DOI: 10.1111/tmi.13651

SYSTEMATIC REVIEW

What factors affect patients' ability to access healthcare? An overview of systematic reviews

Bryony Dawkins[1] | **Charlotte Renwick**[2] | **Tim Ensor**[3] | **Bethany Shinkins**[1] | **David Jayne**[4] | **David Meads**[1]

[1]Academic Unit of Health Economics, Leeds Institute of Health Sciences, University of Leeds, Leeds, UK

[2]Leeds Institute of Health Sciences, University of Leeds, Leeds, UK

[3]Nuffield Centre for International Health and Development, Leeds Institute of Health Sciences, University of Leeds, Leeds, UK

[4]Leeds Institute of Medical Research, University of Leeds, Leeds, UK

Correspondence
Bryony Dawkins, Academic Unit of Health Economics, Leeds Institute of Health Sciences, Worsley Building, Clarendon Way, Leeds LS2 9NL, UK.
Email b.dawkins1@leeds.ac.uk

Funding information
National Institute for Health Research (NIHR), Grant/Award Number: 16/137/44

Abstract

OBJECTIVES: This overview aims to synthesise global evidence on factors affecting healthcare access, and variations across low- and middle-income countries (LMICs) vs. high-income countries (HICs); to develop understanding of where barriers to healthcare access lie, and in what context, to inform tailored policies aimed at improving access to healthcare for all who need it.

METHODS: An overview of systematic reviews guided by a published protocol was conducted. Medline, Embase, Global Health and Cochrane Systematic Reviews databases were searched for published articles. Additional searches were conducted on the Gates Foundation, WHO and World Bank websites. Study characteristics and findings (barriers and facilitators to healthcare access) were documented and summarised. The methodological quality of included studies was assessed using an adapted version of the AMSTAR 2 tool.

RESULTS: Fifty-eight articles were included, 23 presenting findings from LMICs and 35 presenting findings from HICs. While many barriers to healthcare access occur in HICs as well as LMICs, the way they are experienced is quite different. In HICs, there is a much greater emphasis on patient experience; as compared to the physical absence of care in LMICs.

CONCLUSIONS: As countries move towards universal healthcare access, evaluation methods that account for health system and wider cultural factors that impact capacity to provide care, healthcare finance systems and the socio-cultural environment of the setting are required. Consequently, methods employed in HICs may not be appropriate in LMICs due to the stark differences in these areas.

KEYWORDS
healthcare access, healthcare equity, international health, overview of systematic reviews, systematic review, three delays framework

INTRODUCTION

Achieving access to healthcare for all is an internationally recognised global goal, reinforced by the Universal Healthcare Movement and Sustainable Development Goals (SDGs) [1]. Yet, inequalities in health persist both within and between countries, with poorer, more marginalised groups often having the poorest health, compounded by also having the least entitlement to healthcare [2–4].

Sustainable Development Goals: Good Health and Wellbeing, Reduced Inequalities.

Inadequate access to healthcare is often synonymised with low uptake of services, frequently assumed to be due to financial barriers on the demand side. Consequently, following some success, demand-side financing policies are used widely whenever low uptake is an issue [5–9]. However, uptake does not provide a full picture of factors influencing access, required to guide effective policy. As such, success of demand-side financing policies can depend on the reason for low uptake; for example, they may not be successful if low uptake is mainly due to socio-cultural factors such as stigma, as financial incentives may have little impact [5,8]. Understanding where barriers lie, and in what context, can help tailor policies aimed at improving access to healthcare.

While a considerable body of evidence on healthcare access already exists, it tends to focus on a particular patient group and/or healthcare setting in a specific geographical region. However, the Universal Healthcare Movement and SDGs are not condition-specific goals, and a clear global picture is needed to inform coherent macro-level policies to achieve them. This review addresses that gap using an overview of systematic reviews methodology owing to the size of the body of primary evidence and number of related systematic reviews already in existence [10,11]. It aims to identify what factors act as facilitators or barriers to healthcare access; develop understanding of the most important factors in different contexts and examine variation in these factors in high-income countries (HICs) vs. low- and middle-income countries (LMICs).

METHODS

This review was registered with the International Prospective Register of Systematic Reviews (PROSPERO), registration number CRD42019144775. Methods are described in full in the published protocol [12].

Deviations from protocol: eligibility criteria

Several articles ($n = 16$) presented evidence from a range of countries with different income classifications and other characteristics, and data pertaining to the different groups could not be identified. Therefore, we took the decision to exclude these articles. This is an additional exclusion criterion to those presented in the protocol but was necessary to facilitate meaningful synthesis of the evidence. Articles excluded for this reason were not systematically different in scope to the articles included. Updated eligibility criteria and a table of articles excluded based on this additional criterion and their characteristics are available in Appendices S1 and S2 respectively.

Quality assessment

Methodological quality was assessed for each included study using an adapted version of the AMSTAR 2 tool [13]. The process of adapting the tool and the final appraisal questionnaire are detailed in Appendix S3.

RESULTS

Study selection

Fifty-eight systematic reviews were included in this overview (Figure 1). Agreement between reviewers at each stage was good (>85%). Discrepancies were resolved easily through discussion.

Characteristics of included studies

For characteristics of included studies, see Appendix S4. Twenty-three articles present findings from LMICs and 35 present findings from HICs. The number of studies across countries is illustrated in Figure 2. Evidence is presented from 30 HICs and 70 LMICs (where specified). Most studies synthesised results narratively with only five presenting meta-analysis. In terms of clinical area, evidence from HICs was more diverse compared with LMICs where a high volume of evidence was related to maternal and neonatal care.

Factors affecting healthcare access

Factors affecting healthcare access are categorised by the three delays model below (with additional detail in Appendix S5) to identify where in the patient pathway barriers and facilitators to accessing care occur. This comprises: (1) a delay in the decision to seek care, (2) a delay in reaching an adequate facility and (3) a delay in receiving care once at the facility [14].

Delay 1

Factors affecting the decision to seek care are presented in Figure 3. Fear is a cross-cutting theme in Delay 1 and drives many factors outlined below, for example, fear of discrimination, financial hardship or poor treatment.

