations noted included: lack of data examining the association between occupational health outcomes and social integration/support[30][31], labour market integration[31], integration into health services[31], factors such as harassment, exploitation, violence, or discrimination[31]; whether compensation was provided or not for occupational morbidities[31]; lack of mortality data[31]; reporting and recording of migrants' health needs[31]; physical and chemical hazards[30]; and use of protective gear/mechanism to reduce risk, food safety, hygiene, etc.[30]. Methodological limitations included: lack of longitudinal data[30][31]; limited generalizability due to convenience sampling[30]; use of informal data sources, including hospital visit records and news[30]; and lack of comparative data between migrant and native workers[31]. Similarly, data on occupational health outcomes of migrants moving between HICs or between LMICs, migrants in high-skilled sectors, and undocumented migrants were lacking[31]. A study on FDWs noted several challenges, including: underreporting due to fear of repatriation and punishment; difficulty in accessing FDWs due to the limited time spent outside the employer's home; and language and cultural barriers[30]. Based on these limitations, suggestions for future research included: comparative studies including migrant and native workers[31]; research on undocumented migrants[31]; more robust and longitudinal studies[30][31]; and more research on FDWs in different host countries[30].

6. Miscellaneous

Oral care – Two reviews on oral health/care focused on South Asia migrants to HICs; both reported inadequate oral health knowledge, attitude, and practices among these migrants[32][33]. In a recent review, more than 50% of participants were engaged in one or more oral cancer risk practices such as smoking and betel/quid/pan/gutkha chewing, and perceived some of these habits, such as chewing betel, as good for their health[32]. Whilst Batra and colleagues reported that migrants didn't perceive oral health

as important[33] and did not focus on prevention and regular check-ups in the absence of symptoms, the same study also identified different barriers to oral health care access, including lack of trust in dentists, treatment costs, religiosity, being female, language difficulties, and general awareness[33].

The limitations identified in the two reviews included varied quality of individual studies included in each review[32][33]; unpublished studies not included[32][33]; studies published in languages other than English not included[32][33]; and diverse methodologies employed in individual studies, making comparison difficult[32]. Findings from these reviews cannot be generalized to all South Asians[32][33]. Some studies in the review by Batra and colleagues comprised only women and mostly Indian, Pakistani, or Bangladeshi migrants, whilst other South Asians were underrepresented[33]. Perhaps future research on oral health care should focus on dental education and the importance of dental care, especially for women of child-bearing age; the impact of acculturation on oral health; and further studies among migrants from the Maldives, Sri Lanka, and Nepal[33].

Impact of non-health policies on health – A review covering immigrants from LMICs to HICs found that non-health policies, including restrictive entry and integration policies, and policies related to temporary protection, detention, and restricted asylum reception, were associated with poor mental health among immigrants[34]. These restrictive policies perpetuated migrant health inequities among migrant populations in receiving countries[34].

The limitations identified in this review included: the impact of certain non-health policies such as exit policies, and policies on education and housing opportunities not explored; low certainty of findings due to the observational nature of included studies; grey literature and publications in other languages excluded; a shortage of natural experiment studies using robust analytical approaches to isolate policy effects; and studies conducted in LMIC contexts lacking[34]. Suggestions for future research included: research evaluating the effects of non-health policies on migrant health in LMICs; studies focusing on the health effects of resettlement or dispersal, short-term integration (language training), and deportation policies; and studies considering the medium and long-term health effects of policies, and whether effects differ among migrant subgroups (gender, age, socioeconomic position, reason for migration)[34].

COVID-19 – migrants were disproportionately represented in reported COVID-19 deaths[35]. This study found an increase in all-cause mortality in migrants with high vulnerabilities and risk factors from

COVID-19 due to high-risk occupations, overcrowded accommodation, legal-administrative barriers to health care services, and language barriers[35].

Suggestions for future research included the need for: more robust data on COVID-19 testing uptake, hospitalizations, and deaths; large retrospective and prospective studies disaggregating migrant status; evidence on the link between risk factors identified in migrants and clinical outcomes; and research on COVID-19 vaccine uptake by migrants[35].

