Migration and Health Systems performance in low- and middle- income countries

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Abstract

Increased migration is one of the main challenges impacting on health system performance. The World Health Organisation (WHO) framed responsiveness, fair financing, and equity as the intrinsic goals of a health system. In line with this framework, we attempted to map existing research on migration and health system performance. A qualitative systematic review was conducted. We followed the processes indicated for evidence mapping synthesis reviews, which included choosing the scope and research topic, searching, and selecting evidence, reporting findings, and identifying the evidence. We improved the primary review by first performing a brief scoping review, which served as the analytical basis for the systematic review extraction process. Articles found during the scoping review were evaluated again during the bigger systematic review phase. We refined the study's eligibility criteria as well as the data extraction items. Seventy-two articles were considered for the review. Out of this total (55/72) were published between 2016 and 2021. Our analysis showed fairness in financing, weak governance and leadership, the absence of a universally acceptable definition of migration, limited access of migrants to healthcare, equity, health worker attitude towards migrants, dignity, and health care quality to migrants as key challenges that affect health system performance. The mapping exercise shows more literature on migration and health system performance, but also shows gaps requiring urgent attention, including integration of the health system goals in implementing health interventions. We conclude that countries are recognising the challenges of migration on health system performance. Migration is slowly being included in national health policies in low- and middle- income countries, however challenges to implementation of such policies exist. Migration is recognised as a human right and the ethical obligation of health institutions. More agenda setting and funding for bridging work on migration and health system performance is recommended.

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Acronyms

AIDS	Acquired Immunodeficiency Syndrome
ART	Antiretroviral Treatment
COVID-19	Coronavirus Disease 19
CBO	Community Based Organisations
HPSR	Health Policy System Research
HRH	Human Resource for Health
HS	Health System
HIC	High Income Countries
EAC	East Africa Community
COMESA	Common Market for Eastern and Southern Africa
HSR	Health System Responsiveness
ILO	International labour Organisation
IDP	Internally Displaced Persons
FPGH	Foreign Policy and Global Health
IOM	International Organisation of Migration
LMICs	Low to Middle Income Countries
MOSAWA	Mozambique South Africa and Swaziland
MPH	Master's degree in Public Health
NGO	Non-Governmental Organisation
TB	Tuberculosis
NDoH	National Department of Health
OOP	Out of Pocket
SADC	Southern Africa Development Community
SDG	Sustainable Development Goals
UHC	Universal Health Care
UN	United Nations
UCT	University of Cape Town
UNCHR	United Nations Centre for Human Rights
UNFPA	United Nation Populations Fund
WHA	World Health Assembly
WHO	World Health Organisation
WHR	World Health Report

Glossary

Health Systems	"Health systems are socially constructed, existing within contexts and histories. They are complex, adaptive, and integrative by nature, and generally seek to improve population health, while addressing the broader social determinants of health" (Gilson 2013; WHO 2007).
Systematic review	"A type of literature review that uses pre-decided systematic research methods to search the literature, which are then analysed and reported on" (Mulrow 1994). "The aim is to synthesis and explain existing information around a topic or question to provide evidence for decision makers" (Cronin et al. 2008; Dixon-Woods et al. 2016).
Migration	"Human migration implies some form of permanent or semipermanent relocation by an individual or a household, and it is the permanent or semipermanent nature of the movement that distinguishes migration from tourism and commuting" (Clark 2020).
Health policy	"Courses of action (and inaction) that affect the sets of institutions, organizations, services, and funding arrangements of the health system" (Buse et al. 2012)
Health policymakers	"Actors who have a specific responsibility for developing formal policies, including those outside the health sector; influence how policies are translated into practice; or seek to influence the formal policy process" (Gilson 2013; WHO 2007)
Health systems strengthening	"The process of improving health systems functions to expand access to health services, improve coverage of health services and/or increase the quality and efficiency of the health system" (WHO 2007).
Health System Responsiveness	"The social acts taken by service providers to meet the legitimate expectations of service seekers, concentrating on the tangible activities, processes, and interactions between providers and service seekers" (Joarder 2015)
Universal health coverage	"Ensuring that all people can use the promotive, preventive, curative, rehabilitative and palliative health services they need, of sufficient quality to be effective, while also ensuring that the use of these services does not expose the user to financial hardship" (WHO 2015).
Health policy and systems research (HPSR)	A field that "seeks to understand and improve how societies organize themselves in achieving collective health goals, and how different actors interact in the policy and implementation processes to contribute to policy outcomes" (Gilson 2013).

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Part A

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PART A: Systematic Review Protocol

Migration and Health Systems performance in low-and middle- income countries

"*Migration is an expression of the human aspiration for dignity, safety and a better future. It is part of the social fabric, part of our very make-up as a human family*" - Ban Ki-moon[1]

Introduction

Health system performance is important and needs improvement across the globe (Spreng 2011). National health systems in Low- and Middle- Income Countries (LMICs) and High-Income Countries (HIC) alike need to improve their performance to meet the needs of their populations. Countries around the world are transforming their health systems in the pursuit of universal access, equity, quality, and fairness in finance (Frenk et al. 2006), to ensure health system performance is improved. The World Health Organisation (WHO) describes three main health system goals: health, fair financing, and responsiveness. These performance goals are important for health system functioning to ensure people' access to health and critical steps need to be taken to ensure optimal health system performance (Balabanova et al. 2013; Shen et al. 2014).

Health systems face challenges that inhibit performance improvement such as changing health needs, growing public expectations, global pandemics such as COVID-19, and new health goals that are ambitious and raise the bar for health systems to deliver better health outcomes and higher social value (Kruk et al. 2018). Additionally, health systems are faced with burdens that are rooted in complex political, economic, social, environmental, and demographic realities that shape functionality and their role in improving performance in addressing population health needs (Rabbani et al. 2016). Although most governments recognise the importance of good health system performance, other countries face a scarcity of health resources and insufficient public health infrastructure (IFC 2008; IFC 2011; Screenland 2005), and their reliance on external resources for health is growing (IFC 2008; IFC 2011; Screenland 2005; Foster et al. 2010).

One of these challenges to health system performance is 'migration' (of varied sorts, see below). Migration is growing, and increasingly important to countries and health systems alike. There is no doubt that migration must be considered in improving health system performance. Migration is a reality in today's globalised world, and it is becoming an increasingly important component of global health, economic, and social growth (Davies et al. 2011) in need of monitoring to ensure optimal health system performance. With over one billion people migrating globally and over 244 million crossing international borders, it is critical to improve and strengthen efforts toward health system performance, as well as develop a better understanding of how to respond to the complex interactions between migration and health system performance (Hanefeld et al. 2015). With a few exceptions, it is commonly acknowledged that migration has been a feature of global development throughout the last millennia, affecting health system performance; yet migration has been overlooked in formulating national and global health plans (Mosca et al. 2020). Such apathy has pushed migration-related health objectives to the margins (Wickramage et al. 2018). Even though publications on migrant health policies have been more common during the 1990s (Bollini 1992; Mladovsky 2009), a systematic approach has been

[1] UN Press Release: The United Nations takes action on international migration to address pressing migration concerns and improve development benefits, (UN 2018)

problematic until now because each study has tended to focus on a different sample of countries and challenges, as well as employing different concepts, definitions, and criteria (Ingleby et al. 2019).

Despite being a key challenge in determining health system performance, 'migration'/ 'migrant' are very challenging concepts, with many definitions. Countries define this term differently and without a universally accepted definition, its inclusion or positioning in health system planning and performance is often over-looked. The terminology is unpacked below, but for the moment, we use the word 'migrant' to refer to "any person who is moving or has moved across an international border or within a state away from his/her habitual place of residence" (Abbas et al. 2018).

There are increased requests for the inclusion of migration as a topic in health system planning and measuring health system performance, as migration has important implications for health practitioners, health systems performance and the health of individuals (Gushulak et al. 2011). Any strategy aimed at improving health outcomes must include all people as active participants in their own health and wellness creation (WHO 2007). This concept is encapsulated by the term "people-centred health systems," which highlights specific criteria for describing health systems that put people at the centre (Sheikh et al. 2014), recognising the feedback all people bring to the health system and the intrinsic importance accorded to people in the health system.

Standardisation, categorisation, and quantification of data on migrants are necessary for studying changes over time and comparing across countries (Ingleby et al. 2019). There are limited definitions, and prioritisation in planning, and similarly limited routinised data collection – all of which make understanding migration, or its relation to health system performance and responsiveness, in particular very difficult.

Health system responsiveness, being a health system goal, is one such mechanism for monitoring and measuring health system performance. However, although there are several frameworks for measuring health system responsiveness, including the WHO responsiveness toolset, established in the World Health Report (WHR) 2000, it is a complex field that lacks adequate definition, research, and evidence (Khan et al. 2021). The frameworks and tools for measuring and determining health system responsiveness, themselves, are also argued to be inadequate (Mirzoev and Kane 2017; Robone et al. 2011).

As an important factor in health system performance, responsiveness raises interesting questions when considered in the context of migration. For the moment, we define health system responsiveness as the "the ability of the health system to meet the population's legitimate expectations regarding their interaction with the health system, apart from expectations for improvements in health" (WHO 2010). Responsiveness is an important goal for a health system that wants to be adaptable and provide care to everyone (Bridges et al. 2019). Health systems that are responsive anticipate and adapt to current and future health needs (Mirzoev & Kane 2017), thus contributing to health system improvement and better health outcomes for all people if considered.

We undertook a scoping review which mapped the evidence at the intersection of health systems, migrants, and health system responsiveness (see Methods section for more detail). Studies from the year 2011 to 2021 that had migration, health system performance and responsiveness relevancy were reviewed from January

2021 to December 2021. Search terms used in the scoping review included health system performance, migration, health system responsiveness on a global scale.

Literature Review

Health systems and their performance

Health system goals have received varied attention over the last two decades, with fairness in financing and health provision receiving slightly more attention than health system responsiveness (Khan et al. 2021). These three goals must routinely be monitored by every country, and they form the source for the assessment of health system performance as facilitated by WHO (Murray & Frenk 2000). However, in some LMICs, there are emerging signs of attention paid to health system responsiveness as part of the goal of the health system.

Differences in health system design, content, and management lead to differences in results such as health, responsiveness, and justice (Murray & Frenk 2000). Decision-makers at all levels must be able to quantify variations in health system performance, as well as identify the factors that influence it and develop strategies to enhance results in a variety of settings (Murray & Frenk 2000). As a result, a plethora of frameworks for evaluating the performance of health systems have been suggested and implemented (Bustamante et al. 2018; Jee & Or 1999; Murray & Frenk 2000).

Considering the three goals outlined above, the goal of any national health system is to improve the health of the people it serves. As a result, when evaluating a health system's success, population health is typically the first area addressed, demanding combining data on the population's health status and improvement (Papanicolas & Smith 2013). There would be no need for health systems if they did not contribute to increased health (Papanicolas & Smith 2013). Premature mortality and non-fatal health outcomes are key components of population health, which should reflect the health of all persons over the course of their lifetimes (Murray & Frenk 2000). Most governments are positively concerned about both the average level of population health and the distribution of health within the population, that is, health disparities (WHO 2010).

Secondly, fairness in financing is one of the common goals of all health systems that has received slightly more attention, as stated above, as compared to the goal of health system responsiveness (reviewed under health system responsiveness section). Financial security is a multifaceted notion that mainly refers to how well individuals are protected from the financial implications of illness (WHO 2000), and it is a primary goal of health systems around the world (Papanicolas & Smith 2013).

Finally, enhancing the health system's responsiveness to the population's legitimate expectations for non-health-improving components of their interactions with the health system is the third goal of the health system (WHO 2010). Literature on responsiveness suggests a better and solid understanding of health system responsiveness is vital, particularly for LMICs, where social and economic development is happening at an unprecedented rate (Lodenstein et al. 2017).

Barriers to good health system performance have been identified in the literature, including a lack of management training, poor teamwork, lack of supervision, and lack of motivation (Muchekeza et al. 2012), inadequate planning and management capacity (Barnett & Ndeki 1992; Gilson et al. 1994), inadequate funding, and a non-supportive perception of evidence-based interventions and policing (Barnett & Ndeki 1992;

Gilson et al. 1994; Jacobs et al. 2010). Furthermore, it should be recognised that the remedy for national barriers is dependent on policy rather than structural difficulties (Tabrizi et al. 2017). The performance of health systems is an important factor to examine when assessing whether health system goals have been met.

Migrational variations and health systems performance

The association between migration and health is undeniable, which calls for an urgent need for the advance of 'migration-aware' health systems across the globe. For example, it is through the movement of people that communicable diseases spread and through migration that expert doctors get accepted in countries to assist in provision of good health. Migration-aware health systems are characterised as a whole-system approach in which population movement is prioritised in the development of health interventions, policies, and research (Vearey 2014). Migration is good for development and strengthening of health systems (Segatti & Landau 2011), however, current responses within public health systems do not engage adequately with migration (Vearey 2011; Vearey 2013). Given this context, the resulting health inequities undermine migration's developmental opportunities (Ingleby 2012).

In terms of public health, population health, and health system planning, increased responses to the governance of migration are being developed (Landau et al. 2016) is now unavoidable (Gushulak & MacPherson 2006; Vearey et al. 2018; Walls et al. 2004). Although evidence exists in some countries demonstrating the importance of moving toward 'migration-aware' health policies and responses, marginal effort has been put in developing evidence-based guidelines for the development of tangible migration and health policy solutions and programs that could assist in developing migration-aware health responses (Vearey 2016; Walls et al. 2004).

Migration is becoming increasingly linked to health inequities and is a social element in health. This is because migration is regarded as a health determinant, interacting with health outcomes, and promoting health inequalities in a variety of ways (Castañeda et al. 2015; Davies et al. 2009; Ingleby 2016; Malmusi et al. 2010; Vearey 2013).

Migration has an impact on the health system, not in the behaviours that are commonly assumed, because public healthcare consumers move for reasons other than seeking health care, and there is little evidence that people move for health care (Vearey 2014; Vearey 2016). Individuals may traverse national or regional borders to access the healthcare institution that is geographically nearest to them, posing distinct challenges (Vearey 2016). For example, research in South Africa has demonstrated that access to public health care is challenging for migrants living on the outskirts of cities (Vearey et al. 2010). These barriers to access are moulded by paperwork (or a lack thereof), spoken languages, and healthcare professional discrimination (Vearey 2013; Vearey 2016).

There are numerous philosophical, methodological, and technical obstacles associated with building improved data systems on migration, in addition to persistent political challenges, such as the absence of a widely agreed definition of the term migration (Urquia & Gagnon 2011; WHO 2010) resulting in unhelpful, non-specific definitions (Gushulak et al. 2011). Differences in definitions tend to differently conceptualise place of residence and duration of stay (De Beer et al. 2010).

Migration can be broadly categorised into two main clusters: internal and international migration (discussed more below). For greater descriptive detail in this study, we define migration as representing a process of 'movement of people', a movement that can occur across or within geographical borders, crossing different types of boundaries - political, administrative, or cultural (Boyle & Keith 2014). This is the definition that has been adopted and used in this research. The migrant groups studied in this study are the most used terminology and concepts in the field of migration and health (Urquia & Gagnon 2011).

Although there are different classifications of migrant groups, Table 1, these can be classified into either internal migrants or international migrants, with some groups cross cutting. The research on migration and health is highly diverse in terms of how migrants are categorised and how the relationship between movement and health is understood (Urquia & Gagnon 2011). In many circumstances, the language used in migrant health is confusing, and studies on migrant health should avoid using lay person's terms and instead seek to utilise globally classified categories (Urquia & Gagnon 2011).

Table 1: Migrant groups considered in this report

Migrant Category	Definition
Migrant	A migrant is "someone who has established a (semi-)permanent new domicile in a location different than their previous residence". "A locality, district, or higher administrative area" is referred to as a "place" in this definition (Urquia & Gagnon 2011).
International migrants	The longitudinal movement of people across national boundaries is entailed by a change of address. Movement can result in either a new permanent residence (if the person is permitted to remain in a country indefinitely) or a temporary residence (Urquia & Gagnon 2011).
Internal migrants	Individuals who relocate inside a country's borders, typically across regional, district, or municipal boundaries, resulting in a change in their regular abode (Klugman 2009), Within the same country, one's residence changes (for example, rural-urban, interstate, intercity).
Irregular migrants (or undocumented / illegal migrants	Individuals who enter a country without the appropriate documentation or licenses, often in search of job, or who overstay their visa. Irregular migrants are an especially vulnerable category because they lack access to healthcare and other public services that legitimate international migrants do (Gushulak & MacPherson 2006).
Trafficked persons	Individuals who have been persuaded, duped, or pushed into situations in which their bodies or labour are exploited, whether over international lines (International Organisation of Migration (IOM) 2011).
International labour migrants (flow)	People compensated for an activity in a country where they are not citizens, such as those legitimately accepted as migrant laborers. Labour migration (also known as contract labour migration) is a type of temporary migration in which workers work in a country other than their own, usually under contractual arrangements arranged and enforced by employers, governments, or both, that set limits on the length and nature of employment, as well as rights and responsibilities in the host country. (IOM 2011).
Internally displaced persons (IDPs)	"Individuals who have been compelled to flee their homes or places of permanent residence, particularly due to or in order to avoid the effects of armed conflict, generalized violence, human rights violations, natural or man-made disasters, and who have not crossed an international border" (IOM 2011).
Refugees	"Individuals who are outside their country of nationality due to a well-founded fear of persecution due to race, religion, nationality, membership in a particular social group, or political opinion, and are unable or unwilling to avail themselves of that country's protection or return due to fear of persecution" (IOM 2011).
Asylum - seekers	Individuals who have applied for international protection but have not received refugee status (IOM 2011).
Tourists	Individuals who go to and remain in areas outside of their typical environment for less than a year and whose primary reason of visit is not work (IOM).

Source; Boyle & Keith 2014

An internal migrant is a person who changes residence within the same country, for example, rural-urban, interstate, and intercity (Urquia & Gagnon 2011). Internal migrant definition has been a difficult subject to define; one such definition is what a 'internal migrant' is (Sharma & Grote 2019) based on 'time', an individual is considered a migrant if he/she spends more than a specified amount of time away from their home. In relation to health systems and performance, internal migrants might be people leaving rural areas and settle in an urban area, without crossing international boundaries, where they will also seek medical care. These can be individual patients or healthcare providers.

Internal migration is important and prevalent in almost every country and in some countries, it is far bigger than international migration (Deshingkar & Grimm 2005). Internal migrants are not always registered in their new place of residence and end up affecting health system performance, especially in urban areas and new provinces or districts they settle in as there tend to be a huge burden on the little resources available in most LMICs. Internal migrants prefer to move in a cyclical and transient pattern, traveling between cities and political borders in pursuit of better chances (Hu et al. 2008). Indicators of socioeconomic status position migrants lower than the urban population but higher than their rural counterparts due to limited access to health care. It is typical for migrants to be denied access to metropolitan facilities, particularly public health (Hu et al. 2008).

The second common category or cluster is 'international migration' – which, as its name implies, in its broadest sense, is a change of residence including geographical migration of individuals across national/country borders (Urquia & Gagnon 2011). Between 1960 and 2015, data on worldwide migration did not divide migrants by subgroup, resulting in a projected 258 million migrants, accounting for 3.4 per cent of the world's population (Abubakar et al. 2018). According to recent estimates from the International Labour Organization (ILO), labour migrants accounted for 61% of all international migrants in 2015 (ILO 2017) — but this statistic is based on limited data, and this was the first year for which data were available (Abubakar et al. 2018). International migrants in terms of health systems and performance may include medical physicians from Cuba working in South Africa or Zimbabwean nurses working as health care workers in South Africa, as an example. Table 2 provides author's assessment of health system performance.

Table 2: Author's assessment of health system performance

Migrant type	**Health system level/type**	**Example from the literature**	**Author's assessment of Health system performance / performance barriers**
Internal	Individual patients	- Patients moving between regions/states/provinces (Moultrie et al. 2016; Vearey et al. 2017; Bell et al. 2015; Bhagat et al. 2020; Ginsburg et al. 2016) - Often in relation to access to health services and patient choice (Ginsburg et al. 2016) - Often described as rural to urban migration (Dobra et al. 2017)	- Language barriers - Overpopulated in relation to health system resources - Access to health - Puts pressure on health system - Health care utilisation improved
	Providers/ Care Team	- health worker moving between regions (Abera Abaerei et al. 2017) - often described in relation to urban to rural HRH issue	- HRH issues - Language barriers - Attrition - High turnover - Health care utilisation

	Organisation (Hospital, clinic, nursing homes)	- Provides infrastructure and additional resources to support the work and growth of care team microsystems (Fanjiang et al. 2005) - The organization may "create an overall environment and culture for change through its different decision-making mechanisms, operating systems, and human resource practices," making it a major lever of change in the health-care system (Fanjiang et al. 2005; Ferlie & Shortell 2001)	- Long waiting ques with patients with increased migration - Affects infrastructure use - Decision making and community participation is affected - Health system culture is affected - Increased running costs of the organisation to cater for the providers - Keeping revenue above rising costs - Management often not well positioned to respond to increasing cost and quality crises in the system
	The Political and Economic Environment	- The market refers to regulatory, financial, and payment regimes and entities that have a direct impact on the structure and performance of health care organizations and, by extension, all other levels of the health system (Fanjiang et al. 2005) - The political and economic context of health care is influenced by a variety of actors (Fanjiang et al. 2005)	- Delayed decision making on health system issues - HRH issues - Excessive regulation in the system - Shortage of drugs - Loss of confidence in the health system
International	Individual patients	- often divided between assessment of 'legal' vs 'illegal' patients and access to services (Vearey et al. 2017) - Sometimes it stresses on health system with different disease profiles brought in (Dobra et al. 2017; Flores & Brotanek 2005). - Health care utilisation (Ginsburg et al. 2016) - Improves remittances back in the health system (Singh 2007).	- Language barriers - Discrimination - Burden on local health systems - Access to health system affected - Quality of service compromised - Equity - Burden of chronic diseases and non-communicable diseases (NCDs) - Increased remittance to access private health care in home country
	Providers	- HRH migration of health workers 'out' (for example, brain drain) (Labonté et al. 2015) - health workers brought in from other countries (Asongu 2014) - Policy changes with governments (Connell et al. 2007)	- Shortage of health care workers/HRH issues - Language barriers - Accountability - Health system responsiveness - Loss of skill in the health system - High training costs of health care workers - Policy changes
	Organisation	- Supports the work and growth of care team microsystems by providing infrastructure and supporting resources (Fanjiang et al. 2005) - Because it may "create an overall atmosphere and culture for change through its different decision-making procedures, operating systems, and human resource practices," the organization is a crucial lever of change in the health-care system (Fanjiang et al. 2005; Ferlie & Shortell 2001)	- Increased health care financing through Non-Governmental organisations (NGO), International bodies or foreign AID - Inadequate infrastructure to cater for migrants - No effect as migrants may use as utilise private health care
	The Political and Economic Environment	- "Refers to the regulatory, financial, and payment administrations and bodies that directly influence the structure and performance of	- Lead to discrimination in the provision of health services

		health care organizations and, through them, all other levels of the system" (Menon & Vadakepat 2020).	- Inflow of foreign health workers as government interact at national level

Migration and health system performance

Political sensitivities, in addition to the problems stated above, notably regarding the collection data that is beneficial in understanding health challenges affecting migrants' (Rechel et al. 2013) affect health system performance. Because migrants differ in terms of age, gender, place of origin and destination, socioeconomic level, and kind of migration, data on migrant health, such as that accessible in various Western European countries, usually points in different ways (McKay et al. 2003). Furthermore, when socioeconomic status is considered, health differences between migrants and citizens disappear, even if low socioeconomic status may be a result of migrant status and ethnic origin due to social exclusion mechanisms (Davies et al. 2009; Ingleby 2009). Even though much of the research on upstream determinants of health has concentrated on socioeconomic variables, the relevance of migration has been largely overlooked (Ingleby & Petrova-Benedict 2016), There is increasing recognition that migration might be a social factor of health (Marmot et al. 2012), as already mentioned above.

One of the most major barriers to migrants receiving health care in LMICs is a lack of proper legal entitlements and, if entitlements exist, methods to ensure that they are successfully recognized and respected (Rechel et al. 2011). The right to health was first articulated in the 1946 WHO constitution (WHO 2002), and Article 12 of the International Covenant on Economic, Social, and Cultural Rights states that "everyone has the right to the best achievable quality of physical and mental health" (WHO 2002). The European Union's Charter of Fundamental Rights establishes everyone's right to preventive health care and medical treatment (Gil-Bazo 2008), but this is not the case.

Aside from having restricted legal rights to health care in some countries, migrants are frequently affected by user fees (Nielsen et al. 2009) and may find it difficult to obtain health insurance due to administrative barriers. Unawareness of one's rights, entitlements, and the larger health system, as well as gaps in health literacy, social marginalization, and direct and indirect discrimination, are all barriers (Mladovsky et al. 2012; Rechel et al. 2012). Most countries lack survey data and do not gather reliable and precise data on migration, except for a few European countries such as England and the Netherlands (Gushulak et al. 2011).

Fairness in health service delivery and health outcomes is now widely recognized as a vital aspect of health system performance and decreasing inequities in public health is widely recognized as a critical current problem for health systems (Rechel et al. 2013). Health systems can become more inclusive by addressing health inequities faced by migrants, benefiting not only migrants and other disadvantaged population groups, but also society at large (Rechel et al. 2012), enhancing health system performance, and achieving universal health access.

Improving responsiveness to migrants, on the other hand, will involve addressing several critical issues (Rechel et al. 2011). One difficulty is the huge variety within migrants, as discussed above, making generalisations exceedingly difficult. Migrants are not a homogeneous group, with significant differences in religion, culture, language, ethnicity, and place of origin and destination, and thus are often hesitant to participate in national surveys. Migrant health interventions must be customised to the needs of distinct migrant populations,

considering their place of origin, legal and residence status, and specific economic and sociodemographic risk factors (Rechel et al. 2012). Increasing resource restrictions will make it more important than ever for migrants' solutions to demonstrate their cost-effectiveness (Rechel et al. 2012). In light of this, it's more necessary than ever to consider how migration affects health-care system performance through the lens of health-care system responsiveness. Table 3 provides a sample of some the main studies included in this review.