Demographic factors
An important barrier in all settings, gender (usually female) was the most common demographic barrier in LMICs; often associated with socio-cultural perceptions of women, expectations about gender roles and minimal female empowerment [15–17]. For example, in some cultures, males are given preference over females, women face restricted movement outside the household and often have limited access to resources (including money) needed to access care [18–20]. Furthermore, gender intersects with other barriers and facilitators, for example, females in poor/traditional households are more disadvantaged in terms of access. This is

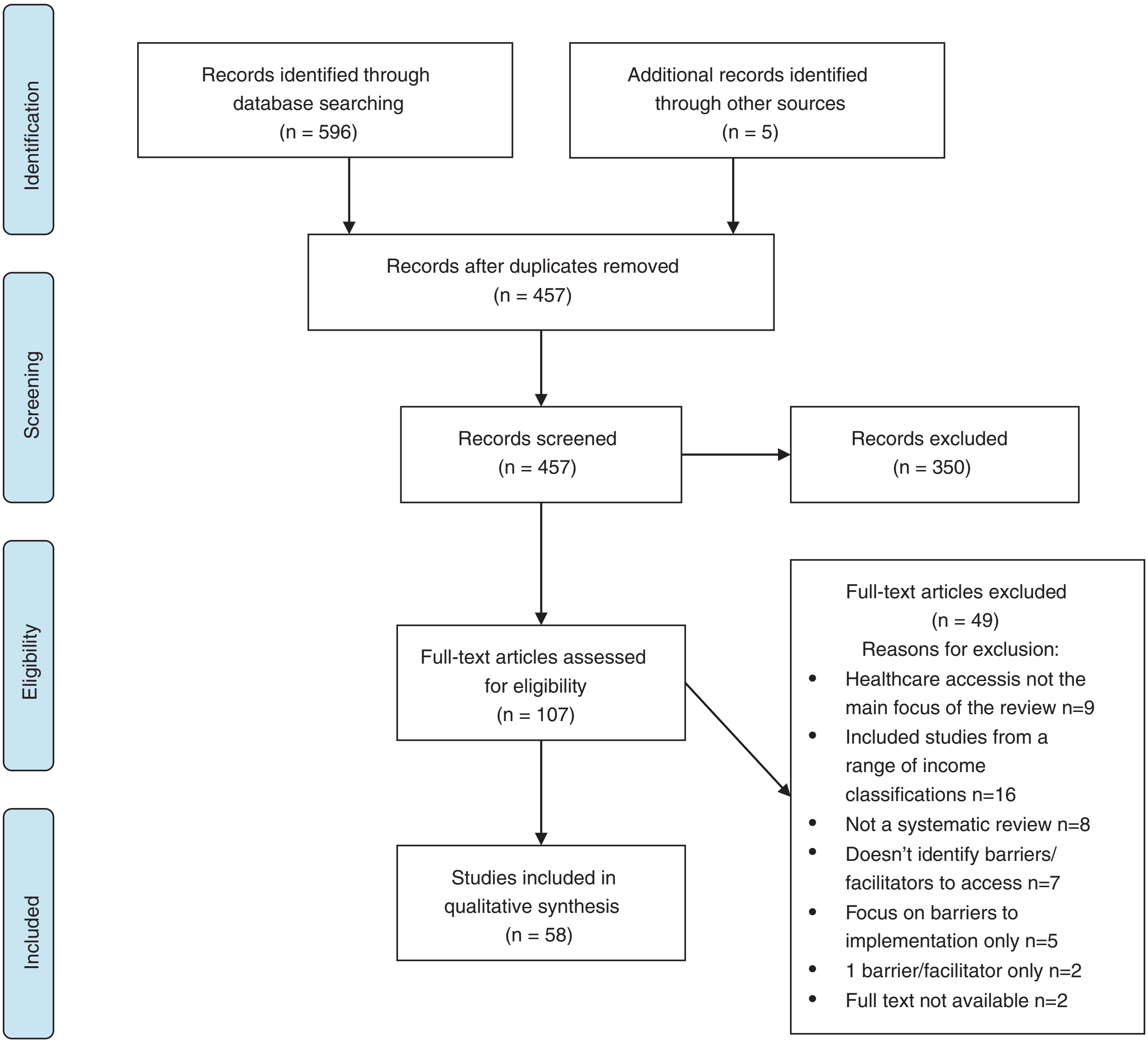

FIGURE 1 PRISMA diagram

particularly the case in patriarchal societies, where 'women's expected submission to male partners and to their role in society as child bearers' causes women to be disadvantaged, the extent of which may be underestimated since this is the status quo [15].

Lack of education limits healthcare access in all settings and correlates with lack of knowledge and perceived need. Ethnicity is found to affect healthcare access in all settings but is identified less frequently in LMICs. Evidence on the impact of age is heterogeneous, indicating its impact may be specific to certain conditions and affected by other factors.

Socio-cultural factors

Shame and stigma were more prominent for certain conditions and groups depending on socio-cultural norms. For example, in some cultures, elderly women felt shame in having to ask for help to get healthcare [18]. Shame was also expressed in relation to conditions deemed embarrassing [17], or resulted from social stigma around certain conditions [15,17,21]. Lack of family/social support was also found to limit healthcare access. Conversely, the presence of such support was specifically identified as a facilitator.

Lack of decision-making power limited healthcare access in all settings but to a greater extent for women in LMICs highlighting the intersection of socio-cultural norms with gender inequalities [17,20]. In HICs, lack of decision-making power for women was mainly reported in relation to certain religions or migrant populations originating from more patriarchal countries [22]. Alternatively, it was associated with healthcare for children/young adults where decisions about their care were made by parents or carers [23,24].

Preference for traditional medicine was an important barrier to accessing effective healthcare in LMICs but was only reported in HICs for migrant populations [22,25]. This reflects cultural differences and the acceptance of medical pluralism in LMICs. Here, patients often visit a traditional

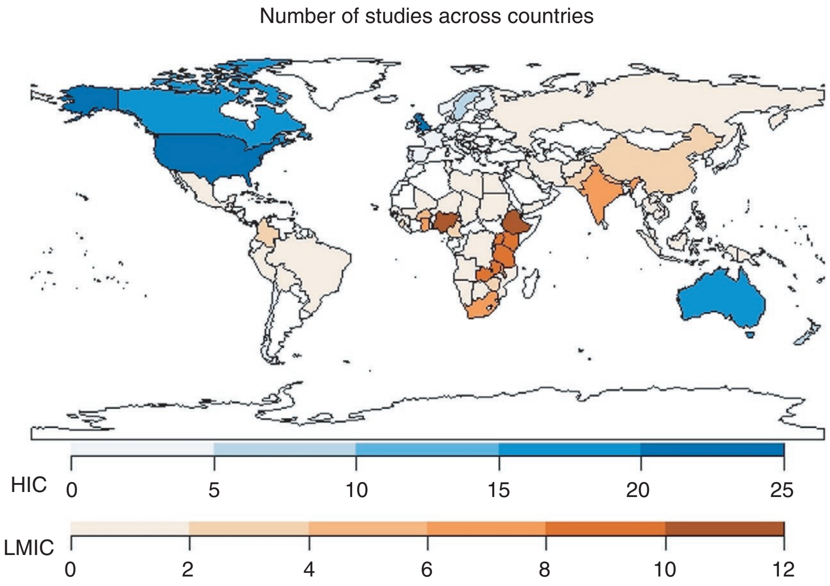

FIGURE 2 Number of studies across countries

healer first, particularly if health problems are perceived as spiritual rather than physical [16]. Many people will seek care from a biomedical provider ‘only when they noticed a declined physical health condition and that other forms of care have become ineffective’ [21]. In contrast, preference for self-management/alternative treatments was more frequently reported in HICs indicating standard practices are not always considered acceptable.

Language/communication barriers and fear of deportation/incarceration were frequently reported in HICs but not in LMICs, reflecting the high number of HIC studies focused on migrant populations or marginalised subgroups rather than the general population [26–29].

