Future Healthcare Journal 11 (2024) 100190

Contents lists available at ScienceDirect

Future Healthcare Journal

journal homepage: https://www.sciencedirect.com/journal/future-healthcare-journal

Proposing a curriculum framework for refugee and migrant health for UK medical students

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ARTICLE INFO

Keywords:
Refugee
Migrant
Medical education
Curriculum
Service learning

ABSTRACT

Introduction: Migration to the UK continues to rise. Refugee and migrant health needs are complex and multi-faceted, and UK medical schools do not equip trainees to care confidently for this population.

Methods: A systematic literature review was performed to design a curriculum, which includes core themes, learning objectives, and proposed teaching methods. This was mapped to the General Medical Council (GMC) outcomes for UK graduates.

Results and discussion: Core themes were identified from 30 publications: knowledge, skills, leadership, advocacy and support. Topics include legislation, common conditions, social determinants of health, safeguarding and barriers to accessing care. Communication skills included trauma-informed and culturally sensitive consultations and interpreter use. Experiential learning programmes demonstrated high student satisfaction, development and patient impact. However, structured student support should be incorporated.

Conclusion: This adaptable curriculum correlates with GMC outcomes and may better equip doctors to deliver care to refugees, migrants and the wider UK population.

Introduction

International migration has increased in recent years due to persecution, conflict, the COVID-19 pandemic and climate change, amongst other humanitarian dangers.[1–3] Refugees and asylum seekers are those who seek government protection to reside outside their home country due to fear of persecution or other dangers.[1,4] In the UK, during the year ending September 2023, the government offered humanitarian routes into the UK for 112,431 people.[1]

Refugee and migrant health (RaMH) needs are complex for a multitude of reasons, including the impact of violence and poverty prior to and during migration, and barriers to accessing healthcare in destination countries.[5] Those who reach the UK face significant morbidity due to poorly controlled chronic conditions, untreated communicable diseases, poor maternity care and mental health issues.[2] This is partly attributed to reduced healthcare access, complicated by language barriers, cultural discordance and socio-political factors[2,6,7] Therefore, specific knowledge and skills are required to meet the needs of this vulnerable population.

Despite attempts in recent years to address this in medical training, inclusion of such education is highly variable and of unclear effectiveness.[8] A recent study conducted in the USA highlighted this gap, with 52% of medical students rating their knowledge of this area as 'poor' or 'none', despite 91% reporting a desire to receive such training.[9] In a similar study, 70.6% of students felt that insufficient time was spent on culturally sensitive care and that they did not have enough clinical exposure to RaMH, leaving most graduates feeling underprepared to care for this population.[10] There is limited research around this in the UK; however a recent survey conducted in one UK medical school mirrors these findings, highlighting poor confidence, competence and awareness of RaMH.[11] This is incongruent with the NHS' aim to promote social justice and health equity.[2,12,13]

In light of this, this paper aims to develop a succinct RaMH education curriculum framework which can be integrated into UK medical school curricula to ensure that trainees are equipped to provide effective care to this vulnerable population. Moreover, we propose that such education facilitates learning and development that is applicable beyond refugees and migrants, advancing care for all.

This article reflects the opinions of the author(s) and should not be taken to represent the policy of the Royal College of Physicians unless specifically stated.

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https://doi.org/10.1016/j.fhj.2024.100190
Received 8 March 2024; Received in revised form 8 September 2024; Accepted 17 September 2024