Public health interventions generally target three demographics to avoid or limit the spread of a developing infectious illness and its harmful consequences "the population in the source area, the floating population leaving the source area, and the population travelling from the infected area to other areas" (Khanna 2020). Epidemics, such as COVID-19, not only cause public health problems, but they also cause economic and migratory problems (Bhagat et al. 2020). The spread of the Corona virus from its epicentre in Wuhan, China, to the rest of the world is ascribed to migration and people's mobility (Bhagat et al. 2020). Both internal and international migrants endured tremendous suffering in numerous regions of the world following the emergence of COVID-19 (Bhagat et al. 2020).

Poor sanitation and infrastructure in developing countries can place enormous strain on public health systems, affecting millions of people, particularly immigrants, refugees, internal migrants, internally displaced people. This is mainly because additional resources will be required to cater for migrant groups and poor sanitation also leads to rapid spread of some diseases. Controlling the spread of COVID-19 is difficult in some geographic settings, such as Columbia, Somalia, Democratic Republic of Congo, Iraq, Lebanon, and Syria, where, because of the ongoing conflict and governmental mismanagement, the public health system is in shambles, and large numbers of refugees and displaced people are living in deplorable conditions, such as not having a permanent place to reside, and authorities may not know how to reach them or have the ability and means to coordinate an intervention (Bhagat et al. 2020). Health service providers were also unable to deal with such a pandemic, and there was a lack of culturally and linguistically accessible information on COVID-19 and how to protect oneself and others, putting refugees, migrants, internal migrants, and host populations at risk (WHO 2020).

Table 3: Author's assessment of relevancy of studies included

Authors	**Year**	**Location(s)**	**Study Type**	**Migrant type**	**Health system performance issue addressed**	**Author's Assessment of relevance**
Vearey et al	2017	South Africa	Rapid evaluation	Internal	Equity	Address equity issues in health, internal migrants
Labonte et al	2015	South Africa, Jamaica, India, and Philippines	Descriptive	International Migration	Human Resources for Health (HRH)	Addresses challenges of migration related to Health worker migration
Walker et al	2021	Southern Africa	Rapid evaluation	International migrants	Access	Deals with health system performance in southern Africa, relevance to COVID 19 vaccinations
Dovlo	2005	Africa	Evaluation	Internal and Internal migrants	Financing	Achievement of MDGs
Thomas et al.	2020	LMICs	Descriptive	Internal and International	Resilience	Deals with migrant policies

Health system responsiveness

Remember how responsiveness is indicated as a key goal for the health system, here are a few examples of frequent response framings. The evidence includes several different definitions of health system responsiveness. Even though different authors define health system responsiveness differently, widespread agreement among experts suggest that that responsiveness involves not just the health system's potential to respond, but also the actual response (Khan et al. 2021). For example, health system responsiveness is defined as "the social acts taken by service providers to meet the legitimate expectations of service seekers," concentrating on the tangible activities, processes, and interactions between providers and service seekers (Joarder 2015). Different terms are also used to define responsiveness, and there appears to be little agreement on who health systems should be responsive to; some argue that the system should be responsive to communities, users of the system, service providers, and others advocate for a broader focus on citizens and even the public (Khan et al. 2021).

Table 4: Author's assessment of health system responsiveness

Author	**Responsiveness Definition**	**Authors assessment to Migration**	**Authors assessment to health system performance**
(Lodenstein et al. 2017)	"Responsiveness of health providers to citizens' concerns is thus the result of a combination of the broader governance and health system context, features of the social accountability initiative and motives and perceptions of providers at a particular point in time"	This is relevant mainly linked internal migration and it defines responsiveness in relation to citizens' concerns	This affects how the users will utilise the health system. Responsive health providers will attract more users strengthening utilisation of health services by internal migrants
(Dewi et al. 2011)	"Responsiveness relates to a system's ability to respond to the legitimate expectations of potential users about non-health enhancing aspects of care and in broad terms can be defined as the way in which individuals are treated and the environment in which they are treated, encompassing the notion"	This definition is applicable to both internal and international migrants, as it defines in relation to the system and potential users	This shows how the system caters for the needs of potential users. An inclusive health system contributes to improved health for internal and international migrants
(Mirzoev & Kane 2017)	"Health systems responsiveness entails an actual experience of people's interaction with their health system, which confirms or disconfirms their initial expectations"	This is also applicable to both internal and international migration, as defines in terms of people interacting with health system	Experience of interactions also reflects on how the users will visit the health system again and touches on aspects of access and utility of health services for users and potential users of the system
(Darby et al. 2003)	"Responsiveness of human resources for health (HRH) is defined as the social actions that health providers do to meet the legitimate expectations of service seekers"	This definition applies to both migrant types as HRH is applicable to internal and external migrants	HRH is important as it affects how potential internal migrants and international migrants are likely to return for additional services. Inadequate staffing for HRH implies affects how users are likely to visit the health care system

Responsiveness is not a metric for how well a system maintains or improves population health outcomes; rather, it is a metric for how well a system can meet non-health expectations, such as whether migrants are treated with dignity by healthcare staff (Malhotra & Do 2017). Some health systems, for example, may provide high-quality clinical care, but if healthcare providers are unpleasant to patients and wait times are long, the

system is inefficient (WHO 2000). Table 4 provides a snapshot of the authors' own assessment of health system responsiveness.

Respect for people, which includes issues such as dignity, autonomy, communication, and confidentiality; and customer orientation, which includes factors that influence satisfaction but are not directly related to health care, such as respect for prompt attendance, access to social support networks, and facility quality; and choice of one's health care provider is important (Blendon et al. 2001; Vaitsman & Andrade 2005). The conceptual framework for assessing responsiveness is based on a collection of agreed-upon domains. These variables include prompt attention, dignity, communication, autonomy, confidentiality, choice of healthcare practitioner, and the quality of basic amenities for both inpatient and outpatient care, as well as access to social support for inpatient care exclusively (Table 5) (de Silva 2000; Letkovicova et al. 2005; Valentine et al. 2008; WHO 2002).

According to Mirzoev and Kane (2017), responsive health systems are ones that "predict and adapt to changing demands, capitalize on opportunities to promote access to effective interventions, and improve the quality of health services, eventually leading to better health outcomes." (Mirzoev & Kane 2017) for all people. Health system responsiveness literature suggests that gaining a better understanding of health system responsiveness is important, particularly for LMICs, where economic and social development is occurring at a rapid pace. In 2008, the WHO published a WHR which focused on primary health care, entitled Now More Than Ever. In it, they point out: "The legitimacy of health authorities increasingly depends on how well they assume responsibility to develop and reform the health sector according to what people value – in terms of health and what is expected of health systems in society" (WHO 2007).

In the existing literature on health systems, there are three conceptual flaws that can be found (Mirzoev & Kane 2017). Second, while there are seven characteristics of responsiveness that are widely acknowledged as measures of health-care system responsiveness (Darby et al. 2003; De Silva & Valentine 2000; Jiang et al. 2014; Letkovicova et al. 2005), there is limited acknowledgement of its broader factors (Robone et al. 2011), affecting health system performance globally. The fundamental attention of significant frameworks has been the responsiveness of health care (Mirzoev & Kane 2017).

Some studies have already demonstrated the importance of responsiveness in a variety of circumstances (Robone et al. 2011; Valentine & Bonsel 2016). These studies, however, do not focus on migratory communities. The literature suggests that interventions that address accountability, responsiveness and capability have been applied in countries across the globe, including in LMICs. These interventions commonly include the implementation of formal feedback mechanisms into the health system, intended to generate feedback about health services and the health system, encourage citizen participation and create an opportunity for the health system to respond to the relevant feedback (Lodenstein et al. 2017).

Migrants and ethnic minorities, for example, who utilise health services in groupings that differ from the dominant population, often receive poorer care than majority users (Seeleman et al. 2015). These problems in health care, referred to variously as health care 'disparities,' 'inequalities,' or 'inequities,' have been well documented in the United States (Nelson 2002; Vaccarino et al. 2005) and are increasingly being acknowledged in LMICs (Aarts et al. 2013; de Bruijne et al. 2013; Fransen et al. 2010). Evidence of health-care

disparities suggests that health-care providers must adjust to improve accessibility and quality for minority service users. Individual, organisational, and system actions are all needed to promote diversity responsiveness. Individual carers require distinct abilities, knowledge, and attitudes (Betancourt 2003; Seeleman et al. 2009). Promoting diversity responsiveness in health care organizations necessitates the implementation of specialized service policies and procedures. Diversity responsiveness at the system level includes national or state-level actions, such as laws assuring financial access to health care for all users (Seeleman et al. 2015).

Table 5: Author's assessment of Health system performance

Migrant Type	**Responsiveness issue**	**Author's relevancy to Health system performance/ barriers**
Internal Migrants	Health worker attitudes	This affects the perception internal migrants have on the health system, affecting how internal migrants perceive service providers in the country
	Communication	Language impact how internal migrants access health facilities in countries with a lot of spoken languages such as South Africa for example, as patients or user of the system. Language barrier is limited among internal migrants in countries with few spoken languages.
	Quality	Internal migrants are also concerned about the quality of services provided. It shows how front-line managers and providers rank their expectations for the quality of care provided to internal migrants in relation to the mandated standard.
	Prompt attention	Internal migrants, as users of health system build some negativity if they spend time waiting in ques, opportunity cost of staying at home is considered.
	Dignity	Language barriers can lead to how on perceive how they were treated when seeking services among internal migrants.
International Migrant	Health worker attitudes	Issues of Xenophobia may impact access to health services among international migrants due to health worker attitudes. This is also mainly related to language barriers as this is a common barrier with international migrants accessing health services.
	Communication	Language barrier is a big challenge in international migration. It affects how international migrants such as refugees seek health services
	Quality	This refers to the patient's experience in terms of receiving prescribed medications and if the international migrant would recommend the clinic hospital to a sick friend or relative.
	Prompt attention	For most international migrants such as refugees, time is money and when prompt attention is not given, thy would not return hence affecting accessibility of health services
	Dignity	This relates to the international migrants being treated with dignity, which at times is a subjective issue. This also mainly emanates from the language barrier aspect

The restricted scope of research present on the topic of migrants and health system responsiveness reflects the scarcity of comprehensive information on health system responsiveness and migration as an interdisciplinary in LMIC. A first search of Scopus and PubMed was performed to determine the scale and extent of current evidence. The exploration was limited to health-related materials published after 2000 and includes phrases such as "health system performance," "health system goals," and "migrants" (or variations and abbreviations thereof). Most documents found by the search are, nevertheless, relevant to HIC.

Excluding migrants opposes the principles of Universal Health Coverage (UHC) and does not help to equity or health security; in fact, it does the opposite, especially in an era of emerging infectious diseases like COVID-19, which is aggravating global health insecurity (Fang & Hong 2020). People movement is a worldwide phenomenon that must be considered when designing public health policies and strategies. However, several of these elements are missing, including country efforts, funded research, and a lasting forum for discussion (Fang & Hong 2020). The evidence-base on how health systems respond to migrant populations is limited, especially in LMIC, and efforts must be made to strengthen and recognise migration as a central determinant

of health systems performance that requires appropriate policy and programme responses (Gushulak & MacPherson 2006).

Understanding health system performance is especially crucial for nations experiencing rapid economic, social, and social development, as well as significant migration, such as LMICs. Countries impacted by migration need health systems that are responsive and adaptive to the requirements of migrants and non-migrant (Pottie et al. 2017). Responsive health systems must predict and adjust to shifting demands, seize prospects to enhance access to efficient interventions, and improve the quality of health services (Hanefeld et al. 2017; Lodenstein et al. 2013), ultimately leading to better health results (Allotey et al. 2014; Valentine et al. 2009).

Therefore, what would be useful is a qualitative systematic review, to understand how health systems are responsive to increase in migration and challenges that migration poses to health system performance. To our knowledge, this scoping review shows that this has not really been explored – generally, or specifically in those contexts, there has not been any review study that focused on challenges migration creates to health systems and how LMICs are responsive to migration.

Research aims and objectives
Aims:

1. To inform understanding of health system performance and migration in LMICs.
2. To contribute to exploring migration and health system performance in LMICs as a standalone piece of research.

Review objectives:

1. To review, via a desk-based study and secondary analysis, the current literature on health system performance in LMICs as it relates migration.
2. To trace the functioning of health responsiveness domains in LMIC and how these are affected by migration.
3. To explore and descriptively review the evidence of health system performance and migration that exist in LMICs health systems.

Review Question

What challenges does migration pose to health system performance, and are LMIC health systems responsive to changes in internal/international migration (if so, how)?

Methodology

Review Approach

A qualitative systematic review approach will be used, as well as a descriptive study design. Qualitative systematic reviews incorporate study findings from the top accessible empirical qualitative studies to create evidence-based suggestions on a subject of importance (Butler et al. 2016). As a result, qualitative systematic reviews are effective at assessing large quantities of high-quality evidence that can be used to inform policy and practice (Butler et al. 2016; Walter 2004).

Figure 1 depicts the two steps of this systematic evaluation. As previously stated, the first phase included an initial scoping assessment that critically assessed the current evidence base to gain a thorough grasp of what is already known about health system performance, migration, and responsiveness in LMICs. In Phase 2, the findings from Phase 1 will be used to conduct a comprehensive review of how migration affects health system performance and responsiveness. Based on the results of Phase 1 and 2, relevant research, policy, and recommendation considerations on the influence of migration on health system performance and responsiveness will be possible (Phase 3).

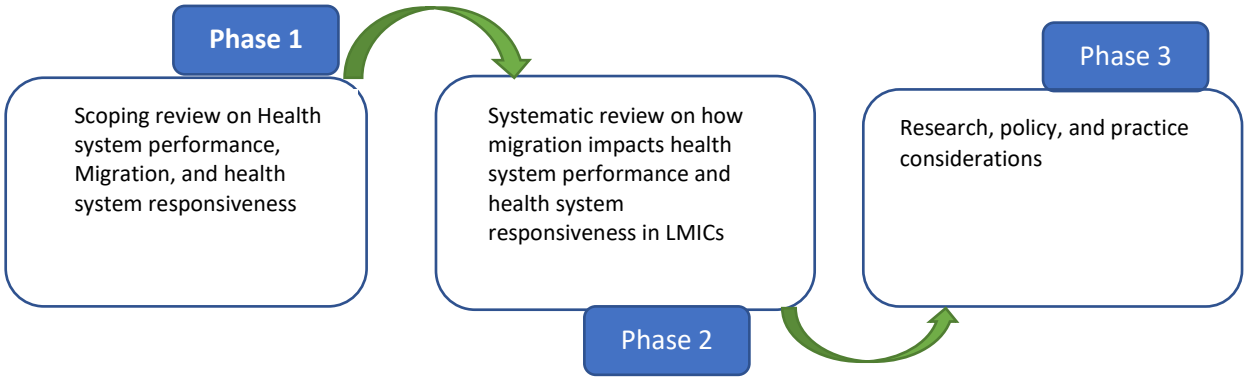

Figure 1: Schematic depiction of the phased method to the systematic review study

Phase 1: Scoping review

A scoping review is an initial review of the magnitude and extent of the research material that is currently available. The scoping review in phase 1 is presented in the literature review of the protocol. Phase 1 was effective for examining huge quantities of literature on an extensive selection of topics, such as health system performance, migration, and responsiveness (Davis et al. 2009; Peterson et al. 2017). This approach of review required drawing the existing proof to ascertain what was previously established about the review problem. It was thus feasible to establish a distinct review topic for the Phase 2 systematic review by contextualizing the knowledge base (Davis et al. 2009).

The first stage was the selection of key phrases and search terms based on a scoping study and the existing literature (Tranfield et al. 2003). In the first step, a scoping review was undertaken to assist in the construction of a further concentrated exploration strategy by making it easier to find relevant search words and a suitable search timeframe (Roehrich et al. 2014). An electronic literature search of pertinent peer-reviewed and grey literature on health system performance, migration, and responsiveness in LMIC was conducted over a four-month period. The search terms and the synonyms for migration, responsiveness and health system performance was used to retrieve literature sources. For migration, terms used in the search strategy included, Migra*[1]; refugee, 'asylum seeker'; xenophobia; movement; relocation; 'population movement'; resettling; exodus; diaspora; immigra*; emigra*; 'Internally displaced'; 'Trafficked persons'; 'International migra*'; and

[1] The * stands for truncation, and it tells the search engine to look for all possible variations of the word, such as migrants and migration.

'Internal migra*'. Those for health system performance included 'global health'; 'health service'; 'health information'; 'health financing'; governance; and 'heath systems performance'. The search terms for responsiveness included Respons*, dignity; autonomy; 'choice of provider'; communication; 'prompt attention'; accountability; 'health care utilisation'; and participation. The search strategy's geographic scope was limited to LMICs as defined by the World Bank (http://data.worldbank.org/about/country-and-lending-groups). The scoping review is expected to produce a descriptive summary of the evidence on the impact of migration on health system performance and responsiveness.

The aim was to identify, inspect and conceptually map health system responsiveness and how migration affects health system performance and gain an understanding of the literature. Results of this exploration were used to identify gaps in the literature as well as opportunities to improve health system performance in LMIC. Multiple forms of information and data were scoped retrospectively, contributing to an extensive literature review. While sources may be limited rapid nature of this scoping review, transparent and reproducible search methods were still applied.

The scoping review critically and rigorously appraised grey and peer-reviewed literature from electronic databases such as PubMed, AfricaWide, Scopus, EBSCOhost, and Web of Science. Additional grey literature searches were conducted on websites such as the WHO (http://www.who.int/en/). Additional searches for peer-reviewed and grey literature that were missed during the initial searches were performed using bibliographic and internet searches in Google Scholar. Search terms used included 'health system performance', and 'migrants', as well as relevant variations thereof, such as 'goals of health system' and 'health services. The search will only return reviews published since the year 2000 that focus on migration and health systems. This is because the health system performance was formalised by WHO in the year 2000. Articles with a disease or program focus were included because these reviews were likely to contain sufficient information about the health system's performance.

An iterative search was conducted until conceptual saturation was reached, which was defined as the point at which "further data do not lead to any new emergent themes" (Given 2015). All migration publications chosen for this analysis were deemed to be health system relevant or to have contributed to the performance of LMIC health systems. Furthermore, papers published in reputable HPSR publications and articles, as well as abstracts published were considered.

Phase 2: Systematic review

An electronic search was conducted for peer-reviewed and grey literature including applicable studies on health system performance, migration, and responsiveness in LMICs[1]. The systematic review delved deeper into how migration affects responsiveness and health-care system performance. It is worth exploring how an increase in migration impact health system performance and how health systems are responsive to this increase in LMICS. Literature sources will be sought for this purpose using electronic databases such as PubMed, Web of Science, Scopus, and EBSCOhost.

[1] After Phase 1 was finished, LMICS was chosen as the geographic focus for this systematic evaluation. During the scoping review, it was discovered that migration has an influence on health system performance and responsiveness, and that this has a greater impact on LMICs than on HICs. In Phase 2, the review methodology was changed to reflect this.

The review question will create many search words that will be used to perform the literature search across multiple electronic databases. Boolean operators such as 'AND' and 'OR' will be utilized to construct permutations of these search phrases and search word synonyms, which would then be entered into the various database search engines as needed. Lefebvre et al. (2008) suggest considering a large variety of search terms inside each set while keeping the number of sets in the search method to a minimum. To connect the terms in each set, the Boolean operator 'OR' will be utilized. Finally, the word 'AND' will be used to link the three search sets. The search technique will be properly documented and reported during the review. For each search, we will keep track of the search technique and the number of records retrieved from the search (Hammerstrm et al. 2010).

Review selection and inclusion criteria

Most review methodological recommendations are geared toward determining the efficacy or cost-effectiveness of interventions. However, HPSR research is broadening the scope of health system research to include methodologies that can address topics like health system financing, organisation, delivery, and use, as well as the factors that underpin health system failure or success in terms of attaining population health goals and producing broader social value (Gilson 2012). It is anticipated that this this review would synthesize available information on health system performance, migrants, and health system responsiveness, but it does not seek to establish the efficacy (loose meaning) of these various terms. As a result, the document's strength of evidence for effectiveness will not be included in the inclusion criteria.

Only articles published between 2011 and June 2021 will be considered for this study. This decision underlines the necessity for the journal to present an up-to-date account of health system performance and migration, as well as the fact that migrant research takes place in an ever-changing legislative and regulatory environment.

Only publications that give full information on migration and health system performance, with a focus on health system responsiveness, will be considered. The coding guide will be used to decide whether the information given is sufficient. However, because there are few thorough descriptions of health system responsiveness, it is important to add publications that simply provide information on the health system's performance outcomes. Snowballing and reference tracking will be utilised to find the missing data in such circumstances.

Critical appraisal

The relevance of the study topic or goals, the methods used, and the reported conclusions will be used to evaluate the quality of complete texts chosen for inclusion in this systematic review. All dimensions of ethics, rigor, and reflexivity will be considered. The Critical Appraisal Skills Programme for Health Research (http://www.casp-uk.net/) appraisal methodologies will be used for this appraisal. These instruments have already been employed in qualitative systematic reviews (Chan 2013; Kane et al. 2007).

A database will be created and made available to a reviewer (MPH supervisor). Using the quality assessment summary, the independent reviewer will undertake additional evaluations of the literature sources. The primary reviewer's and independent reviewer's quality ratings will then be compared, and a final judgment will be made on whether entire texts are eligible for inclusion in the review process.

Data extraction

It can be challenging to decide what data to abstract (Thomas & Harden 2008). As a result, the preliminary literature evaluation will be used to help identify the topics related to health system performance and migrants. As previously stated, a code guide will be created based on the initial broad literature review, and test-applications will be conducted. The selected documents were examined during Phase 1 of the research to develop main categories used to define and analyse health system performance and migration. These programs will be used to analyse the papers that will be included in the review. Modifications or additions that are required will be carried out. Table 6 illustrates a data extraction sheet template.

Table 6: Template of data extraction sheet

Document Details						Health System		Migration		Health system responsiveness					Impact of migration on	
Number	Location	Name of Study	Author and Date	Year	Type	Fairness in financing	Health provision	Internal migration	International migration	Health Worker attitudes	Communication	Quality	Prompt attention	Dignity	Facilitators	Barriers

Source; Author

Data synthesis, analysis, and integration

Synthesis is defined as "the stage of the review where the evidence acquired from the individual sources is brought together" (Mays et al. 2005). A descriptive and narrative method will be applied to analyse and synthesize the data from the systematic review. Narrative synthesis is a common approach for synthesising findings in systematic reviews (Rodgers et al. 2009). For two reasons, narrative synthesis is a strong fit for this study. To begin, traditional narrative reviews give data from available research and other sources without trying to convert these findings to a metric that can be used for further investigation (Mays et al. 2005). In contrast, a narrative synthesis is a strategy for synthesizing information from many sources that goes beyond straightforward analysis and allows the investigator to summarize and explain the findings (Mays et al. 2005). Second, a narrative method to data synthesis is advised for research in which the study questions need the insertion of evidence from a wide range of study types as well as non-research material. A narrative review is an excellent technique to synthesize evidence from several sources (Mays et al. 2005), allowing the systematic review to include a wide range of evidence. Given the objectives of this evaluation, a narrative synthesis is an ideal choice. Both descriptive data from the Phase 1 scope and systematic review data from the Phase 2 will be used to develop qualitative data. Following the completion of the systematic search and the discovery of all relevant documents, the data will be analysed and synthesised. All study materials will be scrutinized in the same way.

Rigour

To improve the study's conclusions as reliable, methodological rigour must be maintained throughout the research process, including the literature search and data analysis. This is done to lessen the danger of information bias and to increase the proposed systematic review's transparency, trustworthiness, and repeatability. This review protocol was created to completely outline the study design and methodology that would be used (Drucker et al. 2016). Mays et al. (2005) provide strategies for assuring systematic review rigour. These include a clear description of the review's goal, an explicit and thorough description of the methods – so that another investigator could replicate the review using the same methods, justification of methodological choices made, and, finally, ensuring that the sources of evidence used in the review are relevant to the review question (Mays et al. 2005). The risk of selection and publication bias will be minimised

since systematic reviews encourage the utilization of a varied source of literature, including both published and grey literature.

Furthermore, as previously indicated, documented assessment procedures would be utilised to analyse the risk of selection bias and the steps taken to reduce bias in the research articles selected for review. Finally, the rules provided by Nowell et al. (2017) for guaranteeing trustworthiness during the theme analysis process will be followed. This includes regular triangulation of reviewers and peer debriefing, as well as maintaining an audit record throughout the review process and giving detailed context descriptions for analysing and interpreting the data set (Nowell et al. 2017).

Several techniques will assure the study's rigour in terms of the literature search. To begin, the rigour of this study will be improved by triangulating the search strategy and coding guide with advice from qualified researchers. Second, using different databases will help protect against periodical bias (Hammerstrm et al. 2010). Similarly, including grey literature in the review would protect against publication bias, ensure that migration articles with no academic component are excluded.

The research supervisor will monitor the inclusion or exclusion of papers using objective selection criteria, Appendix 3. However, because this study will contain grey literature not peer-reviewed, it may be difficult to determine the quality of the study techniques at times (for the reasons stated above). Because an extra investigator is outside the scope of this thesis, there remains some room for subjectivity in the evidence selection process. This is recognised as a restriction, and attempts will be made to avoid subjectivity in material selection. Furthermore, while the inclusion criteria for the study say that only materials containing substantial information on migration and health systems is considered, researcher's decision to ignore records may be subjective and open to interpretation. This could end in a bias in the articles included in the examination. The establishment of the code guide will address this issue. Documents containing data on the appropriate codes would be included in this study. Unfortunately, data submitted in languages other than English cannot be included in this evaluation. As a result, language bias will surely have an impact on the study's findings. This is recognized as a study's shortcoming.

Self-reflexivity

Study reflexivity will also contribute to the quality of this research, providing "transparent information about the positionality and personal values of the researcher that could affect data collection and analysis" (Walker 2013). For this reason, a reflective research diary will be kept for observations and for the researcher to critically appraise findings against the methods utilised. Supervisor and peer debriefing will also occur to recognise any potential effect that the researcher´s background and social identity may have on the data (Robson 2002). The reflective research diary can assist with and be used during this debriefing allowing for any personal perspectives that may influence the study to be identified and analysed (Robson 2002).

Risks and benefits

This study provides no direct rewards to the researcher. The study's broader effects are significant: it will add to our understanding of migration and health system performance. Even though this is a low-risk study, the results of the study may reveal underperforming health-care systems and how migrants may be overlooked in health-care planning. The review's results are expected to improve policy debates and help key decision-makers in ensuring their health system's best functioning. In essence, a systematic review could offer a collection of "lessons learned" about how critical public health initiatives such as migration can be leveraged to scale-up national health system strengthening efforts across LMICs. It is envisaged that this study would lay

the groundwork for more in-depth, exploratory, and explanatory research on migration and health system performance in LMICs health systems. The overall descriptions of health system performance may aid future health decision-making.