Patient factors

Lack of information about conditions and treatments and low perceived need reduced care seeking in all settings, as did lack of time or having other commitments. However, this was more frequently reported for women in LMICs who have caring responsibilities or ‘were busy with housework’ [17]. In HICs, reasons were often related to work or other social commitments. Modesty-related barriers, common in all settings, were also gendered, with women avoiding care seeking for fear of exposing themselves during examination. This was particularly associated with male doctors and fear of lack of privacy at the facility [17,24,30–32].

Lack of organisation, inconvenience and forgetfulness limited care seeking in HICs but not LMICs, reflecting that in HICs it is taken for granted that healthcare will be available. This cannot be assumed so easily in LMICs. In HICs, there are cases of patients not considering healthcare access a priority, but this mainly applies to homeless people who have other competing social issues [29,33–35]. Severity of disease along with physical and mental co-morbidities are reported to limit healthcare access in HICs, but less so in LMICs. Problems navigating the healthcare system limit healthcare access for migrants and other marginalised groups in HICs. These groups may be less familiar with the healthcare system and need additional support to obtain care required.

Treatment/service factors

Perception of services is affected by past experiences, where negative past experiences are barriers to care seeking [20,36,37] and positive experiences are facilitators [16,28,38]. Lack of treatment acceptability and perceived effectiveness limit care seeking in LMICs. This can manifest because practices of modern medicine conflict with cultural preferences and norms. For example, traditional birthing preferences may not be observed in facility deliveries, limiting acceptability [16,39]. Alternatively, patients may have experienced poor-quality care due to under-resourcing of healthcare personnel and equipment. This links with barriers around perceived quality of care and lack of confidence around services.

In HICs, lack of trust in providers often limits care seeking. In the USA, this mainly relates to mistrust of pharmaceutical companies and, sometimes, healthcare providers [24]. This reflects limited protection for patients against high prices for medications or demand-inducing practices of providers. In other HICs, this barrier is mainly reported for migrant populations who fear disclosure of their settlement status to other authorities [28]. Interestingly, despite lack of trust in providers in LMICs being well documented in grey literature, it is rarely reported in this review. This reflects limited academic research on this topic in LMICs [40,41].

In HICs, healthcare provider recommendations facilitate healthcare access, but this is not reported in LMICs. This is likely due to greater focus on preventative medicine, for example, screening, in HICs and the role of general practitioners in encouraging uptake of these initiatives.

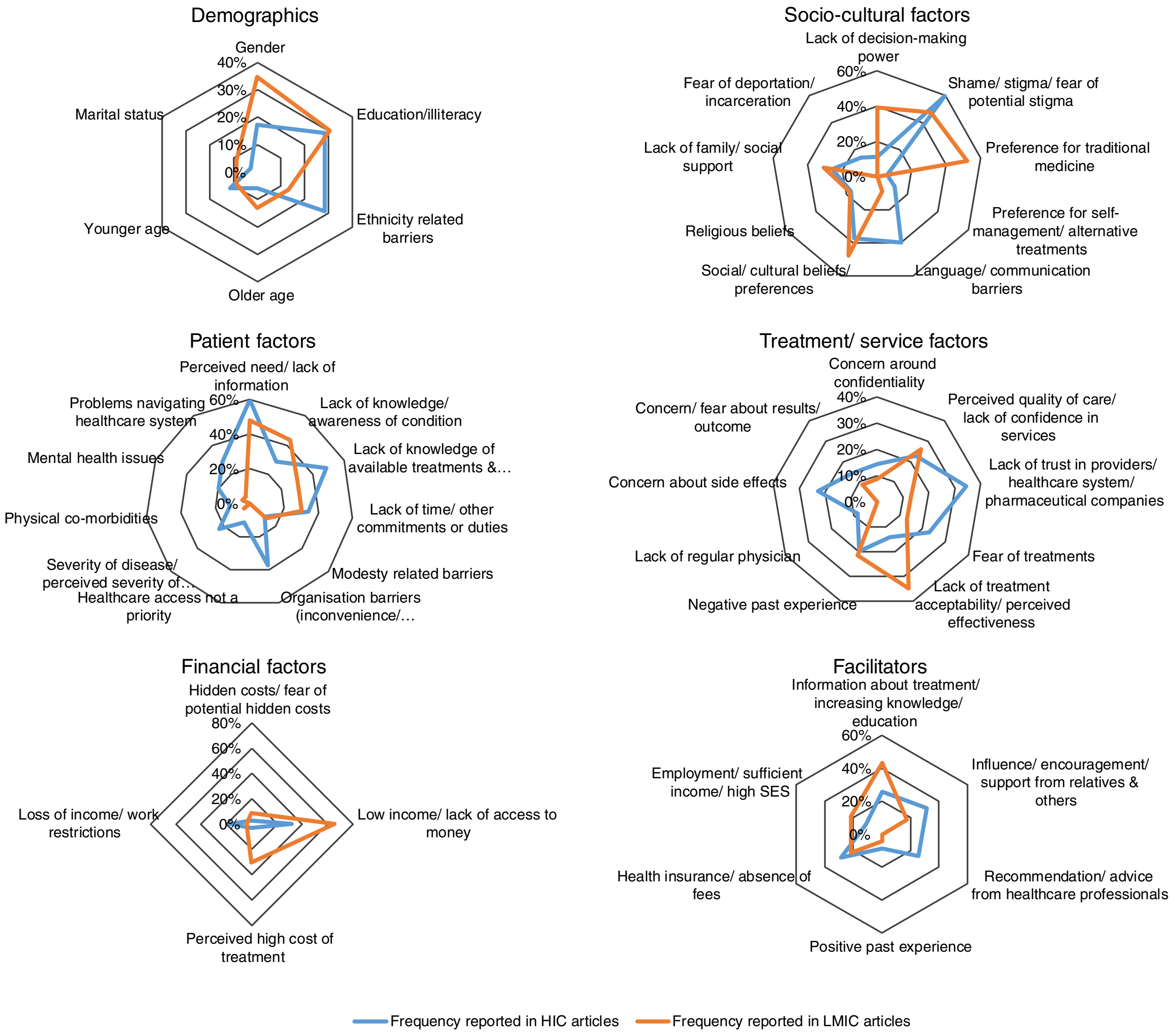

FIGURE 3 Delay 1 barriers and facilitators to healthcare access

Financial factors

In LMICs, low income or lack of access to money was the most common barrier to care seeking, with direct costs described as 'prohibitively high' [16,20]. Here, patients often pay for healthcare out of their own pocket, meaning many families face hardship if healthcare is required. Bohren et al. explain, as there are few money lenders and 'exorbitant interest rates' are charged by those that exist, 'family members [are] often sent around the community to collect money from their neighbours' to cover healthcare costs [16]. Even when healthcare is free or even incentivised (e.g. maternity care), indirect costs still deter use of services [32,42]. Hidden informal healthcare costs are also common, further discouraging care seeking [17]. In HICs, financial factors were mainly reported in the USA where health insurance can be costly and healthcare must be paid for by patients without it [34,43]. In other HICs, financial barriers were associated with gaps in insurance coverage or indirect costs of obtaining healthcare [34]. They are also reported for hard-to-reach groups such as migrants and the homeless who may not have the same entitlement to healthcare as the general population [29,35].

Delay 2

Factors affecting reaching an adequate facility are presented in Figure 4.