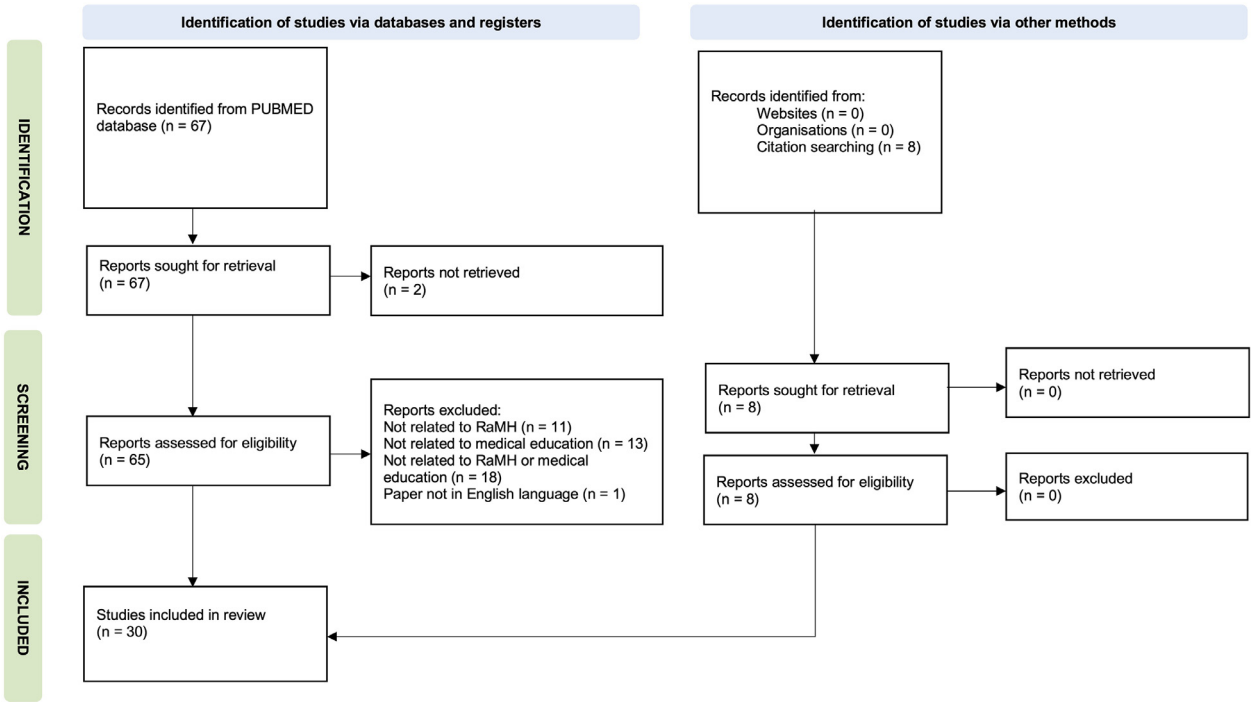

Fig. 1. PRISMA flow diagram. PRISMA =Ppreferred Reporting Items for Systematic reviews and Meta-Analyses.

Table 1
Inclusion and exclusion criteria.

Inclusion criteria	Exclusion criteria
• Publications written in the English language • Records published in a peer-reviewed journal	• Literature not related to medical students or doctors • Literature not related to education, volunteering or experience • Literature not pertaining to vulnerable groups including refugees, asylum seekers or migrants

Methods

A multi-method approach was employed to achieve the aims of this project, using the Good Reporting of a Mixed Methods Study (GRAMMS) guidelines.[14] First, a scoping literature review was undertaken. Review findings were integrated with educational theory to facilitate curriculum development. Following this, wider value and applicability of the curriculum were assessed by correlating the curriculum framework with existing General Medical Council (GMC) outcomes for medical school graduates.[15]

Literature review

Literature pertaining to RaMH medical education was systematically reviewed in accordance with the Preferred Reporting Items for Systematic reviews and Meta-Analyses (PRISMA) (Fig. 1).[16] Variations of the following search terms were used in the bibliographic PubMed database: medical student, curriculum, refugee, asylum, migrant. The full search strategy is included in Supplementary Material 1.

All studies prior to the search period (December 2023) were included in initial screening. Identified studies were divided among four authors who initially screened by title and abstract, before full-text screening against the inclusion and exclusion criteria outlined in Table 1. A simultaneous second review of all titles and abstract was undertaken by the lead author and any discrepancies prompted full-text review and group discussion prior to exclusion. Full-text screening included identification of relevant studies by citation searching.

Curriculum development

Thematic analysis of included studies was undertaken by two authors independently.[17] Identified themes were discussed and refined and presented to the wider group for collaborative refinement. This informed overarching core themes and associated learning objectives in the curriculum. Educational theory informed a stepwise curriculum design.[18] Adult learning theory principles informed focused learning objectives that address all levels of Anderson's revised taxonomy of learning.[19–21] Cognitive-constructivist principles were employed: new knowledge should be actively integrated into existing schema to lead to conceptual growth.[22,23]

GMC outcomes mapping

Following this, each learning outcome was reviewed in the context of the GMC's outcomes for UK medical school graduates, the professional standards by which graduating doctors are measured in the UK.[15]