Study limitations

This study has some flaws, some of which have already been mentioned. For starters, there's a chance of selection bias. Due to the fact that a scoping study technique excludes defining the quality of research to be included in the review (Arksey & O'Malley 2005) and permits the addition of data coming from non-peer-reviewed sources, there is a risk that the data will be of poor quality. Although this is a considerable risk, the advantage of including material that has not been peer-reviewed surpasses this possible danger in the relatively new topic of health system performance. Finally, the literature search will be limited to UCT-accessible databases. If the original publication cannot be retrieved, several relevant research may be excluded.

The proposed systematic review's geographical scope is limited to LMICs. This is a drawback because the review's findings cannot be applied to countries not classified in this way. However, the fact that some countries continue to fail in contrast to other regions of similar income level when it comes to global universal health targets has piqued interest in this geographical region (Experts 2016; Mihigo et al. 2017). As a result, the proposed systematic review intends to help close the global evidence gap. Articles published in other languages other than English may provide realistic evidence on the relationship between migration and health systems pertinent to this review, therefore disregarding them may be a missed opportunity. Finally, any analytically generalizable claims obtained coming from the suggested review findings will need to be cautiously assessed in light of these limits.

Ethical considerations

This research will not include any human beings. The public domain contains all the literature sources that would be employed in the systematic review. As a result, formal ethical approval is not required to perform this study. The work of all other investigators whose work is included in this review will be properly recognised. The research is intended to be of value to researchers and policy makers in LMICs health system settings. It is not intended to result in commercially exploitable results. The research undertaken will consider all ethical considerations, including the nature of the relationships established and the preservation of the health system within which the study will operate, as well as the potential influence on policy, interventions, and decision-making.

Policy considerations

Policy-relevant suggestions for health system performance and migration in LMICs will be made. The review's findings are predicted to have an impact on existing practice and upcoming research in the fields of migration and health systems in LMICs. The results must be effectively disseminated to inform result-based transformation in public health policy. The thesis will be made available to the public in both electronic and hard copy formats through the University of Cape Town's library services. Key policymakers in the health and non-health sectors are also actors in this systematic review.

Budget for the review

This review is entirely self-funded. There will be no further resources necessary aside from the incidental charges listed below. There are no conflicts of interest declared by the principal investigator. There are no

direct costs associated with performing this study because it is a systematic review. Table 7 shows an estimate of the estimated minimal expenses. The information and data will mostly be extracted from a desk-based literature review and expert checking and thus no funding to descriptively map or analyse these data is required.

Table 7: Review budget

Category	**Item**	**Cost**
Stationery	Paper	R100
	Highlighters	R80
	Notebooks	R50
Printing	Dissertation	R1000
Internet		R1000
Contingency		R190
Total		R2420

Source; Author

Timeline for the study

In October 2021, the evaluation will commence. The final draft will begin in December 2021 and will be finished in February 2022. From inception of the review protocol through the final thesis submission for examination purposes, this systematic review study is projected to take eight months. The numerous research activities to be carried out are represented in Table 8's suggested timeline.

Table 8: Timeline for study

Thesis deliverables	Section to be completed	Date
Protocol	Topic formulation, supervisor appointment	February- March 2021
	Drafts	April 2021
	Submission	April 2021
Journal Article	Systematic review	April/July 2021
	Data analysis	April/July 2021
	Drafts	August 2021-December 2021
	Submission	February 2022

References

Aarts MJ, Koldewijn EL, Poortmans PM, Coebergh JWW, Louwman M. 2013. The impact of socioeconomic status on prostate cancer treatment and survival in the southern Netherlands. Urology, **81**: 593-601.

Abbas M, Aloudat T, Bartolomei J, et al. 2018. Migrant and refugee populations: a public health and policy perspective on a continuing global crisis. Antimicrobial Resistance & Infection Control, **7**: 113.

Abera Abaerei A, Ncayiyana J, Levin J. 2017. Health-care utilization and associated factors in Gauteng province, South Africa. *Global Health Action*, **10**: N.PAG-N.PAG.

Abubakar I, Aldridge RW, Devakumar D, et al. 2018a. The UCL–Lancet Commission on Migration and Health: the health of a world on the move. The Lancet, **392**: 2606-2654.

Allotey P, Verghis S. 2016. Forced Migration and Health. International Encyclopedia of Public Health. Elsevier, 174-182.

Arksey H, O'Malley L. 2005. Scoping studies: towards a methodological framework. International Journal of Social Research Methodology **8**: 19-32.

Asongu SA. 2014. The impact of health worker migration on development dynamics: evidence of wealth effects from Africa. *The European Journal of Health Economics*, **15**: 187-201.

Aveyard H. 2014. *Doing a literature review in health and social care: A practical guide*. McGraw-Hill Education (UK).

Balabanova D, Mills A, Conteh L, et al. 2013. Good Health at Low Cost 25 years on: lessons for the future of health systems strengthening. *The Lancet*, **381**: 2118-2133.

Barnett E, Ndeki S. 1992. Action-based learning to improve district management: A case study from Tanzania. The International Journal of Health Planning and Management, **7**: 299-308.

Bell M, Charles-Edwards E, Ueffing P, et al. 2015. Internal migration and development: Comparing migration intensities around the world. *Population and Development Review*, **41**: 33-58.

Bhagat RB, Reshmi R, Sahoo H, Roy AK, Govil D. 2020. The COVID-19, migration and livelihood in India: challenges and policy issues. *Migration Letters*, **17**: 705-718.

Blendon RJ, Kim M, Benson JM. 2001. The public versus the World Health Organization on health system performance. Health affairs, **20**: 10-20.

Bollini P. 1992. Health policies for immigrant populations in the 1990s. A comparative study in seven receiving countries. *International Migration*, **30**: 103-119.

Boyle P, Keith H. 2014. Exploring contemporary migration. Routledge.

Bridges J, Pope C, Braithwaite J. 2019. Making health care responsive to the needs of older people. *Age and ageing*, **48**: 785-788.

Bustamante AV, Chen J, McKenna RM, Ortega AN. 2019. Health Care Access and Utilization Among U.S. Immigrants Before and After the Affordable Care Act. Journal of Immigrant & Minority Health, **21**: 211-218.

Butler A, Hall H, Copnell B. 2016. A guide to writing a qualitative systematic review protocol to enhance evidence-based practice in nursing and health care. *Worldviews on Evidence-Based Nursing*, **13**: 241-249.

Castañeda H, Holmes SM, Madrigal DS, et al. 2015. Immigration as a social determinant of health. *Annual review of public health*, **36**: 375-392.

Chan ZC. 2013. A systematic review of critical thinking in nursing education. *Nurse Education Today*, **33**: 236-240.

Connell J, Zurn P, Stilwell B, Awases M, Braichet J-M. 2007. Sub-Saharan Africa: Beyond the health worker migration crisis? *Social Science & Medicine*, **64**: 1876-1891.

Darby C, Valentine N, De Silva A, Murray CJ, Organization WH. 2003. World Health Organization (WHO): strategy on measuring responsiveness.

Davies AA, Basten A, Frattini C. 2009. Migration: a social determinant of the health of migrants. *Eurohealth*, **16**: 10-12.

Davies AA, Borland RM, Blake C, West HE. 2011. The dynamics of health and return migration. *PLoS medicine*, **8**: e1001046.

Davis K, Drey N, Gould D. 2009. What are scoping studies? A review of the nursing literature. *International journal of nursing studies*, **46**: 1386-1400.

De Beer J, Raymer J, Van der Erf R, Van Wissen L. 2010. Overcoming the problems of inconsistent international migration data: A new method applied to flows in Europe. European Journal of Population/Revue européenne de Démographie, **26**: 459-481.

de Bruijne MC, van Rosse F, Uiters E, et al. 2013. Ethnic variations in unplanned readmissions and excess length of hospital stay: a nationwide record-linked cohort study. The European Journal of Public Health, **23**: 964-971.

Deshingkar P, Grimm S. 2005. *Internal migration and development: a global perspective*. United Nations Publications.

De Silva A, Valentine N. 2000. A framework for measuring responsiveness. World Health Organization Geneva.

Dewi FD, Sudjana G, Oesman YM. 2011. Patient satisfaction analysis on service quality of dental health care based on empathy and responsiveness. *Dental research journal*, **8**: 172.

Dobra A, Bärnighausen T, Vandormael A, Tanser F. 2017. Space-time migration patterns and risk of HIV acquisition in rural South Africa. *AIDS (London, England)*, **31**: 137.

Drucker AM, Fleming P, Chan A. 2016. Research techniques made simple: Assessing risk of bias in systematic reviews. *Journal of Investigative Dermatology* **136:** e114.

Experts SAGo. 2016. midterm review of the Global Vaccine Action Plan. Geneva: World Health Organization.

Fang J, Hong JY. 2020. Domestic migrants' responsiveness to electoral mobilization under authoritarianism: Evidence from China's grassroots elections. *Electoral Studies*, **66**: 102170.

Fanjiang G, Grossman JH, Compton WD, Reid PP. 2005. Building a better delivery system: a new engineering/health care partnership.

Ferlie EB, Shortell SM. 2001. Improving the quality of health care in the United Kingdom and the United States: a framework for change. *The Milbank Quarterly*, **79**: 281-315.

Flores G, Brotanek J. 2005. The healthy immigrant effect: a greater understanding might help us improve the health of all children. *Archives of pediatrics & adolescent medicine*, **159**: 295-297.

Foster J, Guisinger V, Graham A, Hutchcraft L, Salmon M. 2010. Global Government Health Partners' Forum 2006: eighteen months later. *International Nursing Review*, **57**: 173-179.

Fransen MP, Essink-Bot M-L, Vogel I, et al. 2010. Ethnic differences in informed decision-making about prenatal screening for Down's syndrome. Journal of Epidemiology & Community Health, **64**: 262-268.

Frenk J, González-Pier E, Gómez-Dantés O, Lezana MA, Knaul FM. 2006. Comprehensive reform to improve health system performance in Mexico. *The Lancet*, **368**: 1524-1534.

Gil-Bazo M-T. 2008. The Charter of Fundamental Rights of the European Union and the right to be granted asylum in the Union's law. *Refugee Survey Quarterly*, **27**: 33-52.

Gilson L, Kilima P, Tanner M. 1994. Local government decentralization and the health sector in Tanzania. Public Administration and Development, **14**: 451-477.

Gilson L, WHO. 2012. *Health policy and systems research: a methodology reader*. World Health Organization.

Ginsburg C, Bocquier P, Béguy D, et al. 2016. Healthy or unhealthy migrants? Identifying internal migration effects on mortality in Africa using health and demographic surveillance systems of the INDEPTH network. *Social science & medicine (1982)*, **164**: 59-73.

Given LM. 2015. 100 questions (and answers) about qualitative research. SAGE publications.

Gushulak BD, MacPherson DW. 2006a. The basic principles of migration health: population mobility and gaps in disease prevalence. *Emerging themes in epidemiology*, **3**: 1-11.

Gushulak BD, MacPherson DW. 2006b. The basic principles of migration health: population mobility and gaps in disease prevalence. *Emerg Themes Epidemiol*, **3**: 3.

Gushulak BD, Pottie K, Roberts JH, Torres S, DesMeules M. 2011. Migration and health in Canada: health in the global village. *Cmaj*, **183**: E952-E958.

Hammerstrøm K, Wade A, Jørgensen A. 2010. Searching for Studies: A Guide to Information Retrieval for Campbell Systematic Reviews: Supplement 1. Oslo, Norway: The Campbell Collaboration. doi: http://dx. doi. org/10.4073/csrs.

Hanefeld J, Bond V, Seeley J, Lees S, Desmond N. 2015. Considerations for a Human Rights Impact Assessment of a Population Wide Treatment for HIV Prevention Intervention. *Developing World Bioethics*, **15**: 115-124.

Hu X, Cook S, Salazar MA. 2008. Internal migration and health in China. *The Lancet*, **372**: 1717-1719.

Ingleby D. 2012. Ethnicity, migration and the 'social determinants of health'agenda. *Psychosocial Intervention*, **21**: 331-341.

ILO LMB. 2015. ILO global estimates on migrant workers: results and methodology. Geneva: International Labour Organisation (ILO).

Ingleby D, Petrova-Benedict R, Huddleston T, Sanchez E. 2019. The MIPEX health strand: a longitudinal, mixed-methods survey of policies on migrant health in 38 countries. *European journal of public health*, **29**: 458-462.

Ingleby D, Petrova-Benedict R. 2016. Recommendations on access to health services for migrants in an irregular situation: an expert consensus.

Jacobs JA, Dodson EA, Baker EA, Deshpande AD, Brownson RC. 2010. Barriers to evidence-based decision making in public health: a national survey of chronic disease practitioners. Public Health Reports, **125**: 736-742.

Jee M, Or Z. 1999. Health outcomes in OECD countries: a framework of health indicators for outcome-oriented policymaking.

Jiang Y, Ying X, Zhang Q, et al. 2014. Managing patient complaints in China: a qualitative study in Shanghai. BMJ open, 4.

Kane G, Wood VA, Barlow J. 2007. Parenting programmes: a systematic review and synthesis of qualitative research. *Child: care, health and development*, **33**: 784-793.

Khan G, Kagwanja N, Whyle E, et al. 2021. Health system responsiveness: a systematic evidence mapping review of the global literature. *International journal for equity in health*, **20**: 1-24.

Khanna RC, Cicinelli MV, Gilbert SS, Honavar SG, Murthy GV. 2020. COVID-19 pandemic: Lessons learned and future directions. Indian Journal of Ophthalmology, **68**: 703.

Kruk ME, Gage AD, Arsenault C, et al. 2018. High-quality health systems in the Sustainable Development Goals era: time for a revolution. *The Lancet Global Health*, **6**: e1196-e1252.

Labonté R, Sanders D, Mathole T, et al. 2015. Health worker migration from South Africa: causes, consequences and policy responses. *Human resources for health*, **13**: 1-16.

Landau LB, Freemantle I. 2016. Beggaring belonging in Africa's no-man's lands: diversity, usufruct and the ethics of accommodation. Journal of Ethnic and Migration Studies, **42**: 933-951.

Lefebvre C, Manheimer E, Glanville J. 2008. Searching for studies. Cochrane handbook for systematic reviews of interventions: Cochrane book series: 95-150.

Letkovicova H, Prasad A, Valentine N. 2005. The health systems analytical guidelines for survey in the multi-country survey study. World Health Organization Geneva Switzerland, **3**: 45-55.

Lodenstein E, Dieleman M, Gerretsen B, Broerse JE. 2017. Health provider responsiveness to social accountability initiatives in low-and middle-income countries: a realist review. *Health Policy and Planning*, **32**: 125-140.

Malhotra C, Do YK. 2017. Public health expenditure and health system responsiveness for low-income individuals: results from 63 countries. Health policy and planning, **32**: 314-319.

Malmusi D, Borrell C, Benach J. 2010. Migration-related health inequalities: showing the complex interactions between gender, social class and place of origin. *Social science & medicine*, **71**: 1610-1619.

Marmot M, Allen J, Bell R, Bloomer E, Goldblatt P. 2012. WHO European review of social determinants of health and the health divide. The Lancet, **380**: 1011-1029.

Mays N, Pope C, Popay J. 2005. Systematically reviewing qualitative and quantitative evidence to inform management and policy-making in the health field. *Journal of health services research & policy*, **10**: 6-20.

McKay L, Macintyre S, Ellaway A. 2003. Migration and health: a review of the international literature.

Menon DV, Vadakepat VM. 2020. Migration and reverse migration: Gulf-Malayalees' perceptions during the Covid-19 pandemic. *South Asian Diaspora*: 1-21.

Mihigo R, Okeibunor J, Anya B et al. 2017. Challenges of immunization in the African region. *The Pan African Medical Journal* **27**:12.

Mirzoev T, Kane S. 2017. What is health systems responsiveness? Review of existing knowledge and proposed conceptual framework. *BMJ Glob Health*, **2**: e000486.

Mladovsky P. 2009. A framework for analysing migrant health policies in Europe. *Health policy*, **93**: 55-63.

Mosca DT, Vearey J, Orcutt M, Zwi AB. 2020. Universal Health Coverage: ensuring migrants and migration are included. *Global Social Policy*: 1468018120922228.

Moultrie T, Dorrington R, Budlender D. 2016. Migration in South Africa An analysis of the 2011 South African census data. *Johannesburg: African Centre for Migration & Society, University of the Witwatersrand*.

Murray CJ, Frenk J. 2000. A framework for assessing the performance of health systems. *Bulletin of the world Health Organization*, **78**: 717-731.

Nelson A. 2002. Unequal treatment: confronting racial and ethnic disparities in health care. Journal of the National Medical Association, **94**: 666.

Nielsen SS, Krasnik A, Rosano A. 2009. Registry data for cross-country comparisons of migrants' healthcare utilization in the EU: a survey study of availability and content. BMC Health Services Research, **9**: 1-12.

Nowell LS, Norris JM, White DE et al. 2017. Thematic analysis: Striving to meet the trustworthiness criteria. *International Journal of Qualitative Methods* **16:**1-13.

Papanicolas I, Smith P. 2013. *Health system performance comparison: an agenda for policy, information and research: an agenda for policy, information and research*. McGraw-Hill Education (UK).

Peterson J, Pearce PF, Ferguson LA, Langford CA. 2017. Understanding scoping reviews: Definition, purpose, and process. *Journal of the American Association of Nurse Practitioners*, **29**: 12-16.

Pottie K, Hui C, Rahman P, et al. 2017. Building responsive health systems to help communities affected by migration: an international Delphi consensus. *International journal of environmental research and public health*, **14**: 144.

Rabbani F, Shipton L, White F, et al. 2016. Schools of public health in low and middle-income countries: an imperative investment for improving the health of populations? *BMC Public Health*, **16**: 1-12.

Rechel B, Mladovsky P, Devillé W, et al. 2011. chapter sixteen. *Migration and health in the European Union*: 245.

Rechel B, Mladovsky P, Ingleby D, Mackenbach JP, McKee M. 2013. Migration and health in an increasingly diverse Europe. *The Lancet*, **381**: 1235-1245.

Robone S, Rice N, Smith PC. 2011. Health systems' responsiveness and its characteristics: A cross-country comparative analysis. Health services research, 46: 2079-2100.

Rodgers M, Sowden A, Petticrew M, et al. 2009. Testing methodological guidance on the conduct of narrative synthesis in systematic reviews: effectiveness of interventions to promote smoke alarm ownership and function. *Evaluation*, **15**: 49-73.

Roehrich JK, Lewis MA, George G. 2014. Are public–private partnerships a healthy option? A systematic literature review. *Social science & medicine*, **113**: 110-119.

Seeleman C, Essink-Bot M-L, Stronks K, Ingleby D. 2015. How should health service organizations respond to diversity? A content analysis of six approaches. BMC health services research, **15**: 510.

Seeleman C, Suurmond J, Stronks K. 2009. Cultural competence: a conceptual framework for teaching and learning. Medical education, **43**: 229-237.

Seers K. 2015. Qualitative systematic reviews: their importance for our understanding of research relevant to pain. *British journal of pain*, **9**: 36-40.

Segatti A, Landau L. 2011. *Contemporary migration to South Africa: a regional development issue*. The World Bank.

Sharma R, Grote U. 2019. Who is an internal migrant? TVSEP Working Paper.

Sheikh K, Ranson MK, Gilson L. 2014. Explorations on people centredness in health systems. *Health Policy Plan*, **29 Suppl 2**: ii1-5.

Shen AK, Fields R, McQuestion M. 2014. The future of routine immunization in the developing world: challenges and opportunities. *Global Health: Science and Practice*, **2**: 381-394.

Singh G. 2007. Health worker migration in South and Southern Africa. IOM.

Spreng C. 2011. Healthy partnerships: how governments can engage the private sector to improve health in Africa.

Tabrizi JS, Gholipour K, Farahbakhsh M, Hasanzadeh A. 2017. Managerial barriers and challenges in Iran public health system: East Azerbaijan health managers' perspective. J Pak Med Assoc, **67**: 409.

Thomas J, Harden A. 2008. Methods for the thematic synthesis of qualitative research in systematic reviews. *BMC medical research methodology*, **8**: 45.

Tranfield D, Denyer D, Smart P. 2003. Towards a methodology for developing evidence-informed management knowledge by means of systematic review. *British journal of management*, **14**: 207-222.

Urquia ML, Gagnon AJ. 2011. Glossary: migration and health. *Journal of Epidemiology & Community Health*, **65**: 467-472.

Vaccarino V, Rathore SS, Wenger NK, et al. 2005. Sex and racial differences in the management of acute myocardial infarction, 1994 through 2002. New England Journal of Medicine, **353**: 671-682.

Vaitsman J, Andrade GRBd. 2005. Satisfação e responsividade: formas de medir a qualidade e a humanização da assistência à saúde. Ciência & Saúde Coletiva, **10**: 599-613.

Valentine N, Darby C, Bonsel GJ. 2008. Which aspects of non-clinical quality of care are most important? Results from WHO's general population surveys of "health systems responsiveness" in 41 countries. Soc Sci Med, **66**: 1939-50.

Valentine N, Prasad A, Rice N, Robone S, Chatterji S. 2009. Health systems responsiveness: a measure of the acceptability of health-care processes and systems from the user's perspective. Performance measurement for health system improvement: 138-186.

Vearey J. 2011. Migration and health in South Africa: implications for development. *Contemporary Migration to South Africa*: 121.

Vearey J. 2013. Migration, urban health and inequality in Johannesburg. *Migration and inequality.* Routledge, 134-157.

Vearey J. 2014. Healthy migration: A public health and development imperative for south (ern) Africa. *SAMJ: South African Medical Journal*, **104**: 663-664.

Vearey J. 2016. Mobility, migration and generalised HIV epidemics: a focus on sub-Saharan Africa. Handbook of Migration and Health. Edward Elgar Publishing.

Vearey J, Thomson K, Sommers T, Sprague C. 2017. Analysing local-level responses to migration and urban health in Hillbrow: the Johannesburg Migrant Health Forum. *BMC Public Health*, **17**: 427-427.

Walter FM, Emery J, Braithwaite D, Marteau TM. 2004. Lay understanding of familial risk of common chronic diseases: a systematic review and synthesis of qualitative research. *The Annals of Family Medicine*, **2**: 583-594.

World Health Organization. 2008. *What are integrated people-centred health services?* [online] Available at: http://www.who.int/servicedeliverysafety/areas/people-centred-care/ipchs-what/en/ [Accessed September 2021]

World Health Organization. 2000. The world health report 2000: health systems: improving performance. World Health Organization.

WHO. 2010a. Health of migrants: the way forward: report of a global consultation, Madrid, Spain, 3-5 March 2010.

WHO. 2010b. *World health statistics 2010*. World Health Organization.

Wickramage K, Vearey J, Zwi AB, Robinson C, Knipper M. 2018. Migration and health: a global public health research priority. *BMC public health*, **18**: 1-9.

Part B: Journal Article

Impact of migration on health system performance in LMICs, and the responsiveness of LMIC health systems to migratory changes: A qualitative systematic review

Targeted journal: Health Policy and Planning[1]

Stephen Khama[2]

Abstract

According to the World Health Organization, the intrinsic goals of a health system are responsiveness, fair financing, and equity. The goal of responsiveness has received the least attention of the three. There is also increased interest in identifying challenges to improved health system performance. Migration (internal/international) is one such challenge that could affect health system performance. There have been high levels of migration and attention given to the issue over the past decade. The policy formulation to address the challenges posed by migration on health system performance has become a contentious issue in low- and middle- income countries. Actors in public health have provided competing and conflicting explanations of the challenge and possible solutions. More needs to be done to engage policymakers in LMIC settings to facilitate national health policy formulation and implementation around migration. To combine information on migration and health system performance, we conducted a qualitative systematic review. There is a pressing need to enhance the responsiveness of health systems, but our understanding of the relationship between performance and migration is currently limited. We analysed 72 included items published between 2011 and 2021 that provided evidence on migration and health system performance. No single definition of migration emerged, and migration was found to be both an enabler and a challenge to health system performance. While framing migration as a threat to health system performance has garnered high-level radical attention and quickened action from countries in low- and middle- income countries, the analysis suggests that excluding migration may have an impact on policymaking and hamper the development and implementation of integrated initiatives needed to address migration and health system performance. There is a need to broaden the research agenda to delve deeper into migration and health system performance in low- and middle- income countries.

Keywords

Low to Middle Income Countries; Health systems; Migrants; Refugees, Health System Responsiveness; Health system performance, health, internal migration, international migration

[1] Instructions for authors in Appendix 4

[2] For this thesis, the student is the sole and first author of this systematic review

Key messages

- The impact of migration on the performance of health systems is not well understood and the impact of migration on health system performance is complicated, owing to multiple determinants.
- Solid political will, transparent governance frameworks, and successful coordination with global partners are crucial in enhancing health system performance in relation to migration.
- Findings are applicable to ongoing system strengthening initiatives in Low- and Middle- Income Countries (LMICs), particularly in migration-affected countries. Health systems in LMICs could be designed better to respond to migration challenges with an improved awareness of how migration affects health system performance.

Introduction

The World Health Report 2000 (WHR2000), 'Health systems: improving performance,' pioneered a new approach to health system performance and development by focusing on three intrinsic goals (World Health Organisation (WHO) 2000). The first goal addresses the issue of good health, "the health of the population should reflect the health of individuals throughout life and include both premature mortality and non-fatal health outcomes as key components" (WHO 2000). Second goal covers the fairness of financial contributions, "households should not become impoverished, or pay an excessive share of their income in obtaining needed health care[1]" WHO 2000). The third goal covers responsiveness to population expectations, "to enhance the responsiveness of the health system to the legitimate expectations of the population[2]" (WHO 2000). These goals not only allow for the definition of ideal system characteristics, but they also enable the detection of structural and performance flaws (Sharma et al. 2018). Governments now recognise the importance of health system performance; however, many countries lack the health resources and adequate public health infrastructure to improve health system performance (Foster et al. 2018).

Health system performance is important and must be improved all around the world (Spreng 2011). Measuring the performance of the health system is critical for understanding progress, identifying obstacles, and recommending a course of action and aids in the development of systems that are not only effective in terms of increased service coverage, but also efficient, equitable, patient-centred, accessible, and long-lasting (Sharma et al. 2018). Furthermore, health system performance is more complicated than simply tracking the level of health system goals (Frenk et al. 2000). Heath system performance is a 'relative concept' that involves relating the health system goals attainment to what could be achieved (Frenk et al. 2000).