Geographic/environmental factors

Geographic and environmental barriers to healthcare access are more extreme in LMICs. For example, distance to services limits healthcare access in all settings but in HICs usually relates to inconvenience of travel, or sometimes travel costs, to access specialist services; whereas in LMICs, the general scarcity of healthcare providers means patients often have to travel long distances to

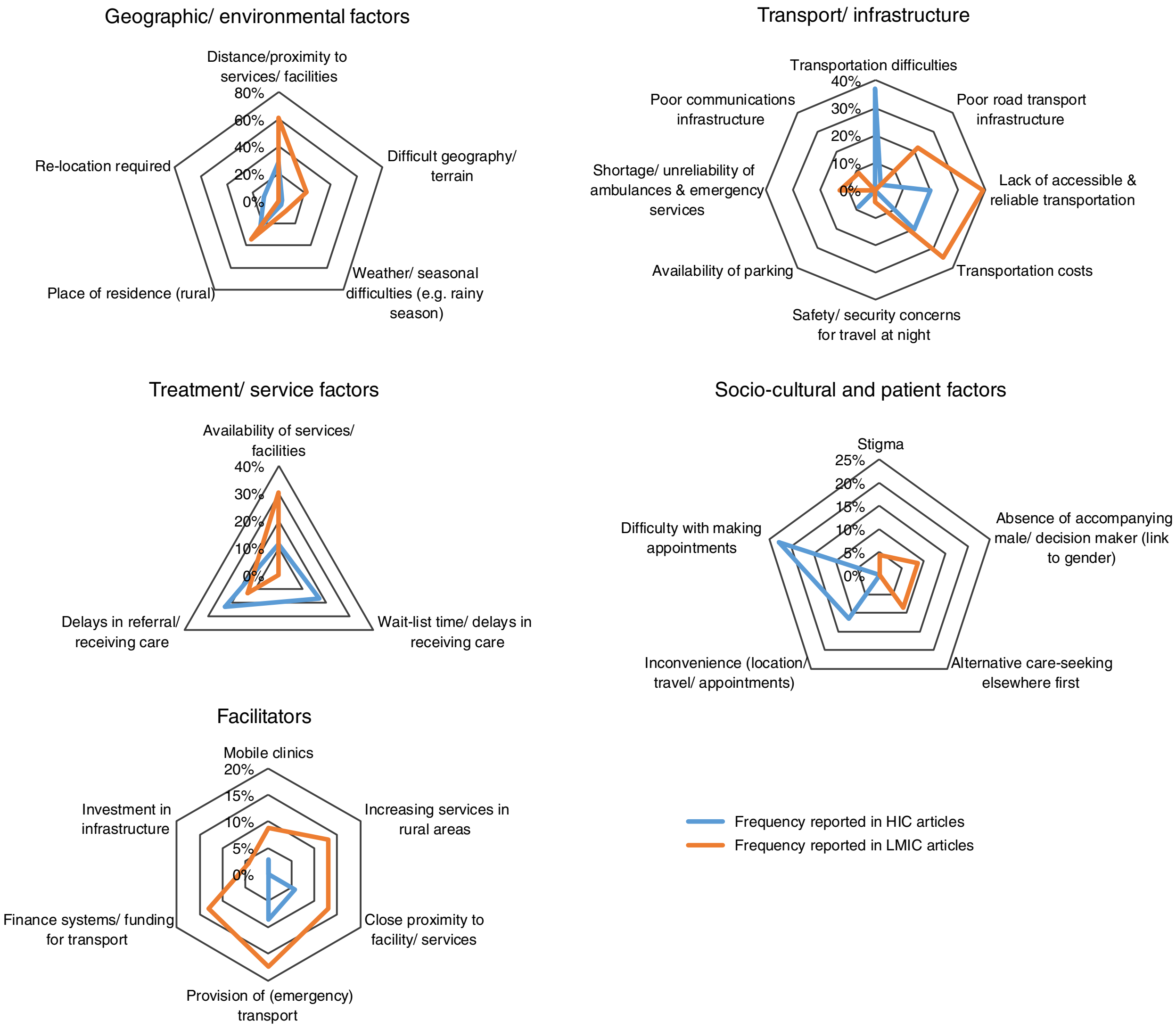

FIGURE 4 Delay 2 barriers and facilitators to healthcare access

access the nearest facility, with these journeys made more difficult by rough terrain and poor road infrastructure [18,19,39,42,44].

Transport/infrastructure

Similarly, challenges with travel can be more acute in LMICs. In HICs, 'transportation difficulties' or 'perceived difficulty in travelling to see the doctor' [45] are described, indicating although transport was available, there may be issues around timing, paying or parking [46,47]. In LMICs, ambulances are often scarce and a complete absence of obtainable transport is common with reports that 'transportation is costly or sometimes non-existent' [16,19]. In these cases, patients have no choice but to seek more arduous transport such as rickshaw, bicycle or walking. Combined with difficulties travelling due to their condition and often 'dilapidated infrastructure', travelling long distances to reach care becomes almost impossible [16,20,48]. Furthermore, even when transport is available, patients can be excluded from using it due to their condition [19].

Treatment/service factors

In LMICs, unavailability of services commonly delayed reaching an adequate facility [16,18,31]; whereas, in HICs, waiting list times and delays in referral were more common barriers [25,49,50]. This emphasises the difference in healthcare systems and infrastructure in the two settings. In HICs, while appropriate services usually physically exist, demand for them at a given time may exceed availability. Here, health systems' infrastructure is equipped to manage waiting lists and facilitate referrals across providers and specialists. In LMICs, appropriate services are more likely to be physically non-existent and complex referral systems are much less common, compounding difficulties faced in accessing already sparse services.

Socio-cultural and patient factors

Socio-cultural barriers to reaching an adequate facility were only reported in LMICs; often linked with gender imbalances, making healthcare access more difficult for women.

For example, women may be delayed due to lack of an accompanying male [32,51], or could be refused access to public transport due to stigma associated with certain conditions affecting women [19]. In HICs, patient factors were related to inconvenience and difficulty making appointments [36,43,52].

Delay 3

Factors affecting receiving care once at the facility are presented in Figure 5.

Socio-cultural and patient factors

Treatment non-adherence and lack of an established relationship with healthcare providers are reported exclusively in HICs [22,33,53,54]. However, treatment non-adherence is unlikely to be recorded in LMICs even if it occurs due to limited health records and follow-up care. Problems with communication also affect receipt of appropriate care for migrants in HICs [22,54,55]. In addition, societal norms influence provision of services deemed unacceptable by some healthcare providers (most often reported for abortion) [15,52].