Results

Literature review

A PubMed search identified 67 publications. Of these, two were not retrievable, leaving 65 publications assessed for eligibility. Publications were excluded for the following reasons: publications not related to RaMH ($n = 11$), publications not related to medical education ($n = 13$), publications not related to RaMH or medical education ($n = 18$), publication not in English language ($n = 1$). An additional eight papers were identified by citation searching ($n = 8$), resulting in 30 studies included

in the review. These 30 publications were published between 2003 and 2023. These papers utilised a range of study designs, including 13 (42%) qualitative, seven (23%) descriptive, three (10%) mixed methods, two (7%) quantitative, two (7%) reviews, two (7%) commentary and one (3%) letter to the editor. Of these 30 publications, 19 (63%) were published in the USA, three (10%) in Canada, four (13%) were published in the UK and one publication each from Germany, Croatia, and Bosnia and Herzegovina (Supplementary Material 2).

Recurring descriptive themes ran through the literature with overlap of learning. Educational programmes addressed common physical and mental health conditions experienced by refugees and migrants, and the impact of their living conditions.[24–26] With respect to physical health, particular attention was given to domestic screening programmes and infectious disease.[27,28] With regards to mental health, studies discuss post-traumatic stress disorder (PTSD) and psychological sequelae of migration.[24,26,29,30] With regards to social, economic, political and cultural determinants of health, programmes covered barriers to accessing care, such as poor uptake of services due to language barriers, health beliefs and the impact of prejudice and discrimination.[27,31,32] Additionally, improving knowledge of legal rights surrounding RaMH care enabled trainees to address some of these barriers, particularly lack of knowledge.[24,29,30,33] This knowledge promotes safeguarding and identification of at-risk individuals.[31]

Many programmes incorporated skills training, including history-taking and examination skills, and a predominant focus on communication skills.[34–36] Communication skills training encompassed trauma-informed care, culturally sensitive consultations, and the use of language interpreters.[28,33,36,37] Cultural sensitivity includes cultural awareness, diversity and ethnomedical treatment, as well as the impact of cultural and religious values on the ease and effectiveness of consultations and patient-centred care.[10,24,28,36,38,39] Griswold *et al* explore the term 'cultural humility', which refers to an awareness of the power imbalance and biases in the doctor–patient relationship, a divide which is deepened with cultural differences.[38,39] Cultural humility promotes self-reflection about care-provider biases and diverts from stereotyping. This promotes a more balanced patient–doctor relationship which fosters patient-centred care and shared decision making.[33,38]

Two further recurring themes were those of leadership and advocacy. In the described programmes, medical students were often empowered to support and advocate for RaMH by organising and leading interventions and actions. Many achieved this through service learning models established through links with community organisations. These included student-run clinics,[34,35] partnerships with families,[40,41] educational programmes for refugees and migrants,[42] and workshops for change.[28,30,36,43] Student-led interventions largely consisted of practical support with navigating healthcare systems such as managing online booking systems, appointment practicalities and available resources.[28,40,41] Additionally, programmes also focused on health promotion and illness prevention, rather than treatment,[31,42] with one educational programme developing accessible health promotion materials for refugees.[42] Some programmes included quality improvement, and many required effective collaboration with other healthcare professionals and community leaders.[28,36,41]

Students may be exposed to traumatic experiences encountered by this population, thus necessitating strong student support in all programmes.[44] Student support may be direct from mentors or supervisors, as well as through facilitated self-reflection, group debriefing and feedback.[28,38,40,45] Kindermann *et al* considered the psychological strain and protective factors in medical students volunteering with refugees, finding that only 8.1% of students felt that psychological support was needed.[46] Similarly, Asgary *et al* found that very few sought support.[47]

A variety of teaching strategies were employed by different programmes, often utilising a multi-method approach. Lectures or online learning modules were often accompanied with more interactive modalities, including workshops, case presentations, small group work and simulated patient models.[25,29,30,34] Service-learning models that included direct clinical experience with refugees fostered high student engagement and satisfaction.[28,33,35,41–43,48] Furthermore, these models often emphasised the value in following up with the same service users in building a continuity of care. This led to better insight into patient journeys and greater knowledge retention.[30,41,42,48]

Curriculum development

We aimed to design a framework of pertinent goals based on existing literature and educational theory, alongside guidance on how to apply it, that is also widely applicable to different UK medical schools based on respective available resources.[49] The curriculum framework is comprised of five core themes that encompass learning outcomes: (1) knowledge, (2) skills, (3) leadership, (4) advocacy, and (5) support (Fig. 2).

