

# BMJ Open Access to medicine among asylum seekers, refugees and undocumented migrants across the migratory cycle: a scoping review protocol

Saleh Aljadeeah <sup>1</sup>, Karina Kielmann,<sup>1</sup> Joris Michielsen,<sup>1</sup> Anil Babu Payedimarri,<sup>2</sup> Raffaella Ravinetto<sup>1</sup>

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<sup>1</sup>Department of Public Health, Institute of Tropical Medicine, Antwerpen, Belgium

<sup>2</sup>Department of Translational Medicine, Università del Piemonte Orientale, Novara, Italy

**Correspondence to**  
Dr Saleh Aljadeeah;  
[saljadeeah@itg.be](mailto:saljadeeah@itg.be)

## ABSTRACT

**Introduction** Migration creates new health vulnerabilities and exacerbates pre-existing medical conditions. Migrants often face legal, system-related, administrative, language and financial barriers to healthcare, but little is known about factors that specifically influence migrants' access to medicines and vaccines. This scoping review aims to map existing evidence on access to essential medicines and vaccines among asylum seekers, refugees and undocumented migrants who aim to reach Europe. We will consolidate existing information and analyse the barriers that limit access at the different stages of the migratory phases, as well as policies and practices undertaken to address them.

**Methods** We follow the Arksey and O'Malley framework for knowledge synthesis of research, as updated by Levac *et al.* For reporting the results of our search and to synthesise evidence, we will adhere to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses extended reporting guideline for scoping reviews. This scoping review consists of five iterative stages. Bibliographic databases (PubMed, CINAHL, Cochrane Database of Systematic Reviews and Scopus) and grey literature databases (Open Grey, Grey Literature Report and Google Scholar, Web of Science Conference Proceedings, non-governmental organisations and United Nations agency websites) will be searched for relevant studies.

**Dissemination and ethics** This review will be disseminated through a peer-reviewed article in a scientific open-access journal and conference presentations. Furthermore, findings will be shared at workshops of research and operational stakeholders for facilitating translation into research and operational practices. Since it consists of reviewing and collecting data from publicly available materials, this scoping review does not require ethics approval.

## INTRODUCTION

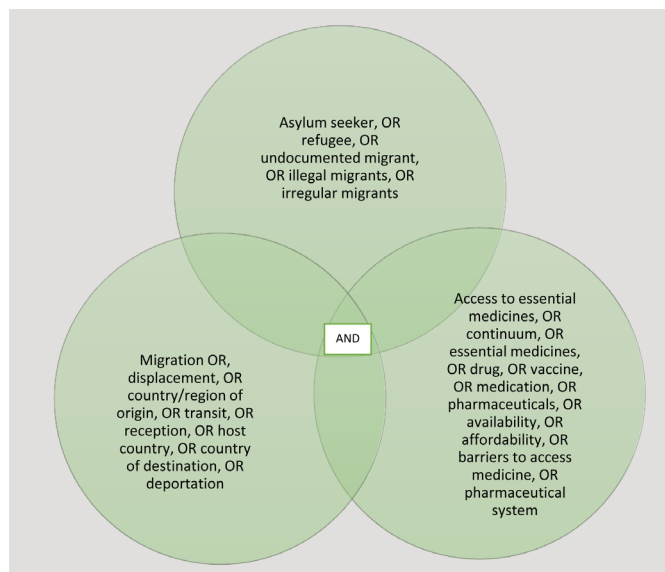
War, human rights violations, poverty, climate change and other disasters and emergencies forced 89.3 million people to flee their homes worldwide by the end of 2021. The Russian military invasion of Ukraine in late February 2022 has triggered the fastest and one of the largest forced displacement waves since World

## STRENGTHS AND LIMITATIONS OF THIS STUDY

- ⇒ This scoping review is the first to systematically explore the determinants, patterns and barriers to accessing medicine among migrants along the migration cycle.
- ⇒ We use the Preferred Reporting Items for Systematic Reviews and Meta-Analyses Extension for Scoping Reviews tool to ensure a systematic approach to searching, screening and reporting both academic peer-reviewed as well as grey literature.
- ⇒ This iterative scoping review study has been registered with Open Science Framework to enhance its transparency.
- ⇒ A limitation is that only articles in English will be reviewed.