Discussion

This systematic review of reviews, to our knowledge, is the first one to identify and synthesise different studies on migration health. The included reviews covered various health issues and outcomes including health services use among migrants, mental health, perinatal health, SRH, occupational health, as well as COVID-19, oral health, and the impact of non-health policies on the health of migrants. Overall, our findings showed worse health outcomes for migrants compared to host-country populations, including poorer mental health outcomes, and migrants are more vulnerable to reproductive and perinatal health problems[4]. This research also highlights research gaps, priorities, and recommendations for future research.

One of the major areas of research was health service use and accessibility. The findings indicated that the use of health services among the migrant population was lower compared to the local population. A plethora of barriers were reported, including communication and language issues, attitude and beliefs, and perceived discrimination in health care settings. Culturally sensitive care and interventions aimed at improving the health care experience of immigrants is an urgent need[36]. Training policymakers and health stakeholders on migrant health issues to improve migrant-friendly services is essential[37]. Additional research on strategies that help migrants deal with access barriers is needed[14].

Our review of reviews found a high prevalence of mental health problems among migrants from LMICs to HICs compared to the host country population. The factors leading to poor mental health among immigrants included stressors related to the individual, family, and society, feelings of being an outsider, illegal status, and poor access to health care services, among others. Immigrants are at risk of mental health problems due to stressors and/or traumas that they face pre- or post-migration[38][39][40]. There is thus a need for efforts to develop and implement methods to prevent mental ill health among the immigrant population[41]. Various strategies to prevent mental health problems among immigrants have

been suggested, including orienting resources to primary and community care[42], training health professionals on the mental health needs of immigrants[43], and increasing the involvement of migrants in their care[43]. Additional studies on risk factors of post-partum depression, mental health problems in various LMIC contexts, research on anxiety/anxiety disorders and psychotic/bipolar disease, and research on interventions to manage mental disorders among migrants are needed.

In terms of perinatal health, due to inadequate perinatal care, women migrating from LICs to HICs were found to be at higher risk of feto-infant mortality and preterm birth. Evidence showed that reproductive health inequalities exist among migrants living in wealthy countries[44] due to biological and behavioural risk factors[45]. Removing barriers to accessing high-quality maternal care should be a priority for HICs[46][47]. In addition, as pregnant migrant women have particular health needs, they should be provided with medical follow-up[47]. Improving access to and utilisation of perinatal health services among migrants, specifically ethnic minority and recently arrived migrants, is crucial[45]. Suggestions for future research include more studies on: pregnancy outcomes; availability, accessibility, acceptability, quality, and use of PNC; dietary and physical activity in pregnant women; the effect of racism on perinatal health; the association between language ability, length of time in the host country, and perinatal health among various subgroups of migrant mothers.

SRH of migrants is important as they are at higher risk of HIV and STIs compared to non-migrants. SRH services require skills and staff training to deliver such services successfully to migrants[48], as socio-cultural constraints impede SRH knowledge and behaviour among migrants and therefore affect their access to and utilisation of services[49][50]. Unclear legal provisions and uncertainties on entitlements for migrants also create barriers to accessing health care, including SRH services[51]. There is a need for a more culturally adaptive healthcare model that considers migrant women's linguistic, cultural, and socio-economic backgrounds, as well as engages health care professionals by building cultural competency in providing SRH services to migrants[48], hence suggestions include studies on additional barriers and facilitators to accessing SRH services.

In terms of occupational health, higher rates of fatal and non-fatal injuries and poor health outcomes were found among migrants compared to the native population, in line with existing literature, which in part could be due to immigrants working in high-risk occupations[52][53]. Some measures suggested to reduce the health disparities among migrants were improved safety training, promoting fair labour practices in both host and origin countries, including expanding the role of non-governmental

organisations, and fair recruitment policies[53]. Suggestions for future research include more studies on: data examining the association between occupational health outcomes and social integration, labour market integration, and integration into health services; harassment, exploitation, violence, or workplace discrimination; compensation for occupational morbidities; mortality data related to occupational health; physical and chemical hazards; and use of protective gear/mechanism, food safety, hygiene, etc.