The *knowledge* theme comprises common RaMH conditions, barriers to accessing care, factors that may influence RaMH, rights and legislation, and safeguarding. Communication is the main focus in *skills*: language interpreters, culturally sensitive and trauma-informed consultations. *Leadership* encompasses collaborative working, student-led initiatives and quality improvement. *Advocacy* focuses on health promotion and community partnership. Finally, the *support* theme includes peer- and mentor-led feedback, debrief and support. Supplementary Material 3 fully illustrates the aims and learning objectives in the curriculum.

The sequential introduction of each of these themes will aim to guide the learner through a series of learning experiences. The learning outcomes for each theme are arranged in increasing order of cognitive processing, aligning with Anderson's revised taxonomy (Fig. 3).[20,21] Each theme requires higher order cognitive processing than the previous, although there is a degree of overlap: *Knowledge* predominantly includes 'remember' and 'understand' outcomes; *skills* outcomes require students to 'apply' and 'analyse'; and *leadership, advocacy and support* require students to 'evaluate' and 'create'.[20,21]

The framework is presented in a circular format to reflect that while sequential achievement of the themes is required, it is a cyclical and inter-related process (Fig. 2). This aligns with the SPICES model of curriculum development that conceptualises the inter-relationship of curriculum elements.[50]

GMC outcomes mapping

We found that each outcome was reflected in the GMC outcomes for graduates. The converse was also true: each GMC outcome was reflected in the learning outcomes. Fig. 2 summarises the five core themes and the GMC outcomes with which they align. Supplementary Material 4 gives a detailed view of the mapping of each learning outcome.

Discussion

110 million people were forcibly displaced worldwide in the year ending June 2023, as a result of conflict, persecution and humanitarian crises, amongst other reasons.[3] This population has increased physical and mental health morbidity.[1,2] Simultaneously, they face a multitude of barriers to accessing healthcare.[2,6] Those seeking asylum or refugee status, and those who have been granted this, are entitled to free UK NHS healthcare.[51] RaMH education has the potential to tackle barriers and promote health equity, a central aim within the NHS.[12,13] This project aimed to developing an evidence-based, innovative and adaptable curriculum framework for RaMH medical education; and consider its application and scope.

Currently, global health education in UK medical schools is delivered predominantly in lecture format.[8] This proposed curriculum is a circular, sequential framework that enables students to navigate through the stages of memory and active cognitive processing, leading to deeper and longer-term learning.[52,53] We recommend a multimodal teaching approach to achieve deeper learning.[20,30,47] Of note,