War II. Other emergencies, across Africa, the Middle East and other regions, pushed the number of forcibly displaced people to a dramatic milestone of 100 million. Low and middle-income countries host 83% of the world's refugee population.<sup>1</sup> Here, we use the term 'migrants' to refer to asylum seekers, refugees and undocumented migrants. An asylum seeker is 'an individual who is seeking international protection and whose claim has not yet been finally decided on by the country in which the claim is submitted'.<sup>1</sup> A refugee, according to the 1951 Geneva Refugee Convention, is 'someone who is unable or unwilling to return to their country of origin owing to a well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group, or political opinion'.<sup>2</sup> Undocumented migrants are 'persons who do not fulfil the requirements established by the country of destination to enter, stay or exercise an economic activity'.<sup>3</sup>

Migration can create new health vulnerabilities and exacerbate pre-existing medical conditions.<sup>4</sup> Including migrants in national



**Figure 1** Illustration diagram of the literature search strategy.

health systems is a priority of the United Nations High Commissioner for Refugees (UNHCR)<sup>5</sup> and aligns with the Global Compact on Refugees and the 2030 United Nations Agenda for Sustainable Development Goals.<sup>6</sup> However, migrants are disadvantaged in accessing healthcare in comparison to non-migrants in many countries, and this may include access to medicines and vaccines.<sup>7,8</sup> Their access to healthcare is linked to legal status in many host countries.<sup>6</sup> For example, legal restrictions limit asylum seekers' access to emergency medical care in many European countries of transit or destination, such as Germany and the Netherlands.<sup>9</sup> Additionally, migrants may face system-related or administrative barriers, language barriers and high financial costs, all of which can affect their access to healthcare.<sup>10–12</sup> Furthermore, lack of access to any healthcare services along the migration itinerary, and the experience of

suffering duress, discrimination, violence and torture have harmful consequences for physical and mental health.<sup>13</sup>

Medicines and vaccines are essential healthcare interventions for disease prevention, treatment and management,<sup>14</sup> hence, access to essential medicines and vaccines is a critical element of health systems and a strong indicator of the performance of a health system.<sup>15,16</sup> Migrants often face barriers to access to medicines.<sup>12</sup> Barriers to accessing medicines are of particular relevance as they affect patient safety and limit adherence to treatment regimens.<sup>11,16,17</sup> For instance, shortages and disruptions of essential medicines pose a challenge for treating diseases requiring long-term continuous access to medicines among migrants in many countries of transit or destination.<sup>13</sup> Migrants may also face interruptions or delays in initiating necessary healthcare, including due to lack of access to medicine<sup>13</sup>: when in transit, it is especially difficult to obtain medicines for acute conditions and to ensure continuity of treatment for chronic diseases. On arrival in the destination country, general or migrant-specific legal barriers may prevent access to healthcare.<sup>13</sup>

While academic work has investigated in recent years migrants and refugees' health status and healthcare in Europe,<sup>18–20</sup> there is a scarcity of research studies that specifically address the issue of access to medicines and vaccines among migrants, in countries of origin, transit or deportation. Available studies are focused on specific nationalities of migrants in countries of destination, or on specific groups, such as undocumented migrants or migrants facing deportation, or on predefined therapeutic areas of interest.<sup>13</sup> Moreover, there is limited information on what happens in the countries of origin, transit or deportation, and the wealth of information available from grey literature, United Nations (UN) agency reports and non-governmental organisation (NGO) reports has been insufficiently exploited to inform policymakers.

**Table 1** Eligibility criteria

Domain	Criteria	
	Inclusion criteria	Exclusion criteria
Time restriction	Literature (including grey literature) published between 1 January 2000 and 31 September 2022.	Literature published before 1 January 2000.
Language restriction	Literature available in English.	Literature published in other languages.
Population	Asylum seeker, refugees, undocumented migrants.	Regular migrants, international students, migrants in general without any reference to the legal status of this migrant population that can determine whether this population includes asylum seekers, refugees, or undocumented migrants, or not.
Intervention	Access to essential medicines and vaccines; barriers to access to essential medicines and vaccines.	Access to healthcare in general, without any reference to access to medicines.
Setting	Country of origin, transit, destination (European countries), deportation settings.	Non-EU countries of destination.
Study type	Qualitative, quantitative, mixed methods studies, reviews and meta-analysis, grey literature, UN agency reports, NGO reports.	None.

EU, European Union; NGO, non-governmental organisation; UN, United Nations.