Healthcare provider factors

While healthcare providers will inevitably experience heavy workload due to the demand for healthcare in all settings, this is more pronounced in LMICs where workforce shortages are more extreme [15,18–20,31,39,48]. Inexperience and lack of competence are also common in all settings; however, in LMICs, staff shortages exacerbate limited opportunities for professional development and mean little/no support from more experienced practitioners [20,31,48,56]. In HICs,

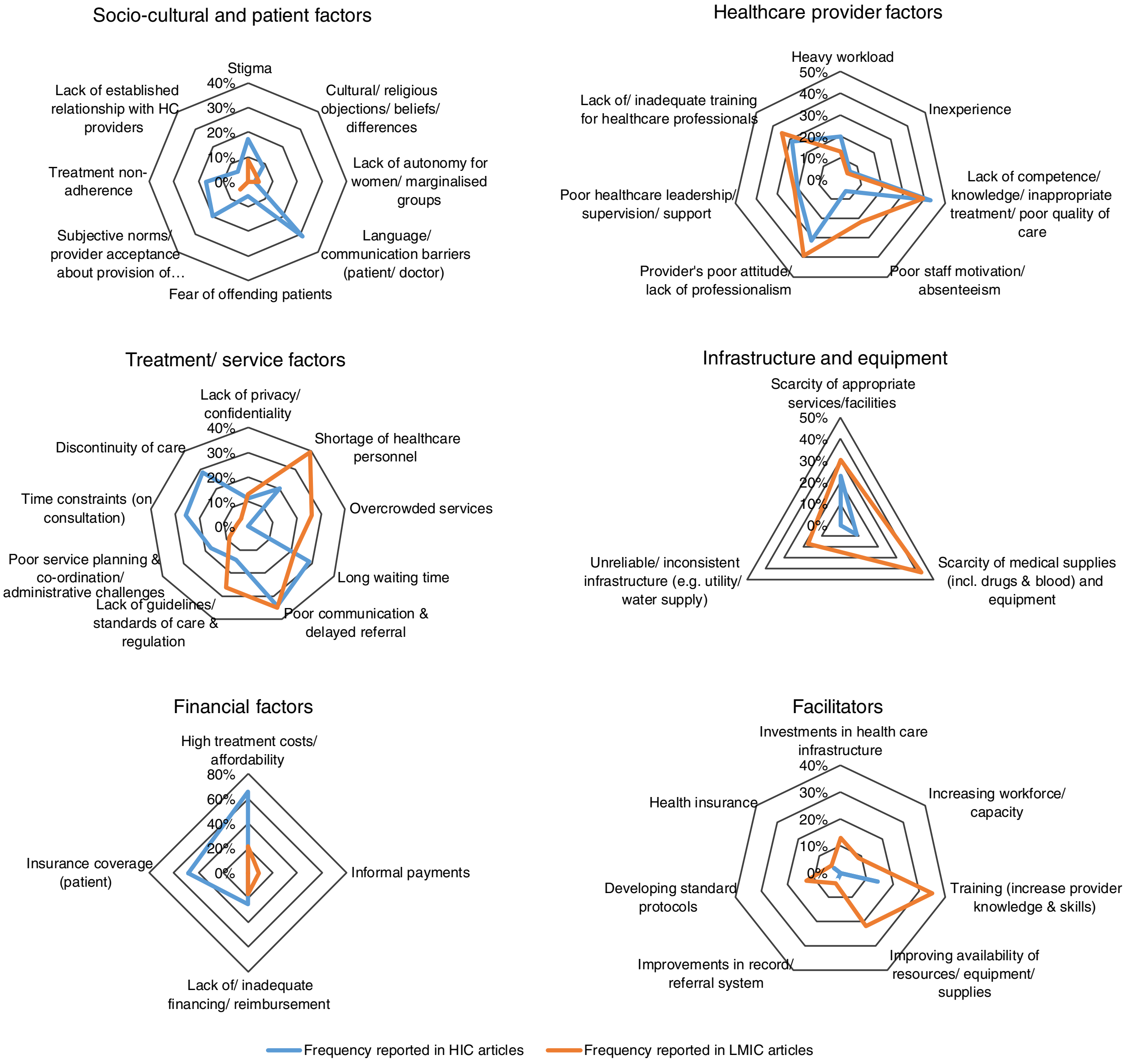

FIGURE 5 Delay 3 barriers and facilitators to healthcare access

these more often refer to inexperience with specific patient groups or certain specialities [46,53,54]. Poor provider attitude was often reported due to patients feeling they were treated insensitively in HICs. In LMICs, although there were some cases of this kind [15], there were also reports of abuse and neglect by providers [16]. In part, this is inevitably due to strain placed on individuals by the limited infrastructure and scarcity of resources, but is also likely due to lack of appropriate training and support [15,18,57].

Treatment/service factors

Many treatment/service factors are reported with similar frequencies across settings, but the realities can be starkly different. In HICs, waiting time is linked to the impact on patient experience, 'up to 60% of oncology outpatients reported that waiting times of more than 15 min contributed to poor experiences within health services' [47]. In contrast, in LMICs, long wait times result from facilities being closed when patients present, especially at night, or lacking appropriate staffing to manage the problem [16]. In HICs, personnel or service shortages often means a shortage of specialists or limited choice of providers. In LMICs, this can mean a shortage of any/all healthcare personnel, and few, or sometimes a complete absence of, facilities within a distance feasible to travel [15,16,19]. In HICs, the need for training relates to training for specialist services [29,53]; whereas in LMICs, this relates to general training of healthcare professionals and links with the absence of trained healthcare workers, especially in rural areas [39,58].

Scarcity of medical supplies, including medications, blood and equipment, is reported much more commonly in LMICs, demonstrating extremely limited resources for even basic healthcare [42,51,58]. In HICs, medical supply chains are more robust and well regulated. Limitations with medical infrastructure such as unreliability of power or water supplies and absence of toilets in healthcare facilities are reported solely in LMICs [16,20].

In contrast, time constraints on consultation and discontinuity of care are commonly reported barriers to healthcare access in HICs but not LMICs [30,33,59,60]. We note, however, that time constraints are also an issue in LMICs but are perhaps not picked up due to less focus on patient experience of care in evidence from LMICs. This may demonstrate differences in expectations of healthcare provision in different settings.

Financial factors

Financial barriers to receiving care at the facility are more frequently reported in HICs, particularly in the USA, when there are gaps in health insurance or unexpected and costly co-payments [34,36,46]. Although financial barriers are reported for all three delays in LMICs, they are reported less frequently for Delay 3. This may indicate that perceptions about cost of treatment, ability to pay and access to money feature more in the decision to seek care (Delay 1) in LMICs; meaning many who would have faced financial difficulty at the facility, never actually make it there. However, informal payments limit healthcare access in LMICs but not in HICs [31,61].

Quality assessment

For results of the quality assessment, see Appendix S6. Methodological quality was variable with some high-quality reviews (e.g. 54,61–63) and others meeting few criteria (e.g. 18,64). There was no trend in methodological quality of articles by study setting, study characteristics or according to the topic of the review. Of the 58 included studies, 37 undertook assessments of quality/risk of bias. However, only 15 discussed their interpretation of findings with reference to this assessment. For this type of research question, detailed analysis of risk of bias may have been considered less important than, for example, reviews determining intervention effectiveness. There was 100% agreement between reviewers on the quality assessment.

DISCUSSION

Key findings

Fifty-eight systematic reviews were included in this overview. All included articles provided evidence on barriers to healthcare access, while only a subset also provided evidence on facilitators. The methodological quality of included studies was variable across all settings. To improve this, review authors should ensure comprehensive searches are conducted in several databases and searches are expanded to include grey literature. Authors should also adhere to reporting guidelines to ensure quality can be judged appropriately.