'Migration' could be a major factor in health system performance. By migration, we mean "any person who is moving or has moved across an international border (international migrant) or within a state/zone (internal migrant) away from his/her habitual place of residence" (Abbas et al. 2018). There are various forms of migration, and these could all impact on health system performance differently (International Organisation of Migration (IOM) 2019). However, migration can be broadly categorised into two main clusters: 'internal' and 'international' migration (IOM 2019). By international migration we mean "a change of address that entails the spatial movement of people across national borders" (Urquia & Gagnon 2011), while internal migration

[1] Fairness in financial contribution requires an important degree of financial risk pooling (WHO 200).
[2] The emphasis was on the importance of responsiveness in reducing inequalities and improving the situation of the poorest (Fazaeli 2014).

"is about individuals who relocate inside a country's borders, typically across regional, district, or municipal boundaries, resulting in a change in their regular abode" (Klugman 2009). The breadth and complexity of international and internal migration are expanding (see table 1), and as a result, migrants could be at risk of exclusion from UHC (Lattof 2018). With increased levels of migration in Low- and Middle-Income Countries (LMICs) (IOM 2020), health repercussions of migration are becoming a significant area of study (LMICs) (IOM 2020), mobility's health repercussions are becoming a major focus of attention (Ginsburg et al. 2021). Table 1 shows increase in international migrants between 2019 and 2020.

Table 9: International migrants, 1970-2020, Source: IOM 2020

Year	Number of international migrants	Migrants as a % of the world's population
1970	84 460 125	2.3
1975	90 368 010	2.2
1980	101 983 149	2.3
1985	113 206 691	2.3
1990	152 986 157	2.9
1995	161 289 976	2.8
2000	173 230 585	2.8
2005	191 446 828	2.9
2010	220 983 187	3.2
2015	247 958 644	3.4
2020	280 598 105	3.6

However, with this increase in international migration, there is a surprising lack of information about migration and health system performance (Hanefeld et al. 2018), especially in LMICs settings. With over one billion people on the move worldwide (Hanefeld et al. 2018) and over 280 million crossing international borders, a greater grasp of how to respond to the complex relationships between migration and health system performance is required (Hanefeld et al. 2018; IOM 2019).

There has been an increase in requests for migration to be included as a topic in health system planning and measuring health system performance, with the recognition that migration (both internal and international) could be a major challenge to or enabler of health system performance (Gushulak et al. 2011). In addition, migration has significant repercussions for health practitioners, health system performance, and individual health (Gushulak et al. 2011). To address these implications, any approach aimed at enhancing health-care system performance must incorporate all individuals as active participants in their own health and wellbeing development (WHO 2008).

One aspect of health system performance – responsiveness – is of particular interest. The WHO defines health system responsiveness as "the ability of the health system to meet the population's legitimate expectations regarding their interaction with the health system, other than expectations for health improvement" (WHO 2010) – although alternative definitions have emerged. Even though there are several frameworks for measuring health system responsiveness, including the WHO's responsiveness toolset, which was established for the WHR of 2000, it is itself a complex field with insufficient definition, research, and evidence (Khan et al. 2021). Therefore, both migration (as a potential factor in health system performance), and responsiveness (a

goal of health system performance), are lacking in clarity – but are linked and important. There is a clear necessity for involvement based on data on migration and health system performance in LMICs. Such evidence is at present lacking and should be investigated using systematic review methods.

Methods

This review used mixed method approcah, although the main approach was qualitative review, quantitative analysis was also partly applied. To this effect, a qualitative systematic review was carried out between March 2021 and January 2022. The systematic review was informed by the scoping review, in particular the identification of themes and categories reflected in the data extraction sheet. We followed evidence mapping synthesis review phases, which included determining the scope and research question, seeking for and identifying the evidence, drawing on and recording the results, and recognizing the evidence maps (Clavisi et al. 2013). We improved the extent of the main study in the first phase by performing an preliminary fast scoping review, which acted as the analytical basis for the systematic review extraction process. During the larger systematic review phase, items discovered during the scoping review were evaluated again. We fine-tuned the research eligibility criteria and data extraction items during this phase.

This was followed up with a systematic evaluation, documenting all searches. Four electronic databases were used for the searches: PubMed, Web of Science, Scopus, and EBSCOhost (which includes Academic Search Premier; Africa wide; Health Source; PsycInfo; SocIndex; and Cinalhl). Google scholar was used for additional searches. The preliminary stage searches took place between March and April of 2021. A paper had to include'migration/migrants, responsiveness, health system performance, health system and their variations' to be eligible for inclusion (See Appendix 2). Initial pilot searches served as the foundation for further refining search terms and identifying exclusion clusters. Iterative searches were performed until saturation was reached; no fresh related material or subjects were found (Given 2015).

Abstracts were vetted, only those that met inclusion criteria were considered: peer or institutionally reviewed; provided relevant data on migration, responsiveness and health system performance; were available in English; and were released between 2011 and 2021. Because there has been a large increase in migration and global initiatives to analyze health system performance in LMICs over the past decade, the time of publishing was driven by the WHO's initiative to conceptualize and measure responsiveness in 2000 (Sharma et al. 2018). The geographic limit was set LMICs.

Articles that fulfilled the following exclusion criteria were excluded: Items whose complete texts could not be obtained; items without meaningful data on health system performance and responsiveness in the context of migration or used responsiveness in a vague way. Following selection, the complete texts of qualified studies were critically assessed for suitability of methodologies employed and the findings. Ethical and rigor factors were considered (see Appendix 3). We reviewed the labels and abstracts to discover things that warranted more full-text screening. Two investigators assessed qualified full-text documents and used conversations and consensus to resolve differences. During the preliminary screening procedure, articles were assessed for quality, including consideration of publication source, as well as checking for the aims of the study, methodology and results, and conclusion (see Appendix 3). The data was then extracted and entered onto a data extraction sheet (see Appendix 2). Qualifying items were imported into EndNote X9.

Because we conducted quantitative (descriptive statistics) and qualitative analysis in the review, our analysis might be termed mixed methods. We constructed frequency tables to assess the evidence's bibliographic

results and utilized qualitative analysis to discover existing information on health system performance, migration, and responsiveness.

Most LMICs do not have health policies that cater for migrant populations (Ginsburg et al. 2021), we therefore explored the challenges in relation to fairness in financing migrant health, health provision, implementation of health programmes, and responsiveness to service provision, with these themes emanating from the scoping review. In instances where the included items also investigated potential or anticipated health system challenges because of an increase in migration, and the responsiveness to these challenges, outcomes were also considered for this review.

Study findings will be useful evidence to the issues of migration to health system performance in LMIC settings. However, a few limitations should be mentioned. There is a huge diversity of migration forms based on the reasons for movement and timeframe. To address this limitation, we grouped migration into either internal or international migration (IOM 2020). Further, internal migrant movement is not well documented and usually included with non-migrants. We attempted to use the term migration to cover both internal and international migration. The analysis considers migration and health system performance only in LMICs settings.

The literature search found a total of 1007 records (Figure 1). We compiled the records and removed 322 repeats, leaving unique 685 entries to be checked by name and abstract. Following the screening process, eighty-six records were identified for full-text screening for inclusion. Finally, seventy-two items pertinent to the research were discovered and included (see Appendix 2). We report on included studies in the first section of the results. This examines the 72 included items considering their publishing rate, geographic location/focus, and publication year (these graphics in Figure 2).

There has been an increase in interest on migration and health system performance over the past decade, with a particular emphasis on responsiveness among policy makers, researchers, and academics. In comparison to other health system goals, such as health-financing and population health, these are still very small numbers. As evidenced by the number of publications, there has been an increase in interest in health system performance with the inclusion of migration (See Fig 2b). The 72 included items were published in 22 countries in LMICs (Fig. 2a). The included items tend to follow a particular pattern (Fig. 2c), covering Southern Africa, East Africa, West Africa, and some South Asian countries. There were more publications on international migration (55/72) as compared to internal migration. However (22/72) of the included items included both internal and international migration. Internal migration is generally challenging to measure, with (4/22) included items specifying Internally Displaced Persons (IDPs) a form of internal migration. All 72 included items (focused on migration, health system performance and health system responsiveness). The challenges of migration on health system performance were assessed through the six domains of responsiveness (Fig. 2e).

Most included items considered health system responsiveness, hence the total not adding up to the 72 included items. Fairness in health financing (40/72), health provision (66/72), health worker attitudes (32/72), communication (23/72), quality of healthcare service (27/72), prompt attention (22/72) and dignity (32/72). (52/72) included items were primarily concerned with assessing health system responsiveness to a service by migrants. The included items (14/72) reported on migration as an enabler of health system performance, while (45/72) migration as a key challenge of health system performance. In (17/22) publication countries, health

services were available to migrant populations through both government institutions, private clinics, and non-governmental organisations.

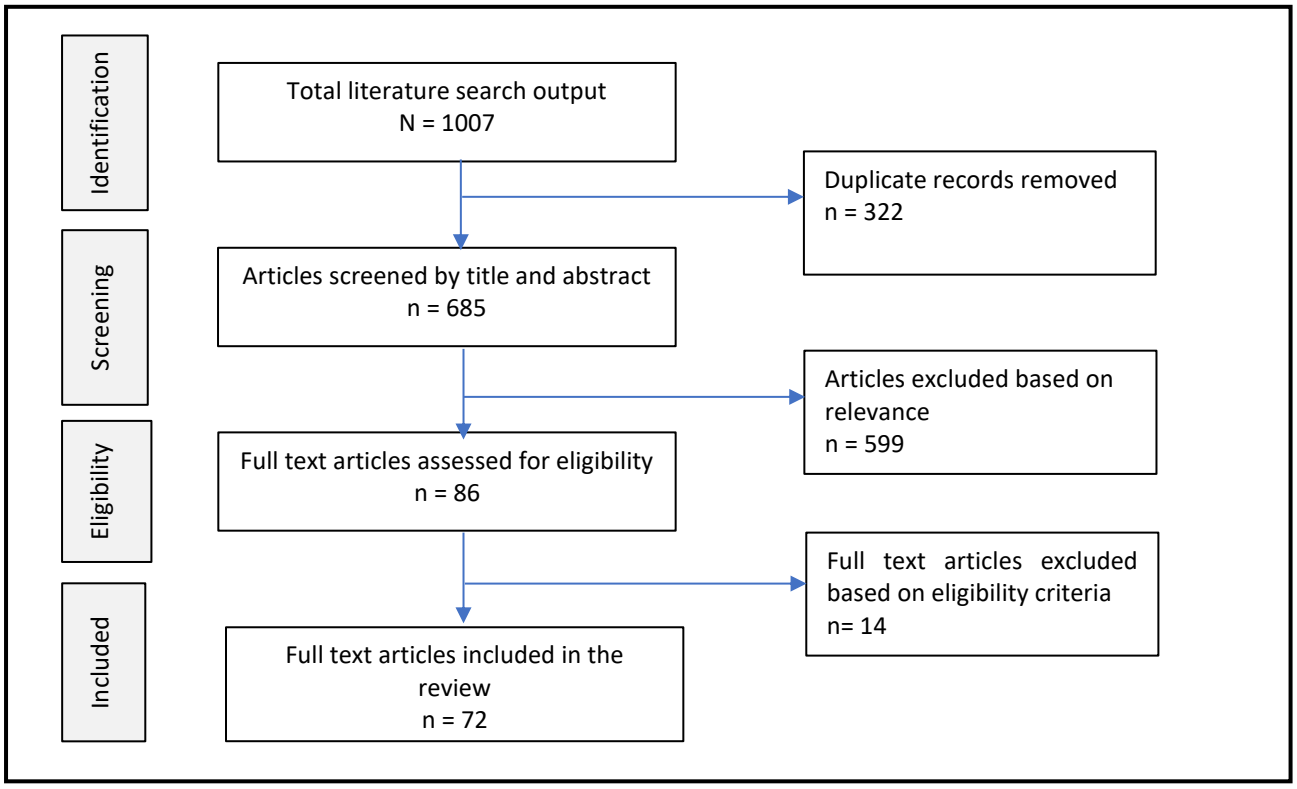

Figure 1: PRISMA flow diagram. Source; Author

Results

We compiled the evidence on migration, responsiveness, and health system performance in LMICs. Findings pertaining to health system performance were included in this review. The review's findings have been divided and reported under distinct headings.

Conceptualisations of migration

The included items have shown that there are four main variations of how 'migrants' are framed and conceptualized in the included studies. These include 'refugees' (48/72), 'internally displaced persons' (IDP) (6/72), 'asylum seekers' (9/72), and 'migrant workers' (9/72). Varying definitions of migration are presented (see Table 2) – with general agreement across them that migration involves physical movement from one place to another within a particular timeframe (Table 2). For example, Argaw (2021) defines migration as "… employees who moved from their origin to destination districts for labour work for less than one year' thus focusing on the movement from one pace to another over a time frame" (p.1). Loganathan et al. (2019) defines labour migrant as "a person who migrates from one country to another with the view of being employed". Within the included items, only (8/72) of the studies made a direct effort to provide a clear definition of migration (Table 2). These 8 studies all developed definitions of migration/migrants based on their study focus and context, while the rest of the included items), did not define migration.

Figure 2: Consolidated graphics relating to publication country, rate, location, and responsiveness domains. Source; Author

Table 10: Examples from eight studies which provided more specific definitions of migration and migrants

- "The term migrant used to include irregular and regular migrants, as well as refugees and asylum-seekers" (Arnold 2014).
- "Migrant is a Lesotho national who is currently living or has been living in South Africa for at least three consecutive weeks in the past six months" (Faturiyele et al. 2018).
- "In this study, seasonal migrant and/or mobile workers were defined as employees who moved from their origin to destination districts for labour work for less than one year" (Argaw et al. 2021).
- "A migrant worker, as a person who migrates from one country to another with the view of being employed" (Loganathan et al. 2019).
- "Internal migrant workers comprise workers, migrated as an individual or in groups, mainly on a temporary or seasonal basis in search of the work to urban areas of other state or geographical regions of India" (Choudhari 2020).
- "A migrant is defined as an individual who was engaged in labour outside of her or his village of usual residence at the time of survey administration as reported by the survey respondent" (Dodd et al. 2017).
- A refugee is person who "owing to a well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion, is outside the country of his nationality, and is unable to, or owing to such fear, is unwilling to avail himself of the protection of that country"" (Alfaro-Velcamp 2017).
- "In this study, we have defined an out-migrant child as one living outside their parents' province" (Adhikari et al. 2011).

Fairness in Financing

This health system goal is important for the achievement of health system goals. This is evidenced in the (41/72) of the included items identifying health financing as important in delivering health system that are inclusive of migrants. In (26/41) of the included items in this cluster, budget constrains were sighted as main challenged in providing migrant health which significant affect health system performance. Chuah et al. (2019) reported that LMICs health system are challenged with budget constraints which results in prioritising non-migrants in health provision (Chuah et al. 2019). In (9/41) of the included items, achieving equity is an important aspect of health system to ensure optimal health performance that can include all people, including migrants. Fairness in health system financing contributes greatly to health system goal achievement (Ackerson & Zielinski 2017; Argaw et al. 2021; Brolan et al 2017; Lattof et al. 2018). However, the overall reference to fairness in finance varied in the included items, some identifying as a key goal to achieve Universal Health Coverage (UHC) (Atake 2018; Arnold 2014; Heydari et al. 2016), while others noting that health financing is available to migrants and sighting accessibility to health care as a challenge in health system performance (Alfaro-Velcamp 2017; Liang et al. 2015; Loganathan et al. 2019; Herbeholz 2020; Vearey 2012).

The leadership and governance landscape

In the evidence, (30/72) of the included items were concerned with governance and leadership on migration. Most of these (24/30), were published between 2013-2021, with a high number (16/30) published after the year 2015, showing an increased interest in migration and health system performance. Within this, there is particular interest in responsiveness, for example, the inclusion or exclusion of migrants in health policy (Haddison et al. 2020). To this effect, strong and inclusive partnerships result in the recognition of migrant health in LMICs (de Gruchy 2020; Sami et al. 2018). Several studies, (30/72), found there had been increased healthcare access for migrants over time, with policies enabling expansion of health services in migrant camps and in communities that host large numbers of migrants in some settings. In several studies, national government leadership indicated interest in improving governance and leadership, to include migration in health policy planning (Ab Rahman et al. 2016; Abdulahi et al. 2020; Almonte & Lynch 2019; Arale et al. 2019; Haddison et al. 2020).

However, (15/30) of the included items on leadership and governance landscape reported limited national resources to provide health-related services by countries. For example, Chi et al. (2021) found that in Ghana, in public health institutions, there is a scarcity of skilled healthcare personnel, and health facilities and medication supplies are insufficient, as are referral systems for migrant populations (Chi et al. 2021). Despite the increase in interest in improving governance and leadership, the lack of overall governance and leadership was identified in several (21/30) of the included items. Structural barriers in accessing healthcare were also reported in (18/30) of the studies focused on governance and leadership. These challenges often led to poor health outcomes in LMICs settings (Chuah et al. 2019b; Hickey et al. 2016; Owusu & Yeboah 2018). Where health provision is offered, it is offered at a high cost to migrants. For example, in South Africa, it is offered to migrants at high prices in public health facilities, except for emergency services which are offered free of charge (Alfaro-Velcamp 2017). Half of the items in this sub-cluster (15/30) found that health policies are generally not supportive of migrant populations (despite the increased policy-maker interest mentioned earlier). For example, in South Africa, 2007 the health policy states that migrants should have access to health service delivery (Adjai & Lazaridis 2014); but evidence shows that migrants (both internal and international) are often still not able to access many types of care and are often charged exorbitant fees when they consult at healthcare facilities, both public and private (Argaw et al. 2021b; White et al. 2021).

Table 11 summarises the main functions of governance and leadership in health system performance, and a summary of the main challenges pertaining to governance and leadership is summarised in Table 4. According to the studies included in this review, these challenges pertain primarily to financial barriers and affordability, language barriers, documentation of migrants, discrimination and medical xenophobia and accessibility of health institutions by migrants.

Table 11: Results summary of main functions of governments in governance and leadership identified

Function	**Explanation**
Policy guidance (3/30) *	Creating sector strategies and technical policies to improve the health of migrants; defining the goals, directions, and service spending priorities of the health system, defining the role of civil society in migrant health, and outlining the responsibilities of public, private, and volunteer actors (Adjai et al. 2014; Bosmans et al. 2012; Argaw et al. 2021; Ginsburg et al. 2021).
Intelligence and oversight (1/30) *	Ensure the collection, analysis, dissemination of intelligence on trends and differences in inputs, service access, coverage, and safety; responsiveness, financial protection, and health outcomes, particularly for migrants; the effects of policies and reforms; the political environment and opportunities for action; and policy options. (Owusu 2018).
Collaboration and coalition building (3/30) *	Within government divisions and within non-governmental players, including civil society, to effect action on important elements of migrant health and access to health care; establish public policy support; to keep the many elements linked—the so-called "joined government" (de Gruchy 2020; Chuah 2019; Chi 2019).
Regulation (4/30) *	Creating regulations and incentives for migrant populations and ensuring that they are fairly enforced with regards to an appropriate health system approach for migrants (Herberholz 2020; Adjai 2014; Bosmans et al. 2012; Atake 2018).
System Design (1/30) *	Ensuring alignment between strategy and structure, as well as reducing repetition and disintegration in the provision of migrant health services (Chelwa et al. 2016).
Accountability (2/30)	Ensuring that actors in the health system are held publicly accountable for promoting and providing migrant health (Aturiyele et al. 2018). Transparency is required to achieve true accountability in the provision of migrant health services (Nara et al. 2020; Lattof 2018).

Note: * The numbers in parenthesis indicate the number of papers that reported findings. Source; Author

Table 12: Summary of challenges to health system performance in LMICs

Main Theme	Health system challenges
Affordability and financial constraints (27) *	• Because the government lacks financial means, migrants must pay for outpatient clinic appointments themselves. • Most health insurance coverage cover migrants, but it is insufficient to meet the rise in medical fees at public hospitals. • Migrants are unaware of health insurance and not political will by governments • Financial constraints for migrants are a significant barrier to healthcare access. • Healthcare avoidance is caused by fear of excessive medical fees at public hospitals. • The ability of migrants to pay has an impact on the management of doctors.
Migrants who are undocumented, their legal status, and their health (11) *	• Managerial measures to verify migrant documents at public facilities restricts access to healthcare. • Migrants choose private clinics because care is provided without the need for documentation. • Undocumented migrants may counterfeit or misrepresent documents to obtain medical care. • Undocumented migrants avoid necessary hospital care, which has a negative impact on the health-care system.
Language barriers (16) *	• Communication is a big issue for migrants and healthcare practitioners, which frequently leads to governments employing interpreters. • Doctors are occasionally frustrated by patients' incapacity to speak, which results in harsh treatment. • Language problems may jeopardize patient safety due to prescription mistakes and improperly acquired permission for operations. • Due to a dearth of official translators, physicians use a variety of tactics to help migrants overcome linguistic challenges.
Xenophobia and discrimination (9) *	• Xenophobia among migrants cuts across various settings including in healthcare setting. • Discrimination at public health facilities because of migrant document checks at registration stations, increased work for healthcare providers • The opinion that medical physicians are uncaring toward migrant workers may be due to a breakdown in communication.
Physical distance, mobility, and transportation (6) *	• Migrants are reluctant to go for treatment because they are afraid of being harassed by law enforcement authorities. • Migrants are hampered by the physical distance between healthcare services.

Note: * The numbers in parentheses indicate the number of papers that reported findings. Source; Author

Barriers and facilitators to health system performance

As noted above, there is evidence of improved delivery of health services to migrants in many LMICs (Ajaero et al. 2021; Almonte & Lynch 2019; Arale et al. 2019; Ginsburg et al. 2021; Heydari et al. 2016; Nara et al. 2020). Most studies (62/70) reported some increased access to health care in LMICs settings – however, accessing health services in public institutions remains a challenge (White et al. 2020). In the cluster of 62 items relating to access of health services to migrants, most (33/62) found that accessing the required health service by migrants remains a challenge because of poor governance and leadership challenges (noted above). There has been an increase interest in migrant health in LMICs settings. This has resulted in increased advocacy for inclusion of migrants to access public healthcare (Alemayehu et al. 2017b; Chuah et al. 2019; de Gruchy 2020).

LMICs are faced with challenges as it relates to resources to provide healthcare to migrants (Adaku et al. 2016), and affordability of health care to migrants has been highlighted as a challenge (Ackerson & Zielinski 2017; Chen 2011; Chelwa et al. 2016), which affect health system performance. For example, an increase in migrants has led to the need for improvement of health infrastructure and facilities, which is a costly exercise for most countries in LMICs settings (Chelwa et al. 2016; Chuah et al. 2019). In a few of the studies (3/72), the availability of quality health service in some LMICs countries, such as South Africa, has led to influx of migrants from across Africa and Asia, not mainly for health but economic life (White et al. 2020; Zihindula et al. 2017). Migration

was found to lead to an unequal distribution of resources, since in some countries such as Ghana, Ethiopia and Thailand, migrants were prioritised to maintain international relations. Migrants in Ghana and Kenya were found to self-diagnose illness and buy over-the-counter medication, a process which is 60% less costly compared to getting medical care to qualified health providers (Al Baz et al. 2018).

The affordability of healthcare was found to be challenge, irrespective of migration status (Abera Abaerei et al. 2017; Ackerson & Zielinski 2017; Adaku et al. 2016; Arnold et al. 2014; Faturiyele et al. 2018). In addition, (11/72) found challenges regarding Out of Pocket (OOP) charges for migrant health, and that clinic visits were often unaffordable to migrants and non-migrants alike (Chi et al. 2019; Chuah et al. 2019; Faturiyele et al. 2018; Loganathan et al. 2020). Some (13/72) studies highlighted the negative experiences of paying for healthcare, as unreasonably high prices for health services. These costs include registration, examination, treatment, hospitalisation, and the extra cost caused by misdiagnosis among the migrant populations (Dehghan & AboAli 2016; Loganathan et al. 2020; Qiu et al. 2019; White & Rispel 2021; Zihindula et al. 2017). To this effect, financial hurdles largely prevent migrants from accessing health care, influence migrants' decisions to seek treatment, and influence where and how migrants seek care. (Alemayehu et al. 2017b; Alexakis et al. 2019; Lattof 2018).

Migrant healthcare provision

In other LMICs such as South Africa, Ghana, Thailand, China, Kenya and Uganda, migrants and non-migrants used health services differently, both in terms of overall utilization and the type of treatment sought. (Ginsburg et al. 2021; Kunpeuk et al. 2020). In most of the included items, migrants had been provisioned[3] to access healthcare from public healthcare (Alemayehu et al. 2017; Antai 2010; Argaw et al. 2021; Hickey et al. 2016; Hunter-Adams & Rother 2017; Kunpeuk et al. 2020; Zihindula et al. 2017). Some countries such as Kenya and Ethiopia have responded to the increase of migrants by offering free access to healthcare for migrants (Liang & Guo 2015; Tatah et al. 2016).

Health worker attitudes

Multiple studies (31/72) have shown that identifying health worker attitudes toward migrants is important in gauging the reception of, and the need for further training. Regarding service providers' impressions of xenophobia, it is also likely that, in an environment where xenophobia is pervasive, migrants may perceive unfavourable attitudes and harsh behaviour of nurses as medical xenophobia (Al-Rousan et al. 2018; Crush 2013; Pocock et al. 2020; White et al. 2020). Six of the thirty-one items in this cluster agree that a better understanding of medical xenophobia is not attainable, as it is not acknowledged by government; so, studies among health workers are needed to improve the quality of healthcare service to migrants. However, broad xenophobic sentiments are widespread in many LMICs, and they influence health practitioners' thoughts, speech patterns, responses, and behaviours in a variety of ways (Crush & Tawodzera 2011; Meyer-Weitz et al. 2018; White et al. 2020).

In eight of the thirty-one items included in this cluster, it was discovered that migrants frequently travel long distances to receive services, while others have no idea where to go at all due to health worker attitudes when providing health care. For example, migrants that work on farms do not know where to go for medical care (Faturiyele et al. 2018; White & Rispel 2021). Undocumented migrants are more prone to evade vital hospital care and are taken into hospitals either unconscious or dangerously ill, fearing for the attitudes of health

[3] These include South Africa, Thailand, Kenya, China, Columbia, and Ethiopia

workers (Alfaro-Velcamp 2017; Choudhari 2020; Loganathan et al. 2019; Vearey et al. 2017). In (1/31) of the included items, it was found that, although most patients indicated that the health care provider listened to them and provided information about their condition, the qualitative comments revealed concerns with insufficient information and inadequate communication about health service delivery (White et al. 2020).