**Table 2** Data extraction framework

Main category	Subcategory	Description
Bibliographic (descriptive)		
1. Author		Last name, first name, name of the organisation (for grey literature).
2. Year		Year the study was published.
3. Title		
4. Country/ies or region		
5. Objectives		Stated objectives of the study.
6. Study method classification	a. Qualitative b. Quantitative c. Mixed methods d. Review e. Operational report f. Not stated	
7. Design		Describe methodology and methods in detail.
8. Number of subjects		Extract total number of subjects.
9. Description of subjects		Age, sex, known nationality, legal status.
10. Migratory phase	a. Country or region of origin b. Transit c. Country of destination d. Deportation	
Thematic (analytical)		
11. Key determinants of access to medicines		
12. Barriers to access medicines		Barriers to access medicines.
13. Interventions to improve access to medicines		Interventions to improve access to medicines.
14. Other findings		Findings by subcategories
		Observed knowledge gaps.
15. Notes		

### Review objective

This scoping review aims to map studies, reports and other relevant sources from the grey literature that report on access to essential medicines and vaccines among migrants who aim to reach Europe and on the barriers that limited their access at different stages of the migratory phases.

### METHODS AND ANALYSIS

This scoping review will follow the Arksey and O'Malley methodological framework for knowledge synthesis of research,<sup>21</sup> which was updated by Levac *et al.*<sup>22</sup> The results of the search strategy will be synthesised and reported through the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) extended reporting guideline for scoping reviews.<sup>23</sup> This scoping review consists of five iterative stages:

- ▶ Stage 1. Clarification of objectives and identifying the research questions (RQ).
- ▶ Stage 2. Identifying relevant published and grey literature.
- ▶ Stage 3. Selection of relevant published and grey literature.
- ▶ Stage 4. Extracting and charting the data.
- ▶ Stage 5. Collating, summarising and reporting the results.

### Stage 1. Clarification of objectives and identifying the RQs

This scoping review aims to map and summarise the findings of published and grey literature that reported on access to essential medicines and vaccines among migrants, on the barriers that limit their access at different stages of the migratory phases.

The overarching RQ that guides this study is: what are the key determinants of access to essential medicines and vaccines for migrants along the migration cycle?

The specific questions that we want to answer in our scoping review are:

- ▶ RQ1. What are the patterns of access to essential medicines and vaccines for migrants?  
Are there differences across asylum seekers, refugees and undocumented migrants?  
Are there differences between acute and chronic conditions? Or between preventive and curative interventions? Or across different kinds of diseases?
- ▶ RQ2. Which barriers limit migrants' access to essential medicines and vaccines at different stages of the migratory cycle (country of origin, transit, country of destination and deportation)?  
How do these barriers contribute to limiting the continuum of access to medicines among migrants? Or to limiting access to (including life-saving) treatment for acute conditions? Or to limiting access

**Table 3** Anticipated timeline

Scoping review stage	Month					
	1	2	3	4	5	6
Stage 1. Clarification of objectives and identifying the research questions	x					
Stage 2. Identifying relevant studies	x	x				
Stage 3. Selection of relevant studies		x	x			
Stage 4. Extracting and charting the data			x	x		
Stage 5. Collating, summarising and reporting the results				x	x	x

to preventive care (including but not limited to vaccination; eg, vaccines included in the expanded programmes of immunisation, and COVID-19 and monkeypox vaccination)?

Are there any contexts which are particularly under-represented in academic and grey literature?

## Stage 2. Identifying relevant studies

### Information sources and search strategy

#### Databases

The following bibliographic databases will be searched from 1 January 2000 to 31 September 2022: PubMed, CINAHL, Cochrane Database of Systematic Reviews and Scopus. Grey literature databases (Open Grey, Grey Literature Report and Google Scholar, Web of Science Conference Proceedings, NGOs and UN agency websites; eg, websites of *Medicins Sans Frontiers (MSF)*, WHO, *Medicins du Monde (MDM)*, The International Committee of the Red Cross (ICRC), UNHCR, UNICEF will also be searched. Our search will be from 1 January 2000 to 31 September 2022 to cover the forced migration trends of the last two decades.

The search strategy was constructed using the PCC elements: Population, Concept and Context.<sup>24</sup> Considering the RQs listed above, we will use 'P' for Population (asylum seekers, refugees, undocumented migrants, illegal migrants OR irregular migrants), 'C' for Concept (access to medicines, barriers to access to medicines) and 'C' for Context (country or region of origin, transit, destination and deportation).