In every country around the world, patients encounter challenges when healthcare is needed. While some factors are reported in HICs as well as LMICS, the way they are experienced is often quite different depending on the healthcare system and socio-cultural factors. In HICs, there is greater emphasis on patient experience compared to the physical absence of care in LMICs where barriers to healthcare access are more numerous and more extreme. Additionally, while LMIC articles focus on access issues affecting the general population, HIC articles often raise issues pertaining to specific subgroups, with around one-third focusing on hard-to-reach populations. These groups face greater challenges as they often have less entitlement to healthcare than the general population.

A key theme across all three delays is capacity to provide healthcare needed. In HICs, this is managed with rationing, waiting lists and systems to manage referrals and prioritise patients according to need. As such, although patients may not always have immediate access to care for less urgent healthcare needs, emergency healthcare can be prioritised, and so fewer capacity-related barriers are faced in HICs for emergency care. However, capacity constraints in LMICs are more extreme and are at the root of many of the barriers to healthcare access faced in this setting. Here, a complete absence of available healthcare in some areas means capacity-related barriers are experienced at all levels, for all conditions and regardless of the severity of need. In addition, limitations in healthcare capacity are often exacerbated by deficiencies in other key sectors, such as education and transport, to a greater extent in LMICs than HICs.

Financial barriers are also more severe in LMICs, where inability to pay prevents healthcare access earlier; often resulting in patients failing to present to healthcare providers altogether. Here, welfare systems are often less advanced and health insurance is limited or non-existent. Better healthcare financing support in HICs means patients are more likely to experience financial difficulties later in the process if insurance does not cover all healthcare or co-payments are required (particularly in USA).

Socio-cultural factors are also critical to healthcare access. However, the ways in which they manifest vary depending on the socio-cultural environment. For example, stigma limits healthcare access across all delays and in all settings but the reasons for the stigma and the conditions it is associated with vary in different contexts. These differences can be linked to the prevalence of certain conditions such as obstetric fistula, which can cause extreme stigmatisation in LMICs but is much less common in HICs due to developments in modern medicine. Such differences can also be linked to social and historical influences as is the case with HIV where ‘memories of suffering and death among AIDS patients’ [21] are still clear for some and contribute to continued stigma. Elsewhere, efforts to tackle HIV-related stigma, for example, in mass media campaigns, have had some success. Another example is the importance of traditional medicine in some cultures resulting in accepted medical pluralism in some countries, while in others the health system is dominated by provision of allopathic healthcare (usually the case in HICs). Social and cultural issues related to gender, social roles and expectations of men vs. women can also be very different across countries, which can exacerbate inequalities in access to healthcare and consequently inequalities in health. For example, in patriarchal societies, men are expected breadwinners and control family finances, while women's role in society may be linked with childbearing along with an expected submission to male partners. Understanding the socio-cultural environment in each setting is, therefore, critical in understanding factors affecting healthcare access. While the importance of increasing capacity of healthcare systems and developing healthcare financing options is already recognised in guidance on how to achieve universal health coverage (e.g. [65]), such guidance does not currently recognise the role of the socio-cultural environment which is needed for strategies to be successful.

Limitations

Due to the synthesis of evidence from a global perspective, the results of this overview are heterogeneous. Arguably, though, such heterogeneity can be viewed positively as the aim was to examine variations in factors affecting healthcare access in different settings.

Although a range of clinical areas are represented, some are better represented than others, and indeed, many are not represented at all. A similar trend exists in relation to the countries covered by the included articles. Furthermore, while this review has enabled identification of the most reported barriers and facilitators, the data are insufficient to determine the weight of each barrier/facilitator's impact, relative to others. The overview methodology, although necessary, has meant that only factors affecting access where there is sufficient primary evidence for it to have been synthesised in a systematic review are represented. Inevitably this means that important topics, which may be well documented in primary literature, but for which there is not yet sufficient data for them to emerge as priorities in systematic reviews, may not be represented in this review.

Country income classifications provide groupings according to level of development. However, although country income is likely correlated with development, it does not always translate to good standards of living. Also, as this approach is based on country averages, where income inequality is high it is unlikely to be representative. This review highlights greater barriers faced by certain groups such as migrants, homeless people and women (vs. men); but groupings based on average income are unlikely to capture these within-country inequalities in healthcare access. As such, categorising countries by level of inequality (e.g. Gini coefficient) may have highlighted additional nuances in the results. However, use of other metrics (e.g. the human development index) would likely have produced similar groupings to income. Furthermore, the decision to exclude articles for which the evidence could not be grouped in this way may have limited the capacity to explore factors affecting healthcare access in further depth.

In addition, findings are grouped into evidence from LMICs and HICs. This grouping was based on what is common within the literature. Yet breaking down the results further, for example, splitting LMICs into low income and middle income, would likely have yielded additional contrasts.

Implications

It is important to identify and understand key healthcare and system needs to understand how barriers to healthcare access will be experienced. Until the implications of these barriers can be understood with respect to the needs in a country, they cannot be effectively overcome. Importantly, improvements in healthcare provision and developments in healthcare systems in LMICs cannot always be measured effectively using standards and expectations from HICs.

Deficiencies in healthcare capacity limit healthcare access around the world but are relatively well managed in HICs. In LMICs, availability of healthcare facilities, trained healthcare professionals, medical supplies and equipment must be improved if healthcare access is to improve markedly. This must be accompanied with improvements in systems and support for healthcare financing. However, any developments to these systems must take account of the socio-cultural environment in the setting to be effective.

CONCLUSIONS

Patients face barriers to healthcare access all around the world, but they are more numerous and experienced much more extremely in LMICs where resources for healthcare are often very scarce both on a health system level and patient level. Efforts to understand and overcome these barriers require understanding of the healthcare and system needs, and the socio-cultural environment. Evaluation of efforts to overcome these barriers requires methods that account for the health system and wider cultural factors that impact capacity to provide care, the healthcare finance systems and the socio-cultural environment of the setting. As such, evaluation methods employed in HICs may not be appropriate in LMICs due to the stark differences in these areas.

ACKNOWLEDGEMENTS

BD, TE, BS and DJ are supported by NIHR Global Health Research Group in Surgical Technologies (GHRG-ST). GHRG-ST research was funded by the National Institute for Health Research (NIHR) (16/137/44) using UK aid from the UK Government to support global health research. The views expressed in this publication are those of the author(s) and not necessarily those of the NIHR or the UK Department of Health and Social Care.