Communication

In (22/72) of the included items, language and communication were found to be a key hurdle experienced by both migrants and healthcare providers. For example, Loganathan et al. (2019) found that migrants in Malaysia come from different Asian countries and face difficulties in communicating with local people (Loganathan et al. 2019). In addition, doctors found out that illiterate workers and those from rural areas, find the language spoken on Google Translate unfamiliar when services providers try to use such electronic means of translation (Chuah et al. 2019; Crush & Tawodzera 2011; Loganathan et al. 2019; White et al. 2020). In (7/22) included items in this cluster, Language barriers delayed healthcare seeking among migrants, who may come at clinics with late-stage dangerous diseases. Worryingly, language issues were discovered to contribute to a lack of informed consent with migrant patients seeking care in countries such as Ghana, South Africa, and Kenya, even for major procedures (Hunter-Adams & Rother 2017; Pocock et al. 2020; Qiu et al. 2019). In (4/22) of included items, migrants required interpreter services which have not been made available to migrants in most LMICs settings. All the twenty-two included items in this cluster found out that most services were offered in local languages, which became a huge barrier to migrants accessing health services and communication became a huge barrier in service provision.

The quality of health service delivery

In (26/72) of the included items, migrants often complained of perceived medication errors in countries such as Kenya, Ghana, and Uganda. In (9/26) of included items, migrants cited poor public health service quality as a primary factor for not visiting public health facilities. In (16/26) of included items in this cluster, however, it was observed that quality service to migrants is hindered by stigmatisation. Stigmatisation has been observed to affect quality service in many countries in LMICs settings (Crush & Tawodzera 2011; Faturiyele et al. 2018; White & Rispel 2021). In addition to this, (11/26) included items in this cluster, communication and documentation were discovered to be the two most common contacts that affect any quality service, including rejecting services or giving substandard services. Vearey et al. (2012) found that there are quality health services provided to migrants at both public health facilities and private health facilities, the only challenge is accessing the health services (Vearey et al. 2012) without proper documentation.

Prompt attention to service delivery

Extended perceived waiting times have been highlighted as a major risk factor; data demonstrates that long waiting times have a detrimental impact on patient satisfaction (Al-Rousan et al. 2018; Al Baz et al. 2018; Almonte & Lynch 2019; Loganathan et al. 2020; Meyer-Weitz et al. 2018; White et al. 2020). In (23/72) of the included items, prompt attention was reported as one factor that could determine repeat health service by migrants. Migrants, for example, had to lose a whole day waiting to be seen by a healthcare worker while also being aware that they had other home obligations (Arnold et al. 2014; Hickey et al. 2016; Meyer-Weitz et al. 2018). For example, results from Ghana reveal that the difficulty of waiting for long periods of time to receive care has long been a feature of the Ghanaian health system (Owusu & Yeboah 2018) and according to empirical data, many migrants spend long hours in huge lines at health facilities just to be sent home with little care provision (Ivanova et al. 2018; Owusu & Yeboah 2018). Challenges to prompt attention to migrant populations

were also found in delivering quality new-born care in Ethiopia because of lack of 24/7 skilled care (Sami et al. 2018).

Dignity and service delivery among migrants

In (31/72) of included items, the focus was on dignity. For example, 93.5% of participants in one of the articles from South Africa reported that their privacy was not respected (Ackerson & Zielinski 2017; White et al. 2020). Findings regarding dignity of migrants not being respected as they received services without consent have been reported (Hunter-Adams & Rother 2017). With inappropriate health financing among migrants, migrants were found to lose their dignity to access health services (Lattof 2018). Migrants may perceive unfair treatment, with the result that migrants would incur additional costs and instead use private health care (Alfaro-Velcamp 2017; Crush & Tawodzera 2011; White & Rispel 2021). Some migrants get reported to local policy and detained for lack of adequate documentation (Faturiyele et al. 2018). Discrimination by service providers because of migrants not being able to speak the local language but speaking in English has led migrants not being treated with respect on several countries such as Cameroon, Uganda, Kenya, and South Africa (Hunter-Adams & Rother 2017; Vearey et al. 2017; White et al. 2020).

Table 13: Summary of challenges experienced by health system actors in responsive to migrant health

Key Actors	Challenges from included items
National Governments (11) *	• Budget constraints necessitate prioritizing healthcare for citizens over healthcare for migrants. • Existing immigration laws have an impact on responses to the health needs of the migrant population. • When treating undocumented migrant patients, immigration laws may conflict with the professional obligations of healthcare workers.
Civil Society (3) *	• There are insufficient resources to meet all the health needs of migrants. • Policy changes involving increased migrant fees further erode capacity, as more migrants seek treatment and medication from NGO clinics. • Due to resource constraints, it is difficult to carry out public advocacy work.
UNHCR (2) *	• The budget of UNHCR Malaysia, for example, is insufficient to meet the actual health needs of the refugee population. Due to the global increase in refugee needs, additional budget cuts have occurred in the last year. • The rise in medical expenses for migrants at public health institutions has made it more difficult for the UNHCR to give financial support to refugees in need of secondary and tertiary care.
Refugee Communities (2) *	• Given that migrants do not have legal status in most LMICs, Community Based Organizations lack legitimacy in their operations and provision of services. • Some refugee groups may lack access to community-based organizations (CBOs) or community leaders for assistance.
Private Sector (1) *	• The profit-making financing model leads to high healthcare costs at private health facilities, which migrants cannot afford. • Due to low enrolment rates among migrants, private companies providing healthcare insurance may struggle to sustain such initiatives.
Academia (2)	• Funding for migrant research has been difficult to come by. Existing research funding prioritizes non-migrant health issues.

Note: * The numbers in parenthesis indicate the number of papers that reported findings. Source; Author

Discussion

With varied degrees of effectiveness, health systems around the world have contributed to improved health and life expectancy. There is growing interest in migration and health to achieve the goals of a health system, and its substantive relevance as an area of focus. In this regard, technical assistance to assist LMICs in developing migration-aware health strategies is required, and policy implications on health system performance remain unknown to date (Franken & Koolman 2012). Migration health, on the other hand, is still

in its infancy and is under-researched and under-funded. Research on migration and health system performance is largely condensed in high-income countries that “receive” migrants (Wickramage et al. 2019), leaving gaps in migration and health system performance in research in LMICs settings.

Internationally, the 2008 World Health Assembly Resolution is the most important framework for global action on migration and health (WHO 2011). The framework begins to recognise the importance of migration on health system performance which has been a salient challenge in LMICs. Despite this recognition, the work on including migrants in health systems is very slow. The framework's shortcomings were identified, and the 2017 Global Consultation on Migrant Health aimed to "reset the agenda" to make more informed recommendations to guide intervention (Vearey et al. 2017). Progress in this area has been slow. South Africa, for example, has contributed to regional health promotion through regional policy and cross-border healthcare initiatives such as the SADC HIV and AIDS Cross Border Initiative (Vearey et al. 2017). The results of this resolution are still yet to be realised.

Most of the included items agreed that governance and leadership of health systems, also known as stewardship, is a complex component of any health system (WHO 2006). Governance and leadership include policies, legislation, institutions, and programmes that deal migrant populations (IOM 2018). For example, Thailand has been a popular destination for migrants for many years and most of the migrants cross the borders without legal documentation (Kunpeuk et al. 2020). To this effect, the Thai government established one service stop and a management centre for migrants as a mechanism to legalise undocumented migrants (WHO 2018). The Thai government moved to establish public health insurance for migrants (Kunpeuk et al. 2020). Governance encompasses the government's role in health and its interactions with other actors whose activities have an impact on the health of migrants. In most cases, governments are not making laws that are migrant friendly and often migrants are excluded from national health or policy planning (Adjai & Lazaridis 2014; Brolan et al. 2017; Herberholz 2020).

Migrants' access to healthcare is aided and hampered by legislation and policy. Addressing the Sustainable Development Goals (SDG) objective for UHC is conditional on meeting migrants' health requirements and providing them access to excellent and affordable health services, according to both the WHO and the IOM (IOM 2019). Although developing migrant-friendly, inclusive health systems that ensure UHC is acknowledged is a huge challenge, it also gives a chance to endorse a more articulate and combined approach to health and well-being among migrants, rather just vertical disease-specific therapies (IOM 2019; Abubakar & Zumla 2018; Abubakar et al. 2018).

Evidence suggests that legislation alone, as a challenge, cannot effect effective change in health-care system performance (Adjai and Lazaridis, 2014; Alfaro-Velcamp, 2017). The relevance of overcoming resource restrictions and underinvestment in LMICs must be identified and recognized. Even though improving the performance of the health-care system is a key government objective, leadership and implementation remain issues in countries with similar economic levels. Investment in the health system will enable quality UHC for all, inclusive of migrants.

The WHR (2010) defined health financing for universal coverage as “Financing systems need to be specifically designed to: provide all people with access to needed health services (including prevention, promotion, treatment, and rehabilitation) of sufficient quality to be effective; [and to] ensure that the use of these services does not expose the user to financial hardship” (WHO 2010). The aim of any health system is to ensure that all health system goals are achieved, and inclusive of all people living in that country. This raises important

questions as to why then other countries struggle to attain the goals? The main challenge has to do with the fact that these health system goals are influenced by social determinants emanating from outside the health system, because health system are complex, however, they need to be adaptive to changing external factors (Kutzin 2015). Migration is one of such social determinants that affect health financing, resulting in underfunded national programmes. The link between health financing and overall system goals should be assessed with other goals. Coordinated policy and implementation across health system functions are essential for making progress on the desired objectives, such as improvement in quality of care for migrants. The findings of this systematic review agree with this recommendation as made by Loganathan et al. (2019). In Thailand, the government has included migrants in health insurance to ensure adequate financing for migrant health (Loganathan et al 2019). To this effect, migrant health financing should be included in overall health financing at a country level, provincial level or even at district level and be included in national health policies to achieve UHC.

Health financing contributes greatly to health system performance. However, LMICs face financial underinvestment in the public healthcare. This, in turn, adds to the perception of the public healthcare system's dysfunctionality, which has an impact on financial classification, service quality, and access to health care for migrants. White et al. (2021) found that “a combination of neoliberal economic policies, insufficient financial investment in the health system and workforce, and poor implementation of existing legislation has created a perfect storm of inequities and fragility in the South African health system” (White et al. 2021). To this effect, financial restrictions are likely to have a bearing on the quality and availability of health services used by migrants. There is additional data pointing to the unavoidable rationing of treatment in LMICs owing to budgetary constraints (WHO 2019). As a result, if implemented, a comprehensive insurance package for migrants that includes a full range of services (preventive, promotional, curative, and rehabilitative) would provide access to quality healthcare and financial risk protection, thereby meeting the goals for truly inclusive UHC in LMICs (Loganathan et al. 2019). Increases in user fees for health services in LMICs clearly demonstrate that decreased utilisation occurs, and that this tends to disproportionately affect the migration and health system performance (Peters et al. 2008). Migrants are often requested to pay whatever they can afford, and the weight of any unpaid expenditure rests on public healthcare services, the majority of which are overseen by the Ministry of Public Health (Herberholz 2020).

Financial restrictions are likely to have a bearing on the quality and availability of health services. Additional data pointing to the unavoidable rationing of treatment in LMICs owing to financial constraints (WHO 2019). As a result, if implemented, a comprehensive insurance package for migrants that includes a full range of services (promotional, preventive, restorative, and reconstructive) would offer access to quality healthcare and financial risk protection, thereby meeting the goals for truly inclusive UHC in LMICs (Loganathan et al. 2019). Increases in user fees for health services in LMICs clearly demonstrate that decreased utilisation occurs, and that this tends to disproportionately affect the migration and health system performance (Peters et al. 2008).

Good health is the second goal of a health system. Migrants are known to be clustering in most of the LMICs, with numerous diseases or conditions affecting some groups (Abbas et al. 2018). This is because of the shared susceptibility, shortage of financial resources, the extent and time of the voyage, and numerous transitional destinations, as well as the epidemiological load in the country of origin (Abbas et al. 2018), which affect to the overall health system of the receiving country. Furthermore, congestion, and inadequate water sanitation in camps and reception facilities raise the danger of infectious diseases such as vaccine-preventable diseases

(Abbas et al. 2018). Following that, restrictive regulations in the destination country have an impact on living conditions by limiting access to healthcare, education, and the labour market, as well as increasing language and other communication hurdles (IOM 2016).

Although this review assessed migration challenges to health system performance, the findings have significant relevance strengthening health systems in LMICs. The major health system restrictions and enablers concerning healthcare delivery, HRH, community partnerships, governance, and policy, apply to practically all services given through migrant programs. Constraints to accessing health services, for example, have a negative bearing on health system performance in the majority of LMICs because of the ineffectiveness of service delivery, HRH shortages, absence of cognisance of health services, poor engagement with populations, and poor governance and policy structures. Migration is both an enabler and an obstacle to health system performance. What remains unaddressed in the literature is how to conquer these obstacles and enhance larger health systems.

This review provides indication on health system facilitators and barriers that can be used to develop programs to address some of the system-wide barriers to health-care system performance. There is growing agreement that stronger health systems are critical to achieving better health outcomes. The evidence base is also remarkably thin, in part because health-systems research has a bad reputation (Travis et al. 2004). Chen et al. (2004), for example, describe a "double crisis" of devastating disease and overwhelmingly failing health systems in many LMICs (Chen et al. 2004). Major health worker shortages, a lack of donor coordination, and poor information systems were cited as important hurdles to attaining the Millennium Health Goals by the High-Level Forum on Achieving the Health Millennium Development Goals (Travis et al. 2004).

There are numerous motives why migrants may not fully use health services, even when the resources are available. Despite eligibility and registration status, migrants confront several challenges to accessing health-care services, inclusive of language and cultural obstacles, fear of discrimination, fear of losing employment due to absenteeism, and weak employer compliance (Guinto et al. 2015). Cost, provider bias, a lack of information about obtaining health entitlements or health insurance, the availability and suitability of translators, and the fear of deportation for people with doubtful legal status are all hurdles to access (Biswas et al. 2015). However, Thailand's experiences have demonstrated the need for high-level political leadership to protect migrants' human rights and non-discrimination principles in accessing health care (Suphanchaimat et al. 2016).

Vertical and horizontal approaches are used to describe service delivery arrangements (WHO 2000). Few programs are delivered in many LMICs through completely stand-alone or completely integrated approaches, but rather through a complex patchwork of arrangements (Travis et al. 2004). Environmental constraints[4], factors such as the whole policy climate, political volatility, and governance quality all play an important impact in migration and health system performance. Migration and health system performance are heavily influenced by aspects such as the overall policy environment, political volatility, and governance quality. According to certain research, in some nations, broad policy and institutional constraints are more difficult to overcome than resource limits (Sachs 2004; Bhutta et al. 200). Although health-care systems cannot eliminate environmental constraints on their own, a few health-care structures (such as the establishment of tougher mechanisms to keep health-care practitioners responsible to the public) may mitigate the effects of such hurdles (Travis et al. 2004).

[4] Those external to the health system

Migrants have access to health care services such as health promotion, mental health services, disease prevention, treatment, and care, as well as financial security. Access to basic services is critical for migrants; however, due to significant data gaps, we do not know to what extent migrants can access health services (IOM 2020). Data on health-care access are frequently not disaggregated by migratory status or are not comparable across countries (IOM 2020). In addition, the evidence has shown that the share of migrants able to access health services is unknown (IOM 2018). Previous research in Malaysia and abroad has found that migrants prefer private clinics and use public clinics only seldom (Loganathan et al. 2020). Indirect and non-medical costs of using health, such as lost wages and transportation costs, have been observed to limit access to healthcare services (Loganathan et al. 2019). The frequency and breadth of health issues faced by migrants gives a description of healthcare service utilization and demands; however, little is known about the morbidity and utilisation patterns of migrants in primary care, and no specific description is provided for LMICs (Ab Rahman et al. 2016).

It is vital to remember that migrants' access to health treatments is determined by the country's health system and migrant eligibility, which frequently varies by migrant variety. For example, only emergency care is provided to migrants in most of LMICs (IOM 2020). One example of universal health access for migrants is evidenced in Thailand, that has managed to include migrants (both documented and undocumented) into health insurance scheme (Tulloch et al. 2016). One issue to consider is that migrants' eligibility for health-care services does not always translate into effective coverage (IOM 2020). Evidence from Thailand indicates that migrants use health services infrequently, and evidence on effective access of migrants to health care is restricted to a few case studies. Health care utilization studies among migrant patients are useful for determining their perceptions of the non-clinical aspects of the health system's quality (that is, HSR), as well as their satisfaction with and experiences with the health system (Mirzoev & Kane 2017).

Communication between service providers and migrants has shown to affect the quality of healthcare received. Limited language proficiency also has an impact on patient safety in terms of medical errors made by the prescribing physician and adverse medication reactions caused by the patient's misinterpretation of instructions (Loganathan et al. 2020). Translation supplied by informal interpreters such as family members, friends, or untrained staff members may be inadequate, and dependence on informal interpreters may jeopardize clinical care (Loganathan et al. 2020).

Migration of health personnel has led shortages in the health workforce and poses challenges to attainment of Millennium Development Goals (MDG) (WHO 2006). This usually leads to the employment of untrained workers who lack the necessary skills to cater to migrant populations (Dovlo 2007). Migration of healthcare personnel contributed to the Human Resources for Health (HRH) crisis in LMICs settings like Kenya, as they struggle to move towards the MDG (Gross et al. 2011). Evidence has shown that for every nurse that migrates, Kenya loses $43 180 (United States dollars) in educational investments alone (Dovlo 2007). The management of Human resources for Health (HRH) is key in health system performance. This can be a health system enabler (generally realised in High Income Countries (HIC) who received migrants from LMICs) to achieve health system goals.

According to the IOM, migration is a health determinant for migrants because it drives disparities that overlap biological, lifestyle, community, employment, socioeconomic, cultural, and environmental factors (IOM 2011). Migrants face specific health vulnerabilities because of the persistent conditions that force them to leave a place of residence, as well as the disruption of their livelihoods and social support networks, as well as

unexpected challenges adapting into new contexts (Carballo and Nerukar 2001; IOM 2011). Table 6 shows some of the policy recommendations to address migrant access to healthcare.

Table 14: Recommendations for policy to overcome barriers to migrant access to healthcare in LMICs

Barriers	Policy Recommendation
Affordability and financial constraints	• Consideration to include migrants in national health insurance • Consider establishing a complete insurance package for migrant populations that covers a whole spectrum of healthcare treatments (preventive, promotional, curative, and rehabilitative). • There is need to review the fee structure of migrants at service provision.
Migrants who are undocumented, their legal status, and their health	• Examine the policy for reporting patients who do not have appropriate identification to authorities. • Consider undocumented migrants' insurance coverage alternatives.
Language barriers	• Consider establishing a specialised interpretation service at hospitals to help migrants seeking medical attention. • Volunteer community health workers can be trained as intercultural mediators. • Health materials in main international languages should be available at health institutions and workplaces.
Discrimination and xenophobia	• Train and develop health-care workers to provide a culturally competent health-care system

Source: Loganathan et al. (2019)

The lack of a universally acceptable definition of migration (as it relates to health systems, and health systems performance in particular) has made it difficult for countries to incorporate migrant-friendly health policies. Policies can contribute to improved health system through creating more supportive structures and shaping individual actions. This has created a huge gap in countries in LMICs settings in attaining UHC and not meeting health system performance goals of responsiveness, equity, and health provision (WHO, 2011). Thailand has incorporated different variations of migrants (refugees, asylum seekers, conflict-induced internal displacement, migrant workers, human trafficking) (IOM 2018) in their health policies. Implementation gaps, for example, still exist in most countries, such as South Africa, leading to medical xenophobia (Crush & Tawodzera 2011). However, we still confirm that there are still major questions about the definition of migration across countries. With the limited specificity, migration remains a theory in LMICs and its effect on health system performance remaining intangible (Vearey 2019).

Nevertheless, there is a need to for a broader policy debate on migration and health system performance in LMICs settings. The health system challenges identified in this review relate to LMICs and might not relate to HICs. Challenges relating to inadequate financing, restrictive health access, health worker attitudes, dignity, health provision for migrant health are mainly applicable to LMICs and may not be applicable not to HICs. However, the finding that health systems are affected by increase in population in various ways is applicable to all geographics settings with same level of income such as LMICs and HICs. Lessons from Thailand have proven the importance of high-level political leadership in protecting migrants' human rights and non-discriminatory access to health care (Suphanchaimatet al. 2016). Furthermore, the assumption that migrants deplete already scarce resources that could be dedicated to local people is only relevant and applicable to LMICs and HIC and is used by political leaders as an excuse (White et al. 2021).

Future systematic reviews should explore further enablers and challenges of migration to health system performance in LMICS. This comprises identifying metrics that include migrants' claim to health care, health policies, responsive health services, and ways to attain the desired change (Abbas et al. 2018). In addition, interesting research field would be to examine the influence of international advocacy leaders (such as WHO, UNHCR, and IOM), LMICs country health system officials, and local health system actors (such as local NGOs

and advocacy groups). Furthermore, a comparison of legislation and policies on migration and UHC in LMICs or nations with similar levels of income. Such research could also investigate the causes of inconsistencies in governance and leadership that exist in these countries. The critical role that civic society plays in negotiating access for migrants in LMICs could be investigated. Finally, future study might compare migrants' experiences with those of other underprivileged groups, whether due to geography, health condition, or legislation.

Conclusion

This systematic review presents information on migration as a threat to health system performance and how health systems in LMICs are responding to growing migration. Migration must be integrated into all levels of healthcare planning for health systems to become “migration-aware.” Importantly, such planning must extend beyond national leadership, where integration and inclusive service delivery are critical. Progress toward health goals, as emphasized here, is predicated on the development and implementation of integrated, evidence-informed interventions that interact with migration. The findings add to our understanding of migration and health system performance. In comparison to other health system goals, there appears to be a lack of prioritisation and resourcing of migration and responsiveness in research, policy, and research intervention. Looking ahead, we believe that, while portraying migration as a threat to health system performance has been effective in attracting high-level political attention to the issue, the lack of a universal definition of migration means that actions on health system performance may remain a theory. Health systems in LMICs are under financed which create gaps in health system provision to extend to migrant populations. This necessitates an expansion of the research agenda, not only to identify migration challenges to health system performance but also to continuously evaluate the role of migration in LMICs health system strengthening. The review’s findings are relevant to ongoing initiatives to strengthen health systems, with consideration to health system responsiveness goal. By identifying migration challenges to health system performance, health systems can be designed to be inclusive of all people and adequately responsive to the increase in migration in LMICs.

References

Ab Rahman N, Sivasampu S, Noh KM, Khoo EM. 2016. Health profiles of foreigners attending primary care clinics in Malaysia. *BMC health services research*, **16**: 1-9.

Abbas M, Aloudat T, Bartolomei J, et al. 2018. Migrant and refugee populations: a public health and policy perspective on a continuing global crisis. *Antimicrobial Resistance & Infection Control*, **7**: 113.

Abdulahi M, Kakaire O, Namusoke F. 2020. Determinants of modern contraceptive use among married Somali women living in Kampala; a cross sectional survey. *Reprod Health*, **17**: 72.

Abera Abaerei A, Ncayiyana J, Levin J. 2017. Health-care utilization and associated factors in Gauteng province, South Africa. *Global health action*, **10**: 1305765.

Abubakar I, Aldridge RW, Devakumar D, et al. 2018a. The UCL–Lancet Commission on Migration and Health: the health of a world on the move. The Lancet, 392: 2606-2654.

Ackerson K, Zielinski R. 2017. Factors influencing use of family planning in women living in crisis affected areas of Sub-Saharan Africa: A review of the literature. *Midwifery*, **54**: 35-60.

Adaku A, Okello J, Lowry B, et al. 2016. Mental health and psychosocial support for South Sudanese refugees in northern Uganda: a needs and resource assessment. *Conflict and Health*, **10**: 1-10.

Adhikari R, Jampaklay A, Chamratrithirong A. 2011. Impact of children's migration on health and health care-seeking behavior of elderly left behind. *BMC public health*, **11**: 1-8.

Adjai C, Lazaridis G. 2014. People, state and civic responses to immigration, xenophobia and racism in the New South Africa. *Journal of international migration and integration*, **15**: 237-255.

Ajaero CK, De Wet-Billings N, Atama C, Agwu P, Eze EJ. 2021. The prevalence and contextual correlates of non-communicable diseases among inter-provincial migrants and non-migrants in South Africa. *BMC Public Health*, **21**: 1-13.

Al-Rousan T, Schwabkey Z, Jirmanus L, Nelson BD. 2018. Health needs and priorities of Syrian refugees in camps and urban settings in Jordan: perspectives of refugees and health care providers. *East Mediterr Health J*, **24**: 243-253.

Al Baz M, Law MR, Saadeh R. 2018. Antibiotics use among Palestine refugees attending UNRWA primary health care centers in Jordan–a cross-sectional study. *Travel medicine and infectious disease*, **22**: 25-29.

Alemayehu M, Wubshet M, Mesfin N, Gebayehu A. 2017a. Perceived quality of life among Visceral Leishmaniasis and HIV coinfected migrant male-workers in Northwest Ethiopia: a qualitative study. *Bmc Public Health*, **17**.

Alemayehu M, Wubshet M, Mesfin N, Gebayehu A. 2017b. Perceived quality of life among Visceral Leishmaniasis and HIV coinfected migrant male-workers in Northwest Ethiopia: a qualitative study. *BMC Public Health*, **17**: 1-8.

Alexakis LC, Athanasiou M, Konstantinou A. 2019a. Refugee camp health services utilisation by non-camp residents as an indicator of unaddressed health needs of surrounding populations: a perspective from Mae La refugee camp in Thailand during 2006 and 2007. *The Pan African Medical Journal*, **32**.

Alexakis LC, Athanasiou M, Konstantinou A. 2019b. Refugee camp health services utilisation by non-camp residents as an indicator of unaddressed health needs of surrounding populations: a perspective from Mae La refugee camp in Thailand during 2006 and 2007. *The Pan African medical journal*, **32**: 188.

Alfaro-Velcamp T. 2017. "Don't send your sick here to be treated, our own people need it more": immigrants' access to healthcare in South Africa. *International Journal of Migration, Health and Social Care*.

Almonte MT, Lynch CA. 2019. Impact of internal female migration on unmet need for modern contraception in Zambia. *Reproductive health*, **16**: 1-11.