We will consult the Medical Subject Headings catalogue to identify cataloguing concepts for our research terms. Then we will use Boolean operators 'AND' and 'OR' as needed to guide the search. The following descriptors, keywords and their combinations will be used to construct the search: asylum seekers, refugees, undocumented migrants, illegal migrants, irregular migrants, access, access to essential medicine, continuum, essential medicine, drug, vaccine, medication, pharmaceuticals, availability, affordability, medicine, barriers, access (to) medicines, pharmaceutical system, migration, displacement, country of origin, region of origin, transit, reception, host country, country of destination, deportation. [Figure 1](#) illustrates how the search terms will be combined. Online supplemental file 1 includes the full search strategies for all databases. Search results will

be documented, and the references will be exported to separate folders using a reference management software, where results of searches will be consolidated and where study duplicates will be identified and removed. In addition, we will use snowballing to search the reference lists and the citations to the studies that were identified as eligible for inclusion as a starting point to find additional relevant studies.

## Stage 3. Selection of relevant studies and reports

Study selection will include two phases. The first phase entails screening of titles and abstracts of retrieved studies/reports/other relevant documents using inclusion and exclusion criteria ([table 1](#)). Any study containing at least one exclusion criterion will be excluded during this phase. For example, a title indicating the study was conducted among regular migrants from a high-income country will be excluded. During the second phase, full texts of all papers that would have passed the initial screening in the first phase will be retrieved and independently screened by the two reviewers to determine whether they meet the inclusion criteria or not. Study selection will be done by two reviewers (SA and ABP). A third reviewer (RR) will check 10% of the retrieved studies and reports to ensure consistency of screening. Any disagreement between the reviewers, for example, concerning whether a study met the inclusion criteria, will be resolved through discussion with a third investigator until full agreement is reached. A PRISMA flow diagram will be used to illustrate the progress of the selection process.<sup>23</sup>

## Stage 4. Extracting and charting the data

Drawing on the RQs and using an iterative process, a data extraction form will be iteratively developed. The matrix will include both bibliometric details of the papers as well as findings addressing the RQs using an inclusive approach to avoid omitting any findings of potential value to this scoping review. This form will be progressively refined and reviewed by the research team to determine which variables to be extracted from studies that will be included based on eligibility criteria ([table 2](#)).

The initial version of the data extraction form contained descriptive information about the following categories: (a) bibliometric (descriptive) information: author names, the year(s) when the study was conducted, title; the country(s) or region where the study was conducted; study objectives; method classification: qualitative, quantitative, mixed methods, review, operational report; study design; study population: age, sex, known nationality, legal status, number of subjects; migratory phase: transit, country of destination, deportation; (b) thematic (analytical) outcomes about access to medicines: barriers to access medicines; interventions to improve access to medicines; main findings about access to medicines; and additional notes.

The data extraction form will be pilot tested by two reviewers on five randomly selected eligible studies.

## Stage 5. Collating, summarising and reporting the results

The data extracted in stage 4 of this scoping review will be collated, summarised and reported in a manner that aligns with the questions addressed in this scoping review. We will generate descriptive statistics from extracted bibliometric data, which will be presented using tables and graphs. Thematic analysis will be presented in a narrative format. We will discuss the meaning of the findings and implications for future research and practice, and we will report the gaps in the academic and grey literature that should be addressed in future research. When reporting our scoping review and synthesising evidence, we will follow the PRISMA Extension for Scoping Reviews guidelines.<sup>23</sup> Our anticipated 6-month timeline for completing this scoping review is presented in [table 3](#).

## Patient and public involvement

Levac *et al* suggest that the consultation stage may provide relevant insights beyond the review findings.<sup>22</sup> Furthermore, ethics guidelines concur in that the research communities should be involved as equal partners and stakeholders in research.<sup>25</sup> To address the requirement of meaningful community engagement, representatives of the migrants' community will be actively engaged at the final stages of the review to support interpretation of the findings.

## Dissemination and ethics

An article reporting the results of the scoping review will be submitted for publication to a scientific open-access journal. Furthermore, our results will be shared at relevant conferences, and at workshops of research and operational stakeholders, in order to facilitate translation into research and operational practices. Since it consists of reviewing and collecting data from publicly available materials, this scoping review does not require ethics approval.

**Twitter** Saleh Aljadeeah @SalehAljadeeah

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## ORCID iD

Saleh Aljadeeah <http://orcid.org/0000-0003-4035-4121>

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