REFERENCES

1. United Nations. Transforming our World: the 2030 Agenda for Sustainable Development. New York, NY, USA: UN; 2015.
2. Calvello E, Reynolds T, Hirshon JM, Buckle C, Moresky R, O'Neill J, et al. Emergency care in sub-Saharan Africa: results of a consensus conference. Afr J Emerg Med. 2013;3:42–8.
3. GBD 2015 Healthcare Access and Quality Collaborators. Healthcare Access. Healthcare Access and Quality Index based on mortality from causes amenable to personal health care in 195 countries and territories, 1990-2015: a novel analysis from the Global Burden of Disease Study 2015. Lancet. 2017;390:231-66
4. Ouma PO, Maina J, Thuranira PN, Macharia PM, Alegana VA, English M, et al. Access to emergency hospital care provided by the public sector in sub-Saharan Africa in 2015: a geocoded inventory and spatial analysis. Lancet Glob Health. 2018;6:e342–e50.
5. Witter S, Somanathan A. Demand-side financing for sexual and reproductive health services in low and middle-income countries: a review of the evidence. The World Bank. 2012.
6. Ahmed S, Khan MM. Is demand-side financing equity enhancing? Lessons from a maternal health voucher scheme in Bangladesh. Soc Sci Med. 2011;72:1704–10.
7. Morris SS, Flores R, Olinto P, Medina JM. Monetary incentives in primary health care and effects on use and coverage of preventive health care interventions in rural Honduras: cluster randomised trial. Lancet. 2004;364:2030–7.
8. Ir P, Horeman D, Narin S, Van Damme W. Improving access to safe delivery for poor pregnant women: a case study of vouchers plus health equity funds in three health districts in Cambodia. *Studies in Health Service Organisation & Policy*. 2008;24.
9. Schmidt J-O, Ensor T, Hossain A, Khan S. Vouchers as demand side financing instruments for health care: a review of the Bangladesh maternal voucher scheme. Health Policy. 2010;96:98–107.
10. Hunt H, Pollock A, Campbell P, Estcourt L, Brunton G. An introduction to overviews of reviews: planning a relevant research question and objective for an overview. Syst Rev. 2018;7:39.
11. Aromataris E, Fernandez R, Godfrey CM, Holly C, Khalil H, Tungpunkom P. Summarizing systematic reviews: methodological development, conduct and reporting of an umbrella review approach. Int J Evid Based Healthc. 2015;13:132–40.
12. Dawkins B, Renwick C, Ensor T, Shinkins B, Jayne D, Meads D. What factors affect patients' access to healthcare? Protocol for an overview of systematic reviews. Syst Rev. 2020;9:18.
13. Shea BJ, Reeves BC, Wells G, Thuku M, Hamel C, Moran J, et al. AMSTAR 2: a critical appraisal tool for systematic reviews that include randomised or non-randomised studies of healthcare interventions, or both. BMJ. 2017;358:j4008.
14. Thaddeus S, Maine D. Too far to walk: maternal mortality in context. Soc Sci Med. 1994;38:1091–110.
15. Barrios Arroyave FA, Moreno Gutierrez PA. A systematic bibliographical review: barriers and facilitators for access to legal abortion in low and middle income countries. Open J Prev Med. 2018;8:147–68.
16. Bohren MA, Hunter EC, Munthe-Kaas HM, Souza JP, Vogel JP, Gulmezoglu AM. Facilitators and barriers to facility-based delivery in low- and middle-income countries: a qualitative evidence synthesis. Reprod Health. 2014;11:71.
17. Lim JN, Ojo AA. Barriers to utilisation of cervical cancer screening in Sub Sahara Africa: a systematic review. Eur J Cancer Care (Engl). 2017;26:e12444.
18. Aboobaker S, Courtright P. Barriers to cataract surgery in Africa: a systematic review. Middle East Afr J Ophthalmol. 2016;23:145–9.
19. Baker Z, Bellows B, Bach R, Warren C. Barriers to obstetric fistula treatment in low-income countries: a systematic review. Trop Med Int Health. 2017;22:938–59.
20. Geleto A, Chojenta C, Musa A, Loxton D. Barriers to access and utilization of emergency obstetric care at health facilities in sub-Saharan Africa: a systematic review of literature. Syst Rev. 2018;7:183.
21. Qiao S, Zhang Y, Li X, Menon JA. Facilitators and barriers for HIV-testing in Zambia: a systematic review of multi-level factors. PLoS One. 2018;13:e0192327.
22. Ferdous M, Lee S, Goopy S, Yang H, Rumana N, Abedin T, et al. Barriers to cervical cancer screening faced by immigrant women in Canada: a systematic scoping review. BMC Womens Health. 2018;18:165.
23. Rambout L, Tashkandi M, Hopkins L, Tricco AC. Self-reported barriers and facilitators to preventive human papillomavirus vaccination among adolescent girls and young women: a systematic review. Prev Med. 2014;58:22–32.
24. Ferrer HB, Trotter C, Hickman M, Audrey S. Barriers and facilitators to HPV vaccination of young women in high-income countries: a qualitative systematic review and evidence synthesis. BMC Public Health. 2014;14:700.
25. Vedio A, Liu EZH, Lee ACK, Salway S. Improving access to health care for chronic hepatitis B among migrant Chinese populations: a systematic mixed methods review of barriers and enablers. J Viral Hepat. 2017;24:526–40.
26. Baker AEZ, Procter NG, Ferguson MS. Engaging with culturally and linguistically diverse communities to reduce the impact of depression and anxiety: a narrative review. Health Soc Care Community. 2016;24:386–98.
27. Blondell SJ, Kitter B, Griffin MP, Durham J. Barriers and facilitators to HIV testing in migrants in high-income countries: a systematic review. Aids Behav. 2015;19:2012–24.