Amodu OC, Richter MS, Salami BO. 2020. A scoping review of the health of conflict-induced internally displaced women in Africa. *International journal of environmental research and public health*, **17**: 1280.

Antai D. 2010. Migration and child immunization in Nigeria: individual-and community-level contexts. *BMC public health*, **10**: 1-12.

Arale A, Lutukai M, Mohamed S, Bologna L, Stamidis KV. 2019. Preventing importation of poliovirus in the Horn of Africa: The success of the cross-border health initiative in Kenya and Somalia. *American Journal of Tropical Medicine and Hygiene*, **101**: 100-106.

Argaw MD, Woldegiorgis AG, Workineh HA, et al. 2021a. Access to malaria prevention and control interventions among seasonal migrant workers: A multi-region formative assessment in Ethiopia. *PLoS ONE*, **16**.

Argaw MD, Woldegiorgis AG, Workineh HA, et al. 2021b. Access to malaria prevention and control interventions among seasonal migrant workers: A multi-region formative assessment in Ethiopia. *PloS one*, **16**: e0246251.

Arnold C, Theede J, Gagnon A. 2014. A qualitative exploration of access to urban migrant healthcare in Nairobi, Kenya. *Social Science & Medicine*, **110**: 1-9.

Atake EH. 2018. The impacts of migration on maternal and child health services utilisation in Sub-Saharan Africa: evidence from Togo. *Public health*, **162**: 16-24.

Bosmans M, Gonzalez F, Brems E, Temmerman M. 2012. Dignity and the right of internally displaced adolescents in Colombia to sexual and reproductive health. *Disasters*, **36**: 617-634.

Bridges J, Pope C, Braithwaite J. 2019. Making health care responsive to the needs of older people. *Age and ageing*, **48**: 785-788.

Brolan CE, Forman L, Dagron S, et al. 2017. The right to health of non-nationals and displaced persons in the sustainable development goals era: challenges for equity in universal health care. *International journal for equity in health*, **16**: 1-4.

Carballo M, Nerukar A. 2001. Migration, refugees, and health risks. Emerging infectious diseases, **7**: 556.

Chelwa NM, Likwa RN, Banda J. 2016. Under-five mortality among displaced populations in Meheba refugee camp, Zambia, 2008–2014. *Archives of Public Health*, **74**: 1-7.

Chen J. 2011. Internal migration and health: re-examining the healthy migrant phenomenon in China. *Social Science & Medicine*, **72**: 1294-1301.

Chi OH, Denton G, Gursoy D. 2021. Interactive effects of message framing and information content on carbon offsetting behaviors. *Tourism Management*, **83**.

Chi PC, Bulage P, Østby G. 2019. Equity in aid allocation and distribution: A qualitative study of key stakeholders in Northern Uganda. *PloS one*, **14**: e0226612.

Choudhari R. 2020a. COVID 19 pandemic: Mental health challenges of internal migrant workers of India. *Asian Journal of Psychiatry*, **54**.

Choudhari R. 2020b. COVID 19 pandemic: mental health challenges of internal migrant workers of India. *Asian journal of psychiatry*, **54**: 102254.

Chua BL, Al-Ansi A, Lee MJ, Han H. 2020. Tourists' outbound travel behavior in the aftermath of the COVID-19: role of corporate social responsibility, response effort, and health prevention. *Journal of Sustainable Tourism*, **29**: 879-906.

Chuah FLH, Tan ST, Yeo J, Legido-Quigley H. 2019a. Health system responses to the health needs of refugees and asylum-seekers in Malaysia: a qualitative study. *International journal of environmental research and public health*, **16**: 1584.

Chuah FLH, Tan ST, Yeo J, Legido-Quigley H. 2019b. Health System Responses to the Health Needs of Refugees and Asylum-seekers in Malaysia: A Qualitative Study. *Int J Environ Res Public Health*, **16**.

Chuah FLH, Tan ST, Yeo J, Legido-Quigley H. 2019c. Health system responses to the health needs of refugees and asylum-seekers in Malaysia: A qualitative study. *International Journal of Environmental Research and Public Health*, **16**.

Crush J. 2013. Linking Food Security, Migration and Development. *International Migration*, **51**: 61-75.

Crush J, Tawodzera G. 2011. Medical xenophobia: Zimbabwean access to health services in South Africa.

Davies AA, Basten A, Frattini C. 2009. Migration: a social determinant of the health of migrants. *Eurohealth*, **16**: 10-12.

de Gruchy T. 2020a. Responding to the health needs of migrant farm workers in South Africa: Opportunities and challenges for sustainable community-based responses. *Health and Social Care in the Community*, **28**: 60-68.

de Gruchy T. 2020b. Responding to the health needs of migrant farm workers in South Africa: Opportunities and challenges for sustainable community-based responses. *Health & social care in the community*, **28**: 60-68.

de Gruchy T, Kapilashrami A. 2019. After the handover: Exploring MSF's role in the provision of health care to migrant farm workers in Musina, South Africa. *Global public health*, **14**: 1401-1413.

Dehghan AHRAN, AboAli NV. 2016. Afghan refugees' experience of Iran's health service delivery.

Dodd W, Humphries S, Patel K, et al. 2017. Determinants of internal migrant health and the healthy migrant effect in South India: a mixed methods study. *BMC international health and human rights*, **17**: 1-12.

Dovlo D. 2007. Migration of nurses from Sub-Saharan Africa: a review of issues and challenges. Health services research, **42**: 1373-1388.

Faturiyele I, Karletsos D, Ntene-Sealiete K, et al. 2018. Access to HIV care and treatment for migrants between Lesotho and South Africa: a mixed methods study. *BMC public health*, **18**: 1-10.

Foster AA, Makukula MK, Moore C, et al. 2018. Strengthening and Institutionalizing the Leadership and Management Role of Frontline Nurses to Advance Universal Health Coverage in Zambia. *Glob Health Sci Pract*, **6**: 736-746.

Franken M, Koolman X. 2013. Health system goals: a discrete choice experiment to obtain societal valuations. Health Policy, **112**: 28-34.

Frenk J, González-Pier E, Gómez-Dantés O, Lezana MA, Knaul FM. 2006. Comprehensive reform to improve health system performance in Mexico. The Lancet, **368**: 1524-1534.

Ginsburg C, Bocquier P, Menashe-Oren A, Collinson MA. 2021a. Migrant health penalty: evidence of higher mortality risk among internal migrants in sub-Saharan Africa. *Global Health Action*, **14**: 1930655.

Ginsburg C, Collinson MA, Gómez-Olivé FX, et al. 2021b. Internal migration and health in South Africa: determinants of healthcare utilisation in a young adult cohort. *BMC public health*, **21**: 1-15.

Given LM. 2015. 100 questions (and answers) about qualitative research. SAGE publications.

Gross JM, Rogers MF, Teplinskiy I, et al. 2011. The Impact of Out-Migration on the Nursing Workforce in Kenya. *Health services research*, **46**: 1300-1318.
Guinto RLLR, Curran UZ, Suphanchaimat R, Pocock NS. 2015. Universal health coverage in 'One ASEAN': are migrants included? Global health action, **8**: 25749.
Gushulak BD, Pottie K, Roberts JH, Torres S, DesMeules M. 2011. Migration and health in Canada: health in the global village. *Cmaj*, **183**: E952-E958.
Haddison EC, Julius CE, Kagina BM. 2020. Health services utilisation before and during an armed conflict; experiences from the Southwest region of Cameroon. *Open Public Health Journal*, **13**: 547-554.
Hanefeld J, Mayhew S, Legido-Quigley H, et al. 2018. Towards an understanding of resilience: Responding to health systems shocks. *Health Policy and Planning*, **33**: 355-367.
Herberholz C. 2020a. The role of external actors in shaping migrant health insurance in Thailand. *Plos one*, **15**: e0234642.
Herberholz C. 2020b. The role of external actors in shaping migrant health insurance in Thailand. *PLoS ONE*, **15**.
Heydari A, Amiri R, Nayeri ND, AboAli V. 2016. Afghan refugees' experience of Iran's health service delivery. *International Journal of Human Rights in Healthcare*.
Hickey JE, Gagnon AJ, Jitthai N. 2016. Knowledge about pandemic influenza preparedness among vulnerable migrants in Thailand. *Health promotion international*, **31**: 124-132.
Hunter-Adams J, Rother H-A. 2017. A qualitative study of language barriers between South African health care providers and cross-border migrants. *BMC health services research*, **17**: 1-9.
Ingleby D, Petrova-Benedict R, Huddleston T, Sanchez E. 2019a. The MIPEX health strand: a longitudinal, mixed-methods survey of policies on migrant health in 38 countries. *European journal of public health*, **29**: 458-462.
Ingleby D, Smith A, Severoni S. 2019b. How can we further rights-based and evidence-based policies on migrant and ethnic minority health? *Public health*, **172**: 143-145.
International Organization for Migration (2019) World Migration Report 2020, IOM, Geneva
International Organization for Migration (IOM). 2019. Universal Health Coverage: "Leave no Migrant behind"-Information Sheet. Geneva: Migration Health Division, International Organization for Migration (IOM), UN Migration.
International Organization for Migration (2020) COVID-19: Guidance for employers and business to enhance migrant worker protection during the current health crisis. https://iris.iom.int/covid-19-crisis-response
IOM (2020) IOM strategic preparedness and response plan—coronavirus disease 2019 https://www.iom.int/sites/default/files/country_appeal/file/iom_covid19_appeal_202 0_final_0.pdf.
Ivanova O, Rai M, Kemigisha E. 2018. A systematic review of sexual and reproductive health knowledge, experiences and access to services among refugee, migrant and displaced girls and young women in Africa. *International journal of environmental research and public health*, **15**: 1583.
Khan G, Kagwanja N, Whyle E, et al. 2021. Health system responsiveness: a systematic evidence mapping review of the global literature. *International Journal for Equity in Health*, **20**.
Kruk ME, Gage AD, Arsenault C, et al. 2018. High-quality health systems in the Sustainable Development Goals era: time for a revolution. *The Lancet Global Health*, **6**: e1196-e1252.
Klugman J. 2009. Human development report 2009. Overcoming barriers: Human mobility and development. Overcoming Barriers: Human Mobility and Development (October 5, 2009). UNDP-HDRO Human Development Reports.
Kunpeuk W, Julchoo S, Phaiyarom M, et al. 2021. A cross-sectional study on disparities in unmet need among refugees and asylum seekers in thailand in 2019. *International Journal of Environmental Research and Public Health*, **18**.
Kunpeuk W, Teekasap P, Kosiyaporn H, et al. 2020. Understanding the problem of access to public health insurance schemes among cross-border migrants in Thailand through systems thinking. *International journal of environmental research and public health*, **17**: 5113.
Kutzin J, Sparkes SP. 2016. Health systems strengthening, universal health coverage, health security and resilience. Bulletin of the World Health Organization, **94**: 2.
Lattof SR. 2018a. Health insurance and care-seeking behaviours of female migrants in Accra, Ghana. *Health policy and planning*, **33**: 505-515.
Lattof SR. 2018b. Health insurance and care-seeking behaviours of female migrants in Accra, Ghana. *Health Policy Plan*, **33**: 505-515.
Liang Y, Guo M. 2015. Utilization of health services and health-related quality of life research of rural-to-urban migrants in China: a cross-sectional analysis. *Social Indicators Research*, **120**: 277-295.
Lin L, Brown KB, Yu F, et al. 2015. Health care experiences and perceived barriers to health care access: a qualitative study among African migrants in Guangzhou, Guangdong Province, China. *Journal of immigrant and minority health*, **17**: 1509-1517.

Lindvall K, Kinsman J, Abraha A, et al. 2020. Health status and health care needs of drought-related migrants in the Horn of Africa—a qualitative investigation. *International journal of environmental research and public health*, **17**: 5917.

Loganathan T, Chan ZX, de Smalen AW, Pocock NS. 2020a. Migrant Women's Access to Sexual and Reproductive Health Services in Malaysia: A Qualitative Study. *Int J Environ Res Public Health*, **17**.

Loganathan T, Chan ZX, de Smalen AW, Pocock NS. 2020b. Migrant women's access to sexual and reproductive health services in Malaysia: A qualitative study. *International Journal of Environmental Research and Public Health*, **17**: 1-18.

Loganathan T, Rui D, Ng C-W, Pocock NS. 2019. Breaking down the barriers: Understanding migrant workers' access to healthcare in Malaysia. *PloS one*, **14**: e0218669.

Meyer-Weitz A, Asante KO, Lukobeka BJ. 2018a. Healthcare service delivery to refugee children from the Democratic Republic of Congo living in Durban, South Africa: a caregivers' perspective. *Bmc Medicine*, **16**.

Meyer-Weitz A, Asante KO, Lukobeka BJ. 2018b. Healthcare service delivery to refugee children from the Democratic Republic of Congo living in Durban, South Africa: a caregivers' perspective. *BMC medicine*, **16**: 1-12.

Mirzoev T, Kane S. 2017. What is health systems responsiveness? Review of existing knowledge and proposed conceptual framework. *BMJ global health*, **2**: e000486.

Mladovsky P, Rechel B, Ingleby D, McKee M. 2012. Responding to diversity: an exploratory study of migrant health policies in Europe. *Health policy (Amsterdam, Netherlands)*, **105**: 1-9.

Motlhatlhedi K, Nkomazana O. 2018. Home is home—Botswana's return migrant health workers. *Plos one*, **13**: e0206969.

Munyewende P, Rispel LC, Harris B, Chersich M. 2011. Exploring perceptions of HIV risk and health service access among Zimbabwean migrant women in Johannesburg: a gap in health policy in South Africa? *Journal of public health policy*, **32**: S152-S161.

Nara R, Banura A, Foster AM. 2020. A Multi-Methods Qualitative Study of the Delivery Care Experiences of Congolese Refugees in Uganda. *Maternal and child health journal*, **24**: 1073-1082.

Owusu L, Yeboah T. 2018. Living conditions and social determinants of healthcare inequities affecting female migrants in Ghana. *GeoJournal*, **83**: 1005-1017.

Pocock NS, Chan Z, Loganathan T, et al. 2020a. Moving towards culturally competent health systems for migrants? Applying systems thinking in a qualitative study in Malaysia and Thailand. *PloS one*, **15**: e0231154.

Pocock NS, Chan Z, Loganathan T, et al. 2020b. Moving towards culturally competent health systems for migrants? Applying systems thinking in a qualitative study in Malaysia and Thailand. *PLoS ONE*, **15**.

Qiu J, Song D, Nie J, et al. 2019a. Utilization of healthcare services among Chinese migrants in Kenya: a qualitative study. *BMC health services research*, **19**: 1-8.

Qiu J, Song D, Nie J, et al. 2019b. Utilization of healthcare services among Chinese migrants in Kenya: A qualitative study. *BMC Health Services Research*, **19**.

Rabbani F, Shipton L, White F, et al. 2016. Schools of public health in low and middle-income countries: an imperative investment for improving the health of populations? *BMC Public Health*, **16**: 1-12.

Reinhardt UE, Cheng T-m. 2000. The world health report 2000-Health systems: improving performance. *Bulletin of the World Health Organization*, **78**: 1064-1064.

Robone S, Rice N, Smith PC. 2011. Health systems' responsiveness and its characteristics: A cross-country comparative analysis. *Health services research*, **46**: 2079-2100.

Sachs JD. 2016. Toward an international migration regime. American Economic Review, **106**: 451-55.

Sami S, Amsalu R, Dimiti A, et al. 2018a. Understanding health systems to improve community and facility level newborn care among displaced populations in South Sudan: a mixed methods case study. *BMC pregnancy and childbirth*, **18**: 1-12.

Sami S, Amsalu R, Dimiti A, et al. 2018b. Understanding health systems to improve community and facility level newborn care among displaced populations in South Sudan: A mixed methods case study. *BMC Pregnancy and Childbirth*, **18**.

Sharma A, Prinja S, Aggarwal AK. 2018. Measurement of health system performance at district level: A study protocol. *Journal of public health research*, **6**: 917-917.

Spreng C. 2011. Healthy partnerships: how governments can engage the private sector to improve health in Africa.

South African Lancet National Commission. 2019. Confronting the Right to Ethical and Accountable Quality Health Care in South Africa: A Consensus Report. Pretoria: National Department of Health.

Suphanchaimat R, Kantamaturapoj K, Pudpong N, Putthasri W, Mills A. 2016. Health insurance for people with citizenship problems in Thailand: A case study of policy implementation. Health Policy and Planning, **31**: 229-238

Tatah L, Delbiso TD, Rodriguez-Llanes JM, Gil Cuesta J, Guha-Sapir D. 2016. Impact of refugees on local health systems: a difference-in-differences analysis in Cameroon. *PLOS one*, **11**: e0168820.

Thupayagale-Tshweneagae G, Nkosi ZZ, Moleki M. 2014. Cross border mobility of nurse educators: Case studies from Botswana and South Africa. *African Journal for Physical Health Education, Recreation and Dance*, **20**: 389-398.

Tulloch O, Machingura F, Melamed C. 2016. Health, migration and the 2030 Agenda for Sustainable Development.

Travis P, Bennett S, Haines A et al. 2004. Overcoming health-systems constraints to achieve the Millennium Development Goals. Lancet, The **364**:900-906.

Urquia ML, Gagnon AJ. 2011. Glossary: migration and health. *Journal of Epidemiology & Community Health*, **65**: 467-472.

Vearey J. 2012. Learning from HIV: exploring migration and health in South Africa. *Global public health*, **7**: 58-70.

Vearey J, Modisenyane M, Hunter-Adams J. 2017. Towards a migration-aware health system in South Africa: a strategic opportunity to address health inequity. *South African health review*, **2017**: 89-98.

Von Roenne A, Von Roenne F, Kollie S, et al. 2010. Reproductive health services for refugees by refugees: an example from Guinea. *Disasters*, **34**: 16-29.

White JA, Blaauw D, Rispel LC. 2020a. Social exclusion and the perspectives of health care providers on migrants in Gauteng public health facilities, South Africa. *PLoS One*, **15**: e0244080.

White JA, Levin J, Rispel LC. 2020b. Migrants' perceptions of health system responsiveness and satisfaction with health workers in a South African Province. *Global Health Action*, **13**.

White JA, Levin J, Rispel LC. 2020c. Migrants' perceptions of health system responsiveness and satisfaction with health workers in a South African Province. *Global Health Action*, **13**: 1850058.

White JA, Rispel LC. 2021. Policy exclusion or confusion? Perspectives on universal health coverage for migrants and refugees in South Africa. *Health Policy and Planning*.

Wickramage K, Vearey J, Zwi AB, Robinson C, Knipper M. 2018. Migration and health: a global public health research priority. BMC public health, **18**: 1-9.

WHO. 2007. Everybody's business - strengthening health systems to improve health outcomes: WHO's framework for action. Geneva, Switzerland: World Health Organization. Available at: http://www.who.int/iris/handle/10665/43918.

WHO. 2010. The World Health Report 2010: Health Systems Financing: The Path to Universal Coverage. World health organization (WHO).

WHO. 2016. Concept Note. 2nd Global Consultation on Migrant Health: Resetting the Agenda. Geneva: WHO and IOM.

WHO. 2019. Primary Health Care on the Road to Universal Health Coverage: 2019 Global Monitoring Report-Conference Edition. Geneva: World Health Organization.

WHO. n.d. Universal Health Coverage. World Health Organization. https://www.who.int/healthsystems/universal_health_coverage/en/, accessed 11 January 2021.

Winters M, Rechel B, de Jong L, Pavlova M. 2018. A systematic review on the use of healthcare services by undocumented migrants in Europe. *BMC health services research*, **18**: 1-10.

Zihindula G, Akintola O, Meyer-Weitz A. 2017a. HOW DO POLICY DOCUMENTS RELEVANT TO REFUGEES ADDRESS ISSUES RELATING TO REFUGEE'S ACCESS TO HEALTH CARE SERVICES IN SOUTH AFRICA? *Etude de la Population Africaine*, **31**.

Zihindula G, Meyer-Weitz A, Akintola O. 2017b. Lived experiences of Democratic Republic of Congo refugees facing medical xenophobia in Durban, South Africa. *Journal of Asian and African Studies*, **52**: 458-470.

Appendix 1: Literature Search Strategy

Query	Search Term
#1	"Migration" Or "Migrant"
#2	(immigration OR migrant OR immigrant OR emigration OR emigrant OR "illegal migrant" OR "irregular migrant" OR refugee* OR "asylum seeker" OR alien OR "trans-migration" OR "return migrant" OR xenophobia OR "displaced person" OR expatriate OR "internal migrant" OR "migrant worker" OR "permanent resident" OR "seasonal migrant" OR "separated children" OR "Smuggled migrant" OR "undocumented migrant" OR "circular migration" OR "climate migrant" OR "displaced person" OR "facilitated migrant" OR "facilitated migration" OR "family migrant" OR "forced migrant" OR "forced migration" OR mobility OR "labour migrant" or "return migrant" OR "political migrant" OR "social migrant" OR Tourist OR "international migra*" OR "Trafficked persons" OR international labour migrant" OR International students" OR irregular migrants)
#3	#1 OR #2
#4	"Health system responsiveness"
#5	("health system responsiveness" OR dignity OR autonomy OR "choice of provider" OR communication OR "prompt attention" OR accountability OR "health care utilisation" OR participation OR trust OR confidentiality OR communication OR "prompt attention" OR Attention OR "access to networks" OR "quality of amenities" OR "respect-of-persons" OR "access-to-social support" OR "patient orientation" OR "health system performance measurement" OR "choice of care provider" OR "Health care worker" OR Communication Or Quality Or Prompt Attention OR Health care worker attitudes Or Prompt attention)
#6	#4 OR #5
#7	"Health system"
#8	("health system" OR "Global Health" OR "Health Service" OR Hospital OR Clinic OR "School Health" OR "Adolescent Health" OR "Health Policy" OR "Health Governance" OR "Health Workforce" OR "Health Worker" OR "Health Care Worker" OR "Health Provider" OR Nurse OR "Medical Products" OR "Medical Technologies" OR "Service Delivery" OR "Health Care" OR "Health Care Delivery" OR "Health Information" OR "Health Financing" OR "Health System/Constraints" OR "Health System/Limitations" OR "Health System/Restrictions" OR "Health System/Barriers" OR "Health System/Challenges" OR "Health System/Facilitators" OR "Health System/Enablers" OR "Health System/Drivers" OR "Health System/Building Blocks" OR "Health System/Strengthen*" OR "Health System/Function*" OR "Health System/Capacity" OR "Health system performance" OR Health systems OR health systems research OR health service* OR community health service* OR health care delivery OR health services accessibility OR health care policy OR delivery of health care OR health care planning OR health care access OR health care cost OR health care quality OR public health service* OR health policy OR health care organization OR health care system * OR health insurance OR health care financ* OR health program OR public health OR "Individual patients" OR "Providers/Care team" OR Organisation OR equity OR Access OR Resillience)
#9	#7 OR #8
#10	#3 AND #6
#11	(LMIC OR Afghanistan OR Albania OR Algeria OR Angola OR Antigua and Barbuda OR Argentina OR Armenia OR Azerbaijan OR Bangladesh OR Belarus OR Belize OR Benin OR Bhutan OR Bolivia OR Bosnia and Herzegovina OR Botswana OR Brazil OR Burkina Faso OR Burundi OR Cabo Verde OR Cambodia OR Cameroon OR Central African Republic OR Chad OR China (People's Republic of) OR Colombia OR Comoros OR Democratic Republic of Congo OR Congo OR Cook Islands OR "Costa Rica" OR "Côte d'Ivoire" OR Cuba OR Djibouti OR Dominica OR "Dominican Republic" OR Ecuador OR Egypt OR "El Salvador" OR "Equatorial Guinea" OR Eritrea OR Ethiopia OR Fiji OR Gabon OR Gambia OR Georgia OR Ghana OR Grenada OR Guatemala OR Guinea OR "Guinea-Bissau" OR Guyana OR Haiti OR Honduras OR India OR Indonesia OR Iran OR Iraq OR Jamaica OR Jordan OR Kazakhstan OR Kenya OR Kiribati OR "Democratic People's Republic of Korea" OR Kosovo OR Kyrgyzstan OR "Lao People's Democratic Republic" OR Lebanon OR Lesotho OR Liberia OR Libya OR "Former Yugoslav Republic of Macedonia" OR Madagascar OR Malawi OR Malaysia OR Maldives OR Mali OR "Marshall Islands" OR Mauritania OR Mauritius OR Mexico OR Micronesia OR Moldova OR Mongolia OR Montenegro OR Montserrat OR Morocco OR Mozambique OR Myanmar OR Namibia OR Nauru OR Nepal OR Nicaragua OR Niger OR Nigeria OR Niue OR Pakistan OR Palau OR Panama OR "Papua New Guinea" OR Paraguay OR Peru OR Philippines OR Rwanda OR "Saint Helena" OR Samoa OR "São Tomé" and Príncipe OR Senegal OR Serbia OR "Sierra Leone" OR "Solomon Islands" OR Somalia OR "South Africa" OR "South Sudan" OR "Sri Lanka" OR "Saint Lucia" OR "Saint Vincent and the Grenadines" OR Sudan OR Suriname OR Swaziland OR "Syrian Arab Republic" OR Tajikistan OR Tanzania OR Thailand OR "Timor-Leste" OR Togo OR Tokelau OR Tonga OR Tunisia OR Turkey OR Turkmenistan OR Tuvalu OR Uganda OR Ukraine OR Uzbekistan OR Vanuatu OR Venezuela OR Vietnam OR Wallis and Futuna OR "West Bank" and "Gaza Strip" OR Yemen OR Zambia OR Zimbabwe)
#12	#10 AND #11
Filters	Abstract (Available); Full text (Available); published in last 10 years; Humans; English