Lastly, we also identified a high risk of exposure to and infection with COVID-19[54], due to the complex interplay of biological, social, and cultural factors. COVID-19 has had an especially detrimental effect on international migrants with travel bans during the pandemic, restricting the mobility of millions of migrants or forcing them to return home[2]. Migrants are vulnerable to health and socioeconomic impacts, and there is a need for interventions that are migrant-inclusive[55][56]. More research is required into the indirect and long-term effects of COVID-19 on the physical and mental health of migrants. Suggestions for future research include the need for: more robust data on COVID-19 testing uptake, hospitalizations, and deaths; large retrospective and prospective studies disaggregating migrant status; evidence on the link between risk factors identified in migrants and clinical outcomes; and COVID-19 vaccine uptake by migrants.

Limitations of current research and suggestions for future research

Most included studies focused on migrants from LMICs to HICs; therefore, findings may not be generalizable to migrants who are part of other migration corridors. Most migrant populations reside in HICs in Europe, North America, and Asia[2], and most studies on migrants are concentrated in HICs. However, mobility between HICs has been on the rise since 1995[2]. Therefore, a suggestion of our review is more studies into migrant health focusing on other migration corridors, particularly from LMICs to LMICs and HICs to HICs.

A frequently noted limitation was that studies did not disaggregate by migrant sub-groups nor compare migrant populations and host-country populations. Therefore, we recommend future studies on migrant health to disaggregate findings by migrant sub-groups[6].

Existing studies note gender as a factor that intersects with migration and health inequalities[9]. Out of the 22 studies included in our review of reviews, 11 focused only on women migrants, whereas the remaining 11 focused on both genders. Arguably, migrant women are more likely to experience

discrimination and harassment[9], but given that migrant men outnumber women, we recommend a review to focus on migrant men.

Most limitations noted in the reviews were methodological, especially since most of the individual studies were observational, increasing the possibility of bias and confounders. Other methodological limitations were high heterogeneity across studies; exclusion of unpublished studies and grey literature; exclusion of publications in languages other than English; and use of non-representative or non-random sampling techniques. Based on the findings of our review, we recommend methodologically stronger studies on migrant health, including longitudinal and large-scale representative population-based studies, meta-analyses to determine precise values, mixed-methods studies, and qualitative studies.

One paper suggests that migration and health research should note the bi-directional relationship between migration and health and study how migration affects health, but also how health status affects decisions to migrate[6]. Future research should attempt to resolve challenges to collecting data from migrants, including language and culture barriers, and reaching migrants, particularly FDW and undocumented migrants. Protecting confidentiality becomes even more important[6]. Finally, migration and health are both complex phenomena, and so are the relationships between them. Therefore, multi-disciplinary approaches to study migration and health, including contributions from sociology, psychology, demography, public health, and epidemiology, are encouraged[6]. It is also important to consider the accelerated technological advancement and how this affects migrant health directly and indirectly. Therefore, studies on the current impact of mobile technology and, if and how, m-health can be used to enhance migrant health should be conducted.

Strengths and limitations of our review of reviews

This systematic review of reviews is, to our knowledge, the most comprehensive and robust study to identify a list of health-related problems among migrant populations, key challenges related to the conduction of research, and offer future research recommendations.

There is one key limitation that we have noted, namely the inclusion of studies in the English language only, which means potentially missing vital publications in other languages.

Statements and Declarations

Ethics approval

Ethics approval was not required for this systematic review

Contributions

All authors contributed to the study conception and design. The searching for the review was largely conducted by PM, NA, and SM, and papers were appraised by all authors. The first draft of the manuscript was written by PR and PM, and all authors commented on previous versions of the manuscript. All authors read and approved the final manuscript.

Conflicts of interest

The authors declare that they have no competing interests.

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