28. Hadgkiss EJ, Renzaho AM. The physical health status, service utilisation and barriers to accessing care for asylum seekers residing in the community: a systematic review of the literature. Aust Health Rev. 2014;38:142–59.
29. Paisi M, Kay E, Plessas A, Burns L, Quinn C, Brennan N, et al. Barriers and enablers to accessing dental services for people experiencing homelessness: a systematic review. Commun Dent Oral Epidemiol. 2019;47:103–11.
30. McDonagh LK, Saunders JM, Cassell J, Curtis T, Bastaki H, Hartney T, et al. Application of the COM-B model to barriers and facilitators to chlamydia testing in general practice for young people and primary care practitioners: a systematic review. Implement Sci. 2018;13:130.
31. Kyei-Nimakoh M, Carolan-Olah M, McCann TV. Access barriers to obstetric care at health facilities in sub-Saharan Africa – a systematic review. Syst. 2017;6:110.
32. Mussie A, Araya Abrha M, Afework M. A review of evidence on barriers to and facilitators of the utilization of reproductive, maternal and neonatal health services among pastoralist communities in Sub-Saharan Africa. (Special Issue: Triad limiting the provision and uptake of reproductive, maternal and neonatal health services in the pastoralist communities of Afar, Ethiopia.). Ethiop J Health Dev. 2018;32(Special Issue):43–9.
33. Klop HT, de Veer AJE, van Dongen SI, Francke AL, Rietjens JAC, Onwuteaka-Philipsen BD. Palliative care for homeless people: a systematic review of the concerns, care needs and preferences, and the barriers and facilitators for providing palliative care. BMC Palliat Care. 2018;17:67.
34. Resurreccion DM, Motrico E, Rigabert A, Rubio-Valera M, Conejo-Ceron S, Pastor L, et al. Barriers for nonparticipation and dropout of women in cardiac rehabilitation programs: a systematic review. J Womens Health (Larchmt). 2017;26:849–59.
35. White BM, Newman SD. Access to primary care services among the homeless: a synthesis of the literature using the equity of access to medical care framework. J Prim Care Community Health. 2015;6:77–87.
36. Mason D, Ingham B, Urbanowicz A, Michael C, Birtles H, Woodbury-Smith M, et al. A systematic review of what barriers and facilitators prevent and enable physical healthcare services access for autistic adults. J Autism Dev Disord. 2019;23.
37. Moreland JJ, Coxe KA, Yang J. Collegiate athletes' mental health services utilization: a systematic review of conceptualizations, operationalizations, facilitators, and barriers. J Sport Health Sci. 2018;7:109–19.
38. Eilers R, Krabbe PFM, de Melker HE. Factors affecting the uptake of vaccination by the elderly in Western society. Prev Med. 2014;69:224–34.
39. Kironji AG, Hodkinson P, de Ramirez SS, Anest T, Wallis L, Razzak J, et al. Identifying barriers for out of hospital emergency care in low and low-middle income countries: a systematic review. BMC Health Serv Res. 2018;18:291.
40. Gilson L. Trust in health care: theoretical perspectives and research needs. J Health Organ Manag. 2006;20(5):359–75.
41. Peters D, Youssef FF. Public trust in the healthcare system in a developing country. Int J Health Plann Manag. 2016;31:227–41.
42. Khatri RB, Karkee R. Social determinants of health affecting utilisation of routine maternity services in Nepal: a narrative review of the evidence. Reprod Health Matters. 2018;26:32–46.
43. Reardon T, Harvey K, Baranowska M, O'Brien D, Smith L, Creswell C. What do parents perceive are the barriers and facilitators to accessing psychological treatment for mental health problems in children and adolescents? A systematic review of qualitative and quantitative studies. Eur Child Adolesc Psychiatry. 2017;26:623–47.
44. Sullivan BJ, Esmaili BE, Cunningham CK. Barriers to initiating tuberculosis treatment in sub-Saharan Africa: a systematic review focused on children and youth. Glob Health Action. 2017;10:1290317.
45. Douthit N, Kiv S, Dwolatzky T, Biswas S. Exposing some important barriers to health care access in the rural USA. Public Health. 2015;129:611–20.
46. Dilworth S, Higgins I, Parker V, Kelly B, Turner J. Patient and health professional's perceived barriers to the delivery of psychosocial care to adults with cancer: a systematic review. Psychooncology. 2014;23:601–12.
47. Fradgley EA, Paul CL, Bryant J. A systematic review of barriers to optimal outpatient specialist services for individuals with prevalent chronic diseases: what are the unique and common barriers experienced by patients in high income countries? Int J Equity Health. 2015;14:52.
48. Lufumpa E, Doos L, Lindenmeyer A. Barriers and facilitators to preventive interventions for the development of obstetric fistulas among women in sub-Saharan Africa: a systematic review. BMC Pregnancy Childbirth. 2018;18:155.
49. Hannaford A, Lipshie-Williams M, Starrels JL, Arnsten JH, Rizzuto J, Cohen P, et al. The use of online posts to identify barriers to and facilitators of HIV pre-exposure prophylaxis (PrEP) among men who have sex with men: a comparison to a systematic review of the peer-reviewed literature. AIDS Behav. 2018;22:1080–95.
50. Smith MS, Lawrence V, Sadler E, Easter A. Barriers to accessing mental health services for women with perinatal mental illness: systematic review and meta-synthesis of qualitative studies in the UK. BMJ Open. 2019;9(1):e024803.
51. Upadhyay RP, Krishnan A, Rai SK, Chinnakali P, Odukoya O. Need to focus beyond the medical causes: a systematic review of the social factors affecting neonatal deaths. Paediatr Perinat Epidemiol. 2014;28:127–37.
52. Doran F, Nancarrow S. Barriers and facilitators of access to first-trimester abortion services for women in the developed world: a systematic review. J Fam Plann Reprod Health Care. 2015;41:170–80.
53. Bots-VantSpijker PC, Vanobbergen JN, Schols JM, Schaub RM, Bots CP, de Baat C. Barriers of delivering oral health care to older people experienced by dentists: a systematic literature review. Community Dent Oral Epidemiol. 2014;42:113–21.
54. de Vries SG, Cremers AL, Heuvelings CC, Greve PF, Visser BJ, Belard S, et al. Barriers and facilitators to the uptake of tuberculosis diagnostic and treatment services by hard-to-reach populations in countries of low and medium tuberculosis incidence: a systematic review of qualitative literature. Lancet Infect Dis. 2017;17:e128–e43.
55. Robertshaw L, Dhesi S, Jones LL. Challenges and facilitators for health professionals providing primary healthcare for refugees and asylum seekers in high-income countries: a systematic review and thematic synthesis of qualitative research. BMJ Open. 2017;7:e015981.
56. Johnson RR, Friedman JM, Becker AM, Spiegel DA. The Ponseti method for clubfoot treatment in low and middle-income countries: a systematic review of barriers and solutions to service delivery. J Pediatr Orthop. 2017;37:e134–e9.
57. Olivera MJ, Villamil JFP, Gahona CCT, Hernandez JMR. Barriers to diagnosis access for Chagas disease in Colombia. J Parasitol Res. 2018;2018:4940796.
58. Schuster RC, McMahon DE, Young SL. A comprehensive review of the barriers and promoters health workers experience in delivering prevention of vertical transmission of HIV services in sub-Saharan Africa. AIDS Care. 2016;28:778–94.
59. Cassim S, Chepulis L, Keenan R, Kidd J, Firth M, Lawrenson R. Patient and carer perceived barriers to early presentation and diagnosis of lung cancer: a systematic review. BMC Cancer. 2019;19:25.
60. Keygnaert I, Ivanova O, Guieu A, Van Parys A, Leye E, Roelens K. What is the evidence on the reduction of inequalities in accessibility and quality of maternal health care delivery for migrants? A review of the existing evidence in the WHO European Region: World Health Organization. Regional Office for. 2016.
61. Gopalan SS, Das A, Howard N. Maternal and neonatal service usage and determinants in fragile and conflict-affected situations: a systematic review of Asia and the Middle-East. BMC Womens Health. 2017;17:20.

62. Bhogal SK, Reddigan JI, Rotstein OD, Cohen A, Glockler D, Tricco AC, et al. Inequity to the utilization of bariatric surgery: a systematic review and meta-analysis. Obes Surg. 2015;25:888–99.
63. Tekelab T, Chojenta C, Smith R, Loxton D. Factors affecting utilization of antenatal care in Ethiopia: A systematic review and metaanalysis. PLoS One. 2019;14:e0214848.
64. Huot S, Ho H, Ko A, Lam S, Tactay P, MacLachlan J, et al. Identifying barriers to healthcare delivery and access in the Circumpolar North: important insights for health professionals. Int J Circumpolar Health. 2019;78:1571385.
65. World Health Organisation. Universal Health Coverage (UHC). 2019. https://www.who.int/news-room/fact-sheets/detail/universal-health-coverage-(uhc). Accessed 19 August 2020.

SUPPORTING INFORMATION

Additional supporting information may be found online in the Supporting Information section.

How to cite this article: Dawkins B, Renwick C, Ensor T, Shinkins B, Jayne D, Meads D. What factors affect patients' ability to access healthcare? An overview of systematic reviews. Trop Med Int Health. 2021;26:1177–1188. https://doi.org/10.1111/tmi.13651