Source; Author

Appendix 2: Data Extraction Table

#	Location	Name of Study	Author and Date	Type	Fairness in financing	Health provision	Internal migration	International migration	Health Worker attitudes	Communication	Quality	Prompt attention	Dignity	Facilitators	Barriers
1	Uganda	Mental health and psychosocial support for South Sudanese refugees in northern Uganda: a needs and resource assessment	Adaku, A. et al. (2016).	Review	Few available resources to provide care	Assessment revealed that there were extremely limited MHPSS services available in Rhino Camp	Silent	Refugees from Sudan to Uganda	Silent	Not specifically mentioned	Not Specifically mentioned	Silent	Not Mentioned	Service available to assist mental illness at the refugee camp	Resources for services, few resources available
2	Uganda	A Multi-Methods Qualitative Study of the Delivery Care Experiences of Congolese Refugees in Uganda	Nara, R. et al. (2020).	Exploratory	Silent	Significant challenges accessing delivery care in both camp and urban settings	Not specifically mentioned	The study was focusing on international migration on delivery of care	Not specifically mentioned	language barriers,	Silent	Silent	discrimination	Government willingness to incorporate migrants into health system	The availability of trained healthcare staff is limited, health facilities and medication supplies are inadequate
3	South Africa	The prevalence and contextual correlates of non-communicable diseases among interprovincial migrants and non-	Ajaero CK, Wet-Billings ND, Atama C, Agwu P, Eze EJ. 2021	Exploratory	High income associated with health seeking behaviour	Silent	The focus was on migrants in South Africa on health seeking behaviour	Not mentioned	Not mentioned	Not mentioned	Not mentioned	silent	Not mentioned	Socio economic conditions	Household incomes

		migrants in South Africa													
4	Kenya and Somalia	Preventing Importation of Poliovirus in the Horn of Africa: The Success of the Cross-Border Health Initiative in Kenya and Somalia	Arale A, Lutukai M, Mohamed S, Bologna L, Stamidis KV. 2019	Descriptive	Not mentioned	Immunisation services were provided to cross-border migrants	Not specifically mentioned	Focus was on international migrants or cross border	Not mentioned	Not mentioned	Not mentioned	Not mentioned	Not mentioned	Availability of health care services to cross border migrants	Deprivation of essential health services to international migrants
5	Malaysia	Health profiles of foreigners attending primary care clinics in Malaysia.	Ab Rahman, N. et al. (2016)	Descriptive	Not specifically mentioned	Medications were prescribed to two-thirds of the encounters while other interventions.	Not specifically mentioned	Provides detailed description of challenges faced by international migrants	Not specifically mentioned		Silent	Foreigners are given attention when they visit the private clinic	Foreigners treated with dignity	Available clinic providing services to foreigners	Silent
6	South Africa	Health-care utilization and associated factors in Gauteng province, South Africa	Abera Abaerei, A. et al. (2017)	Descriptive	Medical insurance played a role in health seeking behaviour	Residents of Gauteng south health care provision for different reasons	Mentions internal migrants from other provinces	Refugees stated as foreigners	Silent	Not specifically mentioned	Around 75% of participants reported reduced quality of public health services	Not specifically mentioned	Lower odds of seeking healthcare were associated with being an immigrant	No specifically mentioned	Medical insurance

7	Sub-Sahara Africa	Factors influencing use of family planning in women living in crisis affected areas of Sub-Saharan Africa	Ackerson, K. and R. Zielinski (2017)	Review	Affordability of health care	Family planning services provided to refugee women	Local women covered in the study utilising services	Refugees	Treated with disrespect in the health clinics	Believing that certain contraceptives cause death, infertility, and side effects	Not Specifically mentioned	Not specifically mentioned	Respectful and culturally sensitive care for all women, regardless of socio-economic status or country of origin.	Educating local health care providers and local community on family planning issues	Lack of access to family planning, women believed that health care providers were unqualified.
8	Thailand	Impact of children's migration on health and health care-seeking behaviour of elderly left behind	Adhikari, R. et al. (2011)	Exploratory	Not specifically mentioned	Health provision was available to parents of migrated children,	Silent	Out migration to other countries	Silent	Silent	Silent	Silent, associated with higher utilization of health facilities by the elderly.	Silent	Remittances	Not mentioned
9	Palestine	Antibiotics use among Palestine refugees attending UNRWA primary health care centres in Jordan	Al Baz, M. et al. (2018)	Cross Sectional study	60% purchase antibiotics directly from the pharmacy without prescription	Refugees purchasing and accessing health services in private pharmacies	Silent	Serving Refugees	90% of patients trust their doctor	Silent	Not specifically mentioned	Long waiting hours prevent them from seeking medical advice.	Patients were treated with dignity and trusted their doctors and pharmacies	Availability of pharmacies and purchasing without prescription	Long waiting ques at health facilities
10	Zambia	Impact of internal female migration on unmet need for modern contraception in Zambia	Almonte, M. T. and C. A. Lynch (2019)	Exploratory	Silent	Unmet need for contraception resulting in limited access to health care	Focus was on internal women migrants	Not specifically mentioned	Not specifically mentioned	Not specifically mentioned	Silent	Reduced attention to prompt attention to migrants needs	Not specifically mentioned	Government willingness to provided family planning services	Lack of understanding migration and migrant streams to strengthen family planning programs

11	Nigeria	Migration and child immunization in Nigeria: individual- and community-level contexts	Antai, D. (2010)	Explanatory	Not specifically mentioned	Provision immunisation services to the population	Focus was on internal migration	Silent	Silent	Not specifically mentioned	Silent	Silent	Silent	Silent	Migration
12	Colombia	Dignity and the right of internally displaced adolescents in Colombia to sexual and reproductive health	Bosmans, M. et al. (2012)	Descriptive	Not specifically mentioned	Provision of sexual and reproductive health to migrants	Focus on internal displaced people	Silent	Not specifically mentioned	Not specifically mentioned	Not specifically mentioned	Not specifically mentioned	The arts were found to play a key role in restoring internally displaced people dignity	National health policies and laws	Availability of and access to sexual and reproductive health services remains a problem
13	Zambia	Under-five mortality among displaced populations in Meheba refugee camp, Zambia, 2008-2014	Chelwa, N. M. et al. (2016).	Exploratory	Improvement of health infrastructure and facilities	Sensitization programmes targeted at ensuring accessibility to health care services	Focus was on mortality on internally displaced persons	Silent	Not specifically mentioned	Silent	Not specifically mentioned	Silent	silent	Collection of health information system	No collaboration between different entities
14	China	Internal migration and health: Re-examining the healthy migrant phenomenon in China	Chen, J. (2011).	Descriptive	Unequal distribution of resources in the health provision	Reach out to migrant and ensure equal access to health, physical and mental	The focus was on internal migrants' health status, urban to urban migrants	Not specially mentioned about international migrants	Silent	Not specifically mentioned	Silent	Silent	Not specifically mentioned	Not mentioned specifically	The health care system not supportive of migrants

15	Uganda	Equity in aid allocation and distribution: A qualitative study of key stakeholders in Northern Uganda	Chi, P. C. et al. (2019)	Exploratory	Incorporation of equity in aid distribution to refugees and local migrants	Silent	Included both local migrants	Refugees included to be affected by equity in resource allocation	Refugees	Silent	Not specifically mentioned	Not specifically mentioned	Not specifically mentioned	International aid	No equitable distribution of resources
16	Malaysia	Health system responses to the health needs of refugees and asylum-seekers in Malaysia: A qualitative study	Chuah, F. L. H. et al. (2019)	Exploratory	Challenged by budget constraints, resulting in the need to prioritize healthcare for citizens over healthcare for foreigners including refugees and asylum-seekers.	The ability of the health system to deliver e active, safe, and quality health interventions to the refugee and asylum-seeker population	internal migrants considered in the study	Refugees/international migrants included	Participants mentioned that manpower is lacking in some public healthcare facilities	Not specifically mentioned	Silent		Not specifically mentioned	Interaction between organisations in financing refugee and citizen health	Healthcare financing as a major challenge in responding to migrant health issues, leading to poor health outcomes among the population
17	South Africa	Responding to the health needs of migrant farm workers in South Africa	de Gruchy, T. (2020).	Exploratory	Not specifically mentioned	Silent	Covers internal migrants	Includes international migrants	Silent	Silent	Silent	Silent	Not specifically mentioned	NGO providing aid an assistance	Migration not included public health planning
18	South Africa	After the handover: Exploring MSF's role in the provision of health care to migrant farm	de Gruchy, T. and A. Kapilashrami (2019).	Case study	Silent	Health provision provided by NGO	Covered as migrant farm workers	Economic migrants from other countries	Silent	Not mentioned	Silent	Not mentioned	Not specifically mentioned	NGO working with provincial governments	Pull out for NGO, poor government integrations

		workers in Musina, South Africa													
19	Lesotho	Access to HIV care and treatment for migrants between Lesotho and South Africa: a mixed methods study	Aturiyele, I. et al. (2018)	Mixed methods	Cannot afford transport costs	Care and Treatment for HIV	Local migrants in Lesotho and South Arica	International migrants between south Africa and Lesotho	Not mentioned	Not mentioned	Silent	Silent	Feel discriminated as foreigner	Availability of medications and facilities	Refused health services; Afraid if not legally registered in South Africa
20	India	Building Partnership to Improve Migrants' Access to Healthcare in Mumbai	Gawde, N. C. et al. (2015)	Process evaluation	Not specifically mentioned	Not specifically mentioned	Intervention was on internal migrants to access health care	Silent	Silent	Not specifically mentioned	Not specifically mentioned	Not specifically mentioned	Silent	Willingness of community members to improve access to healthcare for migrants	Culture differences between migrants and native population
21	South Africa	Internal migration and health in South Africa: determinants of healthcare utilisation in a young adult cohort	Ginsburg, C. et al. (2021).	Cohort study	Not specifically mentioned	Migrants and non-migrants in the study population in South Africa were found to utilise health services differently,	Internal migrant utilisation of health care system	Permanent residents used as comparison	Silent	Not specifically mentioned	Not specifically mentioned	Silent	Silent	Availability of health care services for all as envisaged in the health policy	The perceived quality of public healthcare, costs associated with private healthcare,
22	Iran	Afghan refugees' experience of Iran's health service delivery	Heydari, A. et al. (2016)	Descriptive	No equity in provision of health services to migrants	Migrants receive health services in Iran Health system	Not specifically mention	The focus is on the experiences of refugees/international migrants on health service delivery	Refugees made to feel inferior by health workers	Silent	Not specifically mentioned	Refugees made to feel lonely when seeking healthcare	Health workers should be trained to appropriately take care of all patients,	Migrants positioned to receive care from the Iran Health system	Discrimination from health workers

													without prejudice.		
23	Thailand	Knowledge about pandemic influenza preparedness among vulnerable migrants in Thailand	Hickey, J. E. et al. (2016)	Cross sectional study	Not specifically mentioned	Migrant had access to public healthcare	Focus on access to public healthcare by internal migrants	Silent	Not specifically mentioned	Not specifically mentioned	Not specifically mentioned	Migrants are not provided with health care service with prompt attention	Silent	Silent	Access to health care is limited, migrants not prioritised
24	South Africa	A Qualitative study of language barriers between South African health care providers and cross-border migrants	Hunter-Adams, J. and H.-A. Rother (2017)	Exploratory	Silent	Migrants access health care services from public health institutions	Focus is on cross border migrants	Focused on o locals, international migrants	Medical procedures, including tubal ligation, which were performed without consent	Challenges of communication without a common language, rather than outright denial of care by healthcare professional.	Highlighted fears over unwanted procedures or being unable to access care	Language barrier affected ability of the services providers to receive prompt care	Dignity of migrants was not respected as they received services without consent	Availability of health care services	Language barriers when receiving medical health
25	South Africa	How do Policy documents relevant to refugees' address issues relating to refugee's access to Health care services in South Africa	Zihindula G, Akintola O, Meyer-Weitz A. 2017	Exploratory	Refugees required to pay for health care in South Africa if they do not have adequate documentation	Health services are available to documented migrants in other provinces	Not mentioned	The article focused on refugees' access to health services	Not mentioned	Refugees require interpreter services which have not been made available for refugees in South Africa	Not Mentioned	Not mentioned	Not mentioned	Availability of health services for refugees in South Africa	Health related services denied to refugees without appropriate identification documentation

26	Botswana	Innate health threat among a visibly hidden immigrant group: a formative field data analysis for HIV/AIDS prevention among Zimbabwean workers in Botswana	Kim, D. K. et al. (2013).	Exploratory	Silent	Silent	Focus was on international migrants	Portrays how the Zimbabwean workers in Botswana make sense of their surroundings and perceive information on HIV/AIDS prevention and other public health risks.	Not specifically mentioned	Highlights several communication features among the immigrants, including reliance on interpersonal communication,	Not specifically mentioned	Not specifically mentioned	Silent	Availability of HIV Messaging a programme for both migrants and non-migrants	Language barriers between migrants and local programme health providers
27	Thailand	Understanding the Problem of Access to Public Health Insurance Schemes among Cross-Border Migrants in Thailand through Systems Thinking	Kunpeuk, W. et al. (2020).	Exploratory	Some migrants are still left uninsured.	Health services are available to insured migrants	Focus was on cross border migrants/	The study focuses on cross border migrants	Resistance of some employers to hiring migrants.	No effective communication to cater for the needs of migrants	Silent	Administrative delay of the enrolment process	Nationality verification is an important mechanism to deal with the precarious citizenship status of undocumented migrants.	Access to public health for migrants	Administrative process of getting medical insurance
28	Ethiopia	Perceived quality of life among Visceral Leishmaniasis and HIV coinfected migrant male-	Alemayehu M, Wubshet M, Mesfin N, Gebayehu A. 2017	Exploratory	Financial limitation to seeking health care	Patients seeking health care for treatment of Leishmaniasis	The focus was on internal male migrants in Ethiopia Co infected with HIV and leishmaniasis	Not mentioned	Not mentioned	Not mentioned	Quality of service provision not specifically mentioned	Silent	Not mentioned	Health programmes for migrant population	Inadequate financial resources

		workers in Northwest Ethiopia: a qualitative study													
29	Thailand	Refugee camp health services utilisation by non-camp residents as an indicator of unaddressed health needs of surrounding populations.	Alexakis LC, Athanasiou M, Konstantinou A. 2019	Exploratory	Free medical health checks for both Refugees and locals	Non-camp resident patients, who sought care in the outpatient department (OPD) of the camp required at an inpatient department (IPD)	Focus was on the health needs of locals as compared to refugees in camps in Thailand	Refugees, International migration	Not mentioned	Health care providers could speak the major two languages, hence no language barriers	Quality services and drugs were provided by health care providers	All outpatients given prompt attention on arrival for medical help	All health care seekers were treated with dignity and provided the health services they sought at the health care facility	Free health care and refugee camp	Additional resources allocated to refugees compared to local populations
30	Nigeria	Migration and child immunization in Nigeria: individual- and community-level contexts	Antai D. 2010.	Exploratory	Not specifically mentioned	Migrant populations provided with immunisation services	The foci were on internal migrant populations	Not mentioned	Not mentioned	Not mentioned	Not Specifically mentioned	Not mentioned	Not mentioned	Availability of immunisation services	Constant movement for repetitive immunisation
31	Ethiopia	Access to malaria prevention and control interventions among seasonal migrant workers: A multi-region	Argaw MD, Woldegiorgis AG, Workineh HA, et al. 2021	Formative assessment	Inadequate technical and financial support limited treatment of migrants from malaria	Migrants provided prevention and treatment strategies of malaria	internal migrants considered in the study	Silent	Not specifically mentioned	Not mentioned	Quality health care provided by private healthcare and not public healthcare	Not mentioned	Silent	New policies and strategies devised to deal with migrant populations	Inadequate funding, poor quality of services in public health facilities

		formative assessment in Ethiopia													
32	Uganda	Assessment of attitudes and targeted educational needs for refugee care providers in a Ugandan hospital	Bapolisi A, Crabtree K, Jarolimova J, et al. 2018	Evaluation	Funding to provide health services to refugees	Silent	Silent	Focus was on refugees/international migrants seeking health at an educational hospital	Positive attitudes towards refugees at college hospital	Translators were required for communication between nurses and refugees	Quality health services provided to refugees by student nurses	Silent	Silent	Positive attitude from nurses to provide health services to refugees, availability of health care providers	Language barriers to provide adequate services although translator was considered
33	Uganda	Adolescent sexual behaviour in a refugee setting in Uganda	Bukuluki P, Kisaakye P, Mwenyango H, Palattiyil G. 2021	Exploratory	Not mentioned	Sexual health services offered to migrant populations	Focus was on internal migrant access to sexual health services	Not mentioned	Not mentioned	Silent	Not mentioned	Not Mentioned	Not mentioned	Availability of sexual services among migrant populations	Access to health care services among adolescent girls
34	Uganda	Utilisation of sexual and reproductive health services among street children and young adults in Kampala, Uganda: does migration matter?	Wambale MF, Bukuluki P, Moyer CA, Van den Borne BHW. 2021.	Exploratory	Silent	SRH services required my internal migrants. Low utilisation of SRH services among internal migrants	Focus was on why internal migrants did not utilise SRH services	Silent	Silent	Not specifically mentioned	Not specifically mentioned	Not specifically mentioned	Not mentioned	Availability of sexual reproductive services	Local Migration taking away the consistency of accessing SRH services

35	Africa	The right to health of non-nationals and displaced persons in the sustainable development goals era: challenges for equity in universal health care	Brolan CE, Forman L, Dagron S, et al. 2017	Exploratory	Additional financial and human resource for these international agencies to include indicators on financing. However, it is well worth the short-term investment.	National SDG indicators need to incorporate fiscal allocation of resources for emergency and non-emergency level for these specific groups	Not mentioned	The focus was on inclusion of international migrants in health system planning post SDG	Not mentioned	Not mentioned	Not mentioned	Not mentioned	Not mentioned	International indicators on health provision to vulnerable populations	Inadequate indicators to measure progress towards meeting post SDG goals in developing countries
36	South Africa	People, State and Civic Responses to Immigration,	Adjai C, Lazaridis G. 2014	Explanatory	Not mentioned	The health policies in South Africa states inclusion of migrants in health services delivery	Not mentioned	The article focused on South African policies in relation to migrant's post-independence	Not mentioned	Not mentioned	Not mentioned	Not mentioned	Migrants to provided services as stipulated in the condition and Department of health policy	Policies enabling migrants to access health services like citizens	Implementation of policies resulting in migrants not getting health services
37	Ghana	Priorities and Challenges Accessing Health Care Among Female Migrants	Lattof SR, Coast E, Leone T. 2018	Exploratory	Achieving Equity in Migrant Health Financial barriers and a lack of health insurance exclude migrant workers from utilizing health care in many settings	Incorporating culturally appropriate care into the provision of health services, could improve health service uptake and health awareness among migrants	Focus was internal women migrants' access to healthcare	Not mentioned	Not mentioned	Not mentioned	Rising migration within Ghana necessitates access to affordable, quality health services across domestic borders	Not mentioned	Without medical insurance, women lose their dignity to access health services	Government's ability to consider women health and health insurance accessible to all who need it	Public health systems also need greater awareness of migrants' financial situations and priorities when designing policies and services

						by helping migrants navigate health services									
38	South Africa	Effect of ART scale-up and female migration intensity on risk of HIV acquisition: results from a population-based cohort in KwaZulu-Natal, South Africa	Dzomba A, Tomita A, Vandormael A, Govender K, Tanser F. 2019	Exploratory	Not specifically mentioned	Female migrant populations have access to ART and services available resulting in reduced transmission of HIV post ART	The focal was on internal migrants in the province of KwaZulu natal in South Africa	Not specifically mentioned	Not mentioned	Not mentioned	Not mentioned	Not Mentioned	Not mentioned	Availability of ART services among migrant populations	Not strategies to identify internal migrants as all are categorised as ordinary citizens
39	Ghana	Risky sexual behaviour and contraceptive use in contexts of displacement: insights from a cross-sectional survey of female adolescent refugees in Ghana	Ganle JK, Amoako D, Baatiema L, Ibrahim M. 2019	Exploratory	Not mentioned	Adolescent refugees' females not utilising contraceptives but increases changes in sexual behaviour	The focus was on refugees in Ghana, internal migrants not mentioned	The focus was on understanding Sexual behaviour and access and use of contraceptives among displaced people	Not mentioned	Not mentioned	Not mentioned	Not mentioned	Not mentioned	Availability of contraceptive for use in the health system	Accessibility of the contraceptive among refugee women, policy to lure refugee to access contraceptive
40	Sub-Sahara Africa	Migrant health penalty: evidence of higher mortality	Ginsburg C, Bocquier P, Menashe-Oren A,	Exploratory	Silent	Female migrants tend not to get adequate health	The article focuses on internal migrants and limited access	Not specifically mentioned	Not mentioned	Not mentioned	Not mentioned	Not mentioned	Not mentioned	Availability of health services to disadvantaged populations	Limited resources to provide health services to internal

		risk among internal migrants in sub-Saharan Africa	Collinson MA. 2021			services as compared to male counterparts	to health services							female migrants
41	Kenya	The Impact of Out-Migration on the Nursing Workforce in Kenya	Gross JM, Rogers MF, Teplinskiy I, et al. 2011	Exploratory	Outmigration reflects strain on national resources through lost skilled workforce	Limited provision of service due to outmigration of service providers	The article focused on outmigration	The focus was on out migration of skilled workforce outside of Kenya	Not mentioned	Not mentioned	Silent	Silent	Silent	Training of health workforce	Lost resources due to outmigration to provide adequate services, Inability of the government to absorb young nurses
42	Thailand	The role of external actors in shaping migrant health insurance in Thailand	Herberholz C. 2020	Explanatory	Although external health expenditure has been of minor importance in Thailand,	Migrants who do not have any health insurance have nevertheless received care at public healthcare providers for humanitarian reasons and to prevent the spread of communicable diseases	The focus was on health service provision for migrants by external actors	Focus was both internal and international migrants	Silent	Not specifically mentioned	Not specifically mentioned	Not specifically mentioned	Not mentioned	Strong health system in Thailand	The need for strong and support of health policy as it relates to migrant populations

43	Guinea	Reproductive health for refugees by refugees in Guinea III: maternal health	Howard N, Woodward A, Souare Y, et al. 2011	Exploratory	Not mentioned	Women were provided with antenatal services at various public health faciloties	Not mentioned	The article focused on health service for refugees by refugees	Not mentioned	Not mentioned	Refugees chose to get antenatal services at private clinics compared to government clinics since service was poor	Not mentioned	Not mentioned	Availability of Antenatal services for refugees and availability of care	Perceived poor service provision
44	South Africa	Policy exclusion or confusion? Perspectives on universal health coverage for migrants and refugees in South Africa	White JA, Rispel LC. 2021	Exploratory	Refugees required to pay a fee when accessing health services	Health services are provided to migrants when they meet specific criteria as stipulate by clinics	The article covers migrants and refugeesin South Africa	The focus is mainly on international migrants' access to health in relation to NHI	Migrants, in contrast to refugees, are expected to pay in terms of the fee schedule but frontline health workers do not understand the difference, hampering access.	Language differences may also serve as an identifier of migration status. While the accent of migrants despite speaking English fluently, can exacerbate exclusionary behaviours by healthcare providers	Quality of services is hindered by stigmatisation to refugees	Migrants are often not given prompt attention as they are often stigmatised due to language differences	Migrants and refugees may perceive being treated unfairly which sets the tone for their experiences at facilities.	Availability of health services to where people do reside. civil society organizations played an important role, intervening and mediating access to care for migrants.	Barriers to access are exemplified by the over insistence on proof of identification prior to service. Several KIs noted that an identity document (ID) often determines healthcare access granted to migrants and refugees.
45	South Africa	"Don't send your sick here to be treated, our own people need it more": immigrants' access to healthcar	Alfaro-Velcamp T. 2017	Explanatory	Government issued directive for health facilities to provide health services to both documented and undocumented migrants in 2007	Health provision is offered at a cost in South Africa to migrants and refugees	Silent	The focus is on migrants and refugees accessing health at public health facilities	Xenophobic elements demonstrated by health care providers to foreign nationals which is against the refugees right to health	Refugees and migrants need to seek theory own translators if they don't seek the main South African languages. The	When health services are provided, they are often good quality hence why many migrants and refugees return for	Silent	Refugees are not treated with dignity of they do not have updated permits to show their legal status in South Africa and if they do	Availability of health services to provide health services, including tertiary services, Government willingness to provide health	Challenges in obtaining permits which lead to beneficiaries not accessing health services, Refugees required to pay for

		e in South Africa								translator fees are often very expensive	further services		not have the papers, they are often denied services	services to refugees and migrants as directed 2007	health services or deposit for health services
46	South Africa	Medical Xenophobia: Zimbabwean Access to Health Services in South Africa	Crush J, Tawodzera G. 2011	Exploratory	Silent	The government has health facilities that can accommodate migrants and refugees and services are available, but xenophobia is a big challenge to the health system.	Silent	The article focused on international migrants mainly refugees and other migrants in the public health system	Most South Africans – and most health workers – probably feel that migrants should not be entitled to anything related to health	Most Zimbabwean migrants indicated that their most common problem with South African health services was language related.	When services are provided to the migrants' quality is often compromised due to language barriers.	Silent, but language varies is the biggest problem as migrants don't a=understand how they are addressed	When they are not denied treatment altogether, migrants are pushed to the back of the line, asked for money that they should not have to pay and generally treated with disdain	Availability of health service providers and health services	Language is big challenge, government conflicting policies in relation to migrants. Migrants denied health services when they need the services. Documentation to seek services is very difficult to obtain.
47	Lesotho	Access to HIV care and treatment for migrants between Lesotho and South Africa: a mixed methods study	Faturiyele I, Karletsos D, Ntene-Sealiete K, et al. 2018.	Exploratory	Health services provided far from where migrants reside resulting in high transport costs to return for medication	ART was provided to migrants where possible and health care providers were willing to provide health services to documented migrants. Migrants indicating	Silent	The focus was on international migrants accessing ARV in south Africa,	Health service providers speaking in local languages resulted in bad attitude towards migrants from the migrant's perspective	Most services were offered in local languages which became a huge barrier to migrants accessing ARC services.	Quality of medication and service provide was sighted as poor compared to migrant countries. Quality of ARV described as poor as compared to Lesotho	Not specifically mentioned	The lack of permits to show residence status results in migrants not being treated with dignity as some get reported to local policy and detained	Availability of health service or ARV at local clinics.	Legal and administrative issues, language barriers in communicating in the native language of the host country, and failing to afford transport costs to return to the home country, have also

						not sure where ARV are obtained in South Africa									been identified in a review article
48	South Africa	Cross border mobility of nurse educators : Case studies from Botswana and South Africa	Thupayagale-Tshwenea gae G, Nkosi ZZ, Moleki M. 2014	Exploratory	Not mentioned	Migrants not permitted to work in Botswana or South Africa due to bilateral agreement of the two countries	Not mentioned	The article focused on service provider migration in South Africa and Botswana	Not mentioned	Not mentioned	Not mentioned as focus was on service providers	Not mentioned	Not mentioned	Qualifications of the service providers	Migrants not allowed to practice service provision in foreign countries due to bilateral arrangements between South Africa and Botswana
49	South Africa	Towards a migration-aware health system in South Africa: a strategic opportunity to address health inequity	Vearey J, Modisenyane M, Hunter-Adams J. 2017.	Review	Refugees have access to free public health care while other non-migrants usually pay a foreign fee for health services excluding emergency health service	Challenges for both internal and international migrants to access treatment, care, and support for chronic conditions	The focus was on internal migrants in South Africa as the number far outweigh international migration	International migrants included based on policy measures and have an impact on health system	Discrimination but health providers based on country or place of origin	Language spoken has a huge impact on the provision of health services	Silent	Not mentioned	Discrimination by service providers because of migrants not being able to speak local language but speaking in English	Availability of health services to both local migrants and international migrants	These access challenges are shaped by documentation (or lack thereof); languages spoken; and discrimination by healthcare providers
50	South Africa	Social exclusion and the perspectives of health care providers on migrants in Gauteng public	White JA, Blaauw D, Rispel LC. 2020	Exploratory	Silent	Health care providers indicated some sensitivity to the health needs of migrants	The article was mainly on service providers and social exclusion of migrants on health provision	International migrants excluded from services and often discriminated by health services providers	International migrants are discriminated by health providers based on language	Silent,	same quality of care to migrants as to South Africans	Not	Evidence of discrimination exist in the health system and in other countries as well.	Availability of service provides at both local and national hospitals ad also willingness of health service providers to	More discriminatory attitudes and practices

		health facilities, South Africa												help migrants	
51	South Africa	Migrants' perceptions of health system responsiveness and satisfaction with health workers in a South African Province	White JA, Levin J, Rispel LC. 2020	Exploratory	Not specifically mentioned	Most participants (80.6%) reported that they received their prescribed medication	International migration	The focus was on health system responsiveness to international migrants in the province of Gauteng in South Africa	Although most patients (94.3%) indicated that the health care worker listened to them and that they received information about their condition (89.4%),	Most patients (94.3%) reported that the consulting nurse or doctor listened to them; and 89.4% reported that they received information about their condition	Most participants reported that they received their medication (80.6%); and 85.0% of patients indicated that they would refer a sick friend member to the facility	55.6% reported that the amount of time for their visit was 'just right', but almost one-third (30.0%) reported that they waited too long.	92.3% of patients indicated that they were treated politely	Availability of health services and service providers providing health services and good quality of health services	Health care providers refuse to speak in English, making it difficult for migrant patients to understand them.
52	South Africa	Lived experiences of Democratic Republic of Congo refugees facing medical xenophobia in Durban, South Africa.	Zihindula G, Meyer-Weitz A, Akintola O. 2017.	Exploratory	Silent	Many refugees talked about how they repeatedly visited the health care facility without receiving proper health service until they gave up.	Silent	The article reviewed those international migrants without documentation were denied health services in public health facilities	Participants in this study testified having experienced instances of being denied health care services care services.	Many of the respondents identified communication as a barrier to access and utilize health care services in Durban.	Findings in this study revealed that communication and documentation are the two main encounters that affect any other services	Many refugees are denied treatment simply based on their refugee status, and this regardless of the policies and guidelines in place.	In a previous study examining barriers to health care for refugees, it was found that some health providers were unwilling to accept refugees as patients,	Quality health services in South Africa, availability of health services	The findings revealed that refugees face medical xenophobia during their encounter with health care workers with language barriers and documentation as the first stumbling block in efforts to seek health care services.

53	Botswana	Home is home—Botswana's return migrant health workers	Motlhatlhedi et. Al 2020	Exploratory	Silent	Botswana has good health care facilities with health care providers. Health care provided in public health facilities	The focus was on returning migrants /health service providers	The returning health providers were from other countries	The focus of the articles was on health service providers	Silent	Botswana provides quality services to its citizens and the service providers trained to provide high level quality health care	Silent	Not specifically mentioned	Returning migrants more experience and professional targets achieved	Inadequate training incentive from the government leading to health service provider to migrate
54	Kenya	Utilization of healthcare services among Chinese migrants in Kenya:	Qiu et. al 2019	Exploratory	Lack of heath care insurance of Chinese migrants in Kenya	Health care provided by both public and private providers	Not mentioned	The focus was on Chinese migrants' health care utilisation in Kenya	Not mentioned	Language barrier was one of the items that affected healthcare utilisation by Chinese	Distrust of local medicines by Chinese migrants	Not mentioned	Silent	Access to Chinese medicine and health and availability of health care	Lack of trust in local health care system and language barriers in accessing health care.
55	Kenya	A qualitative exploration of access to urban migrant healthcare in Nairobi, Kenya	Arnold C, Theede J, Gagnon A. 2014	Exploratory	Affordability of healthcare was identified as an issue for both migrants and local people.	Government officials, service providers, migrants and Kenyans also reported limited availability of drugs within public facilities.	The focus was both on migrants and non-migrants	Silent	Perceived discrimination, documentation requirements and language barriers.	Communication, relating to language barriers was a big challenge.	Silent	Migrants and non-migrants standing in ques and at times returning homes without medication and some patients.	Migrants not treated with dignity, and some denied health services stating that free health was only for non-migrants and migrants need to pay for health services	Availability of healthcare services and government service provision	Access to healthcare is just one of many factors surrounding the health of populations that interact to produce unfavourable conditions and subsequent vulnerabilities to ill health

56	Ghana	Living conditions and social determinants of healthcare inequities affecting female migrants in Ghana	Owusu L, Yeboah T. 2018.	Review	Given their relatively low earnings from work, many of these females find it extremely difficult to afford daily meals, let alone pay for all these cost of health services	Migrant women have access to health services, but the cost of the health services deters provision of these services	Focus was on migrant women in Ghana	Not mentioned	Many are welcomed to public health facilities with insult from health providers simply because of their migrant identity,	Not mentioned	Not mentioned	The challenge of waiting for long hours to receive treatment has been a major characteristic of the Ghanaian health system for a long time.	A finding they attribute to the fact that when the females visit the public health facilities, health providers regard them as dirty and wearing tattered clothes and thus cannot attend to them	A National Health Insurance Authority (NHIA) was established by law ''to secure the implementation of a national health insurance policy that ensures access to basic healthcare services to all residents''	Reluctance on the part of Government to provide and establish health clinics in the slum areas where the female migrants reside affects healthcare access
57	South Africa	Learning from HIV: Exploring migration and health in South Africa	Vearey J. 2012.	Exploratory	In South Africa, different categories of international migrants are granted differential rights to access free public healthcare services.	Migrants have access to ART treatment, depending on the classification of the migrants, refugees are treated as citizens and those with work permits must pay a foreign fee to access healthcare.	Silent	The article focusses on international migrants	Silent	Silent	There is quality healthcare at both private health facility and public but accessing this is a challenge to migrants	Not mentioned	Different type of migrants not afforded free healthcare at government health institutions	Not mentioned specifically	Inability of many lower-skilled international labour migrants to obtain the necessary documentation to be in South Africa legally due to (1) a restrictive immigration policy and (2) poor implementation of this policy

58	China	Utilization of Health Services and Health-Related Quality of Life Research of Rural-to-Urban Migrants in China	Liang Y, Guo M. 2015	Exploratory	The costs and time consumed by medical treatment mainly affect their choice on whether they will seek medical attention and/or hospitals when they are sick	Migrants are provided health services but often choose private healthcare	Focus was on internal migrants to urban areas	Not mentioned	Not mentioned	Not mentioned	Silent	Not mentioned	Not mentioned	Availability of services despite being expensive to migrants	The government should provide social support and expand the source of medical information so that the floating population can have more choices
59	Africa	A Systematic Review of Sexual and Reproductive Health Knowledge, Experiences and Access to Services among Refugee, Migrant and Displaced Girls and Young Women in Africa	Ivanova, O. Rai, M. & Kemigisha, E. (2018)	Exploratory	Costs and distance to the health care services were highlighted in the study as a main challenge in accessing healthcare	Sexual reproductive health services made available to patients of 18 year and above. Refugee women and girls complained about lack of facilities	Not mentioned	The article focuses on adolescent girls and young women in a refugee camp	Girls of less than 18 years were not provided with information about sexual health services among Somali migrants	language barriers and discrimination	Quality of services was compromised due to different factors. Lack of acceptable and affordable contraceptives, stock outs, long waiting times	Long ques when refugees were seeking healthcare	Discrimination in service provision from the service providers	Availability of facilities to provide services and health education among refugees	The access and availability of SRH services are often limited due to distances, costs, and stigma.

60	Malaysia	Breaking down the barriers: Understanding migrant workers' access to healthcare in Malaysia	Loganathan, T. Rui, D. Ng, C. W. & Pocock, N. S. (2019)	Exploratory	Major themes include affordability and financial constraints among refugees and migrants	Health services only made to documented refugees and documented migrants	Not mentioned	The focus was on refugees and international migrants	Discrimination and xenophobia experienced by the patients, physical inaccessibility, and employer-related barriers	Language barriers experienced by migrants and refugees	Language barriers may affect the quality of care received by migrant workers, by inadvertently resulting in medical errors, while preventing them from giving truly informed consent	Affected by language barriers and discrimination	Patient discrimination experienced at service provision	Malaysia is widely credited to have achieved universal health coverage for citizens	The perceived close working relationship between the ministries of health and immigration effectively excludes undocumented migrants from access to public healthcare facilities
61	Ethiopia	Health Status and Health Care Needs of Drought-Related Migrants in the Horn of Africa-A Qualitative Investigation	Lindvall, K. Kinsman, J. Abraha, A. Dalmar, A. Abdullahi, M. F. Godefay, H. ... & Schumann, B. (2020)	Exploratory	Trained healthcare providers start their own private facilities as a profit for business which may refugees, and internal migrants cannot afford	The treatment of mental health and GBV is insufficient, and IDPs have inadequate access to essential health services in refugee camps.	Articled covered internal migrants	The focus was on refugees and internally displaced persons/Internal migrants	This shortage of healthcare workers occurs in part because many health staff start their own private facilities as for-profit businesses,	Not mentioned	One general challenge is the level of education among the health workers who are responsible for much of the primary health care system in the country.	Health screening for diseases is done across the region to cater for Kenya, Somalia, Ethiopia, and Eritrea	Not mentioned	IDPs living in established camps have full and free access to basic public health services, including vaccinations and maternal and child health care.	Malnutrition and a lack of vaccination of displaced people are well-known challenges. In particular, the needs of IDPs are not well understood.
62	Ghana	Health insurance and care-seeking behaviours of female migrants in Accra, Ghana	Lattof, S. R. (2018).	Analytical	Financial barriers overwhelmingly limit kayayei migrants from seeking health care, preventing them from registering with the National	Health services are available to the migrants, however, the cost of accessing the health services is too high	The article focuses on internal migrants in Ghana	Not mentioned	Prior experiences with the formal health system, including stigma and discrimination, may lead participants to seek	Migrants used local community pharmacies and drugstores that were easily accessible on foot and where vendors might speak	Providers perceived kayayei migrants as being unable to afford services, which migrants perceived as affecting their	Prompt attention only given to these with valid health insurance cards, and which can speak the local language	Those without health insurance are turned always even if they need medica care	Health insurance available to all who need it, anywhere in the country and availability of service providers	An inability to offer patients the services of a translator in multilingual countries like Ghana can effectively exclude from care those

									informal care outside of health facilities	northern dialects.	quality of care				internal migrants who do not speak the dominant language(s) at their destination
63	South Africa	Healthcare service delivery to refugee children from the Democratic Republic of Congo living in Durban, South Africa: a caregivers' perspective	Meyer-Weitz, A. Asante, K. O. & Lukobeka, B. J. (2018	Exploratory	Over 65.0% used public transport as means of travel to the various healthcare (which are generally free of charge) centres, considered by most as expensive when not having enough money for food	Health is provided free of charge at public health institutions for refugees in some provinces	Silent	The focus was on refugees' children living in Durban	Negative attitudes and discriminatory behaviours of healthcare workers, particularly in public healthcare facilities.	Key reasons to delay in seeking health care are attributed to this delay were their inability to communicate in English and IsiZulu (62.3%) and the negative attitudes of healthcare workers towards refugees (30.4%).	Caregivers were dissatisfied with the quality of healthcare rendered to their children, particularly when referring to public healthcare services	Most caregivers (95%) were not satisfied with healthcare services delivery to their children due to the long waiting hours	Nurses did not spend enough time with their children (100%; n = 89), and that their views about the healthcare needs of their children were not respected (100%; n= 89)	Availability of health services at both public and private institutions	High cost of travel to seek medical care, Language barriers, health workers attitudes
64	South Africa	Exploring perceptions of HIV risk and health service access among Zimbabwean migrant women in Johannesburg: A gap in health policy in	Munyewende, P. Rispel, L. C. Harris, B. & Chersich, M. (2011)	Exploratory	Participants, however, cited several barriers to accessing services in South Africa, including financial constraints	Overall, participants indicated that it was easier to access health-care services in South Africa compared to Zimbabwe, where drugs were often	Silent	The article focused on international migrants	Negative, unfriendly attitudes from facility staff, especially at hospitals. Health service providers don't like foreigners.	Silent	Not specifically mentioned	Not specifically mentioned	Migrants without any valid documents were denied services	Availability of health services at public health facilities for the documented migrants	Financial constraints to access the health services and discrimination from service providers

		South Africa?				unavailable								
65	Africa	A Scoping Review of the Health of Conflict-Induced Internally Displaced Women in Africa	Amodu, O. C. Richter, M. S. & Salami, B. O. (2020)	Exploratory	Not mentioned	Women's limited access to sexual and reproductive health rights was influenced by several factors, including low-income status, cultural views.	Covered	Covered	Unfairness in facility services, in that they were being provided with contraceptives but not with reproductive and maternal health services.	Not mentioned	Not mentioned	Not mentioned	Not mentioned	Availability of contraceptive services in the countries	Facilities were ill equipped to do all the mandated methods of family planning because of a lack of funding for such programming
66	India	Determinants of internal migrant health and the healthy migrant effect in South India: a mixed methods study	Dodd W, Humphries S, Patel K, et al. 2017.	Exploratory	Not mentioned	Migrants have access to health, only the time factor accessing the health services	The focus was on internal migrants	Not mentioned	Not mentioned	Not mentioned	Not mentioned	Not mentioned	Not mentioned	Availability of health services to migrants	Government not prioritising migrant health
67	Togo	The impacts of migration on maternal and child health services utilisation in Sub-	Atake, E. H. (2018)	Exploratory	Health insurance provides an important degree of financial access to maternal and child health	Mothers in migrant families benefit from more financial protection regarding prenatal,	Internal migration	Not mentioned	Bot Mentioned	Not mentioned	Not mentioned	Not mentioned	Not mentioned	Health insurance provides an important degree of financial access to maternal and child	Government to fully recognising positive impact on the health systems

		Saharan Africa: evidence from Togo			care services	delivery and postnatal care								health care services.	
68	South Sudan	Understanding health systems to improve community and facility level new-born care among displaced populations in South Sudan: a mixed methods case study	Sami S, Amsalu R, Dimiti A, et al. 2018	Descriptive	Donors failing to prioritize new-born-specific activities in humanitarian funding proposals	Heath provision services available to new-born migrant children. Availability of essential medical commodities for new-born care improved following the study intervention	Internal migrants/Displaced people	Silent	Shortage of skilled health workers to continuously provide comprehensive package of interventions	Not mentioned	Quality of service was provided at public health institutions, but funding was a huge challenge.	Challenges to delivering quality new-born care were primarily attributed to lack of 24/7 skilled care,	Not mentioned	Availability of new-born services at some health facilities	Participants confirmed that severe shortage of skilled care at birth was the main bottleneck for implementing quality new-born care.
70	Jordan	Health needs and priorities of Syrian refugees in camps and urban settings in Jordan: perspectives of refugees and health care providers	Al-Rousan T, Schwabkey Z, Jirmanus L, Nelson BD. 2018	Explanatory	Cost is the primary barrier to health care access; High health care costs drive refugees to seek care in pharmacies instead of clinics	Refugees in both camps noted that essential medicines for chronic diseases were unavailable in camp clinics and complained of long waiting times.	Not mentioned	Article focused on refugees seeking health services	Discrimination and inhumane attitudes among health care providers and suggested that Syrian physicians should be employed in the camps	Not mentioned	Refugees questioned the quality of care received if a physician did not prescribe an injection.	Long waiting times due to limited staffing in camp clinics	Discrimination and inhumane attitude of health care providers	Providing free/subsidized care to Syrian refugees	Jordanian health care providers caring for Syrian refugees reported feeling overworked

71	Malaysia and Thailand	Moving towards culturally competent health systems for migrants? Applying systems thinking in a qualitative study in Malaysia and Thailand	Pocock NS, Chan Z, Loganathan T, et al. 2020	Descriptive	Not mentioned	Current health services are not migrant friendly, which deters use	Silent	The article focused on international migrants	Doctors didn't have empathy or patient communication skills to fully explain conditions to migrant workers prior to administering medication or treatment	Language barriers were a source of frustration for both migrants and health workers,	Quality service compromised by language barriers	Several participants noted that language barriers delayed healthcare seeking among migrants, who might present at clinics with late-stage serious conditions	Migrant Health Workers who act as interpreters in Thai health facilities, perceived that interpreting services were very important to overcome language barriers	Availability of interpreters for refugees	Current health services are not migrant friendly
72	Cameroon	Impact of Refugees on Local Health Systems: A Difference-in-Differences Analysis in Cameroon	Tatah L, Delbiso TD, Rodriguez-Llanes JM, Gil Cuesta J, Guha-Sapir D. 2016	Exploratory	not mentioned	Health service s made available to both migrants and non-migrants	Silent	Focus was on international migrants	Not specifically mentioned	Not mentioned	Not specifically mentioned	Not mentioned	Not mentioned	Availability of research and health services to both migrants and non-migrants	Not mentioned

Appendix 3: Critical Appraissal Skills Programme (CASP) Appraisal tool

CASP Checklist: 10 questions to help you make sense of a **Systematic Review**

How to use this appraisal tool: Three broad issues need to be considered when appraising a systematic review study:

- Are the results of the study valid? (Section A)
- What are the results? (Section B)
- Will the results help locally? (Section C)

The 10 questions on the following pages are designed to help you think about these issues systematically. The first two questions are screening questions and can be answered quickly. If the answer to both is "yes", it is worth proceeding with the remaining questions. There is some degree of overlap between the questions, you are asked to record a "yes", "no" or "can't tell" to most of the questions. Several italicised prompts are given after each question. These are designed to remind you why the question is important. Record your reasons for your answers in the spaces provided.

About: These checklists were designed to be used as educational pedagogic tools, as part of a workshop setting, therefore we do not suggest a scoring system. The core CASP checklists (randomised controlled trial & systematic review) were based on JAMA 'Users' guides to the medical literature 1994 (adapted from Guyatt GH, Sackett DL, and Cook DJ), and piloted with health care practitioners.
For each new checklist, a group of experts were assembled to develop and pilot the checklist and the workshop format with which it would be used. Over the years overall adjustments have been made to the format, but a recent survey of checklist users reiterated that the basic format continues to be useful and appropriate.
Referencing: we recommend using the Harvard style citation, i.e.: *Critical Appraisal Skills Programme (2018). CASP (insert name of checklist i.e., Systematic Review) Checklist. [online] Available at: URL. Accessed: Date Accessed.*

Paper for appraisal and reference…….

Section A: Are the results of the review valid?

1. Did the review address a clearly focused question?

Yes ☐
Can't Tell ☐
No ☐

HINT: An issue can be 'focused' In terms of
- the population studied
- the intervention given
- the outcome considered

Comments:

2. Did the authors look for the right type of papers?

Yes ☐
Can't Tell ☐
No ☐

HINT: 'The best sort of studies' would
- address the review's question
- have an appropriate study design (usually RCTs for papers evaluating interventions)

Comments:

Is it worth continuing?

3. Do you think all the important, relevant studies were included?

Yes ☐
Can't Tell ☐

HINT: Look for
- which bibliographic databases were used
- follow up from reference lists
- personal contact with experts

	No	• unpublished as well as published studies • non-English language studies

Comments:

4. Did the review's authors do enough to assess quality of the included studies?	Yes Can't Tell No	HINT: The authors need to consider the rigour of the studies they have identified. Lack of rigour may affect the studies' results ("All that glisters is not gold" Merchant of Venice – Act II Scene 7)

Comments:

5. If the results of the review have been combined, was it reasonable to do so?	Yes Can't Tell No	HINT: Consider whether • results were similar from study to study • results of all the included studies are clearly displayed • results of different studies are similar • reasons for any variations in results are discussed

Comments:

Section B: What are the results?

6. What are the overall results of the review?	HINT: Consider • If you are clear about the review's 'bottom line' results • what these are (numerically if appropriate) • how were the results expressed (NNT, odds ratio etc.)

Comments:

7. How precise are the results?	HINT: Look at the confidence intervals, if given

Comments:

Section C: Will the results help locally?

8. Can the results be applied to the local population?

Yes	
Can't Tell	
No	

HINT: Consider whether
- the patients covered by the review could be sufficiently different to your population to cause concern
- your local setting is likely to differ much from that of the review

Comments:

9. Were all important outcomes considered?

Yes	
Can't Tell	
No	

HINT: Consider whether
- there is other information you would like to have seen

Comments:

10. Are the benefits worth the harms and costs?

Yes	
Can't Tell	
No	

HINT: Consider
- even if this is not addressed by the review, what do **you** think?

Comments:

Appendix 4: Health Policy and planning Journal Guidelines

Instructions for Authors

Health Policy and Planning improves the design, implementation, and evaluation of health policies in low- and middle-income countries through providing a forum for publishing high quality research and original ideas, for an audience of policy and public health researchers and practitioners. *HPP* is published 10 times a year.

HPP has a double-blinded peer-review policy. All types of papers are peer reviewed and all article abstracts from each issue are translated into French, Spanish and Chinese.

Before you submit, please make sure you have followed all the relevant instructions. A checklist for authors *is available on the HPP webpage.*

Please note that submission of a paper implies that it reports unpublished work and that it is not under consideration for publication elsewhere. Plagiarism, including duplicate publication of the author's own work, in whole or in part without proper citation is not tolerated by *HPP*. Submitted manuscripts are screened with iThenticate software, as part of the Cross-check initiative to detect and prevent plagiarism.

- Guidance
  - i. Improving chances of publication
  - ii. Manuscript format and style for all articles
  - iii. Prior publication guidelines
- Types of papers
- Submission process

Guidance

Improving chances of publication

As well as the high overall quality required for publication in an international journal, authors should take into consideration:

- Addressing *HPP*'s readership: national and international policy makers, practitioners, academics, and general readers with a particular interest in health policy issues and debates.
- Manuscripts that fail to set out the international debates to which the paper contributes, and to draw out policy lessons and conclusions, are more likely to be rejected, returned to the authors for redrafting prior to being reviewed, or undergo a slower acceptance process.
- Economists should note that papers accepted for publication in HPP will consider the broad policy implications of an economic analysis rather than focusing primarily on the methodological or theoretical aspects of the study.
- Public health specialists writing about a specific health problem or service should discuss the relevance of the analysis for the broader health system. Those submitting health policy analyses should draw on relevant bodies of theory in their analysis, or justify why they have not, rather than only presenting a narrative based on empirical data.
- Primarily focus on one or more low- or middle-income countries

The editors cannot enter correspondence about papers considered unsuitable for publication and their decision is final. Neither the editors nor the publishers accept responsibility for the views of authors expressed in their contributions. The editors reserve the right to make amendments to the papers submitted although, whenever possible, they will seek the authors' consent to any significant changes made. The manuscript will not be returned to authors following submission unless specifically requested.

Should you require any assistance in submitting your article or have any queries, please do not hesitate to contact the editorial office at hpp.editorialoffice@oup.com.

Manuscript format and style for all articles

Only articles in English are considered for publication.

Prepare your manuscript, including tables, using a word processing program and save it as a .doc, .rtf or .ps file. Use a minimum font size of 11, double-spaced and paginated throughout including references and tables, with margins of at least 2.5 cm. The text should be left justified and not hyphenated. The title page should contain:

- *Title - please keep as concise as possible and ensure it reflects the subject matter*
- *Corresponding author's name, address, telephone/fax numbers and e-mail address*
- *Each author's affiliation and qualifications*
- *Keywords and an abbreviated running title*
- *2-4 Key Messages, detailing concisely the main points made in the paper*
- *Acknowledgements*
- *A word count of the full article*

In the acknowledgements, all sources of funding for research must be explicitly stated, including grant numbers if appropriate. Other financial and material support, specifying the nature of the support, should be acknowledged as well.

Figures should be designed using a well-known software package for standard personal computers. If a figure has been published earlier, acknowledge the original source, and submit written permission from the copyright holder to reproduce the material. Colour figures are permitted but authors will be required to pay the cost of reproduction. Please be aware that the requirements for online submission and for reproduction in the journal are different: (i) for online submission and peer review, please upload your figures separately as low-resolution images (.jpg, .tif, .gif or. eps); (ii) for reproduction in the journal, you will be required after acceptance to supply high-resolution .tif files. Minimum resolutions are 300 d.p.i. for colour or tone images, and 600 d.p.i. for line drawings. We advise that you create your high-resolution images first as these can be easily converted into low-resolution images for online submission.

Figures will not be relettered by the publisher. The journal reserves the right to reduce the size of illustrative material. Any photomicrographs, electron micrographs or radiographs must be of high quality. Wherever possible, photographs should fit within the print area or within a column width. Photomicrographs should provide details of staining technique and a scale bar. Patients shown in photographs should have their identity concealed or should have given their written consent to publication. When creating figures, please make sure any embedded text is large enough to read. Many figures contain miniscule characters such as numbers on a chart or graph. If these characters are not easily readable, they will most likely be illegible in the final version.

Certain image formats such as .jpg and .gif do not have high resolutions, so you may elect to save your figures and insert them as .tif instead.

For useful information on preparing your figures for publication, go to http://cpc.cadmus.com/da.

All measures should be reported in SI units, followed (where necessary) by the traditional units in parentheses. There are two exceptions: blood pressure should be expressed in mmHg and haemoglobin in g/dl. For general guidance on the International System of Units, and some useful conversion factors, see 'The SI for the Health Professions' (WHO 1977).

Manuscript file must include text body. Title Page, Figures and Tables should be uploaded separately.

preparing your manuscript

Page 1: *Title Page – as above.*

Page 2: *Abstract*. The abstract should be prepared in one paragraph, no headings are required. It should describe the purpose, materials and methods, results, and conclusion in a single paragraph no longer than 300 words without line feeds.

Page 3: *Introduction.* The Introduction should state the purpose of the investigation and give a short review of the pertinent literature, and be followed by:

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<u>Pre-submission language editing</u>

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