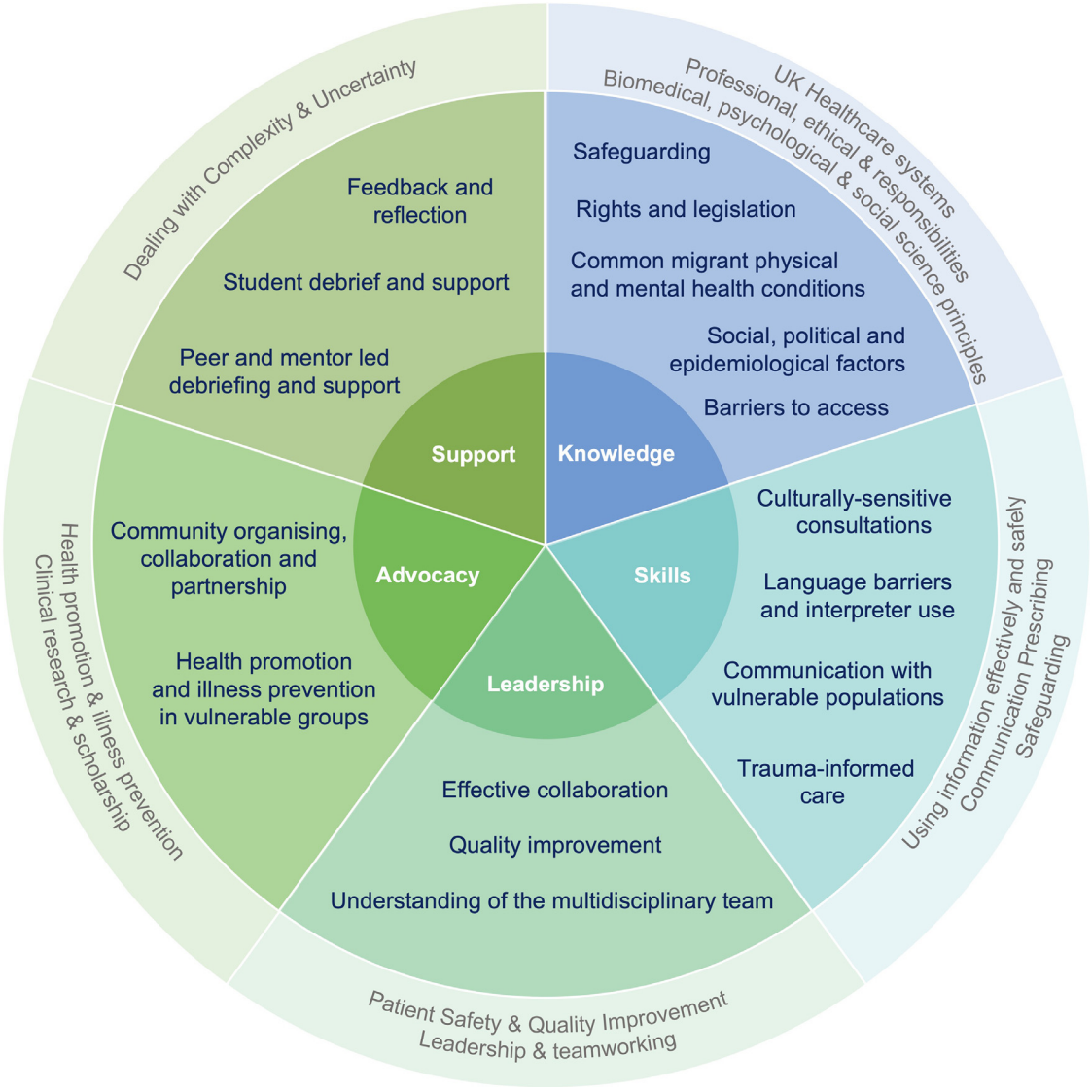

Fig. 2. Curriculum framework. Core themes (inner ring); learning objectives (middle ring); GMC outcome-mapping (outer ring). GMC = General Medical Council.

service-learning experiential models with direct student community engagement with refugees and migrants have shown the highest satisfaction and learning.[30,35,36,40] This employs social learning theory and appears to deepen students' valuing of health advocacy and team collaboration,[34,35,41,54] additionally encouraging students to challenge beliefs, critically reflect and build new frames of reference, incorporating transformative learning principles.[55]

However, we acknowledge the wide variation in resources and teaching styles between medical schools. The broad and adaptable nature of this curriculum facilitates numerous existing opportunities to which this framework can be applied, while maintaining its principles and goals. For example, proposed teaching strategies include problem-based learning cases, simulated patient work, as well as suggestions for direct work with refugee and migrant communities in an elective or non-elective capacity.

Furthermore, we were encouraged by our finding that the proposed curriculum has the potential to encompass all of the GMC outcomes for graduates. We recognise the already stretched nature of the UK training programme; however. our findings suggest that this curriculum can be integrated, rather than added, to existing components. This modification would enable current curricula to better reflect the needs of an evolving refugee and migrant population. Furthermore, this may enhance care for the general population, as the knowledge and skills achieved are highly transferable to, and valuable for, treating those represented within traditional curricula.

The RaMH curriculum incorporates the GMC's outcomes of leadership and quality improvement – domains which are often overlooked in undergraduate medical education, but remain pivotal to doctors' roles and professional progression.[56–58] Additionally, the literature demonstrated that student participation in curriculum implementation and improvement fostered highly valuable and self-sustaining educational programmes.[30,42,56] This novel framework offers scope to empower students in the design and delivery of their education; an approach growing in popularity.[59,60]

However, our study and curriculum are not without limitations. The publications identified in literature review were heterogenous in design, often subjective in outcome measures and subject to volunteer bias. Indeed, most publications were small, single-centre initiatives. These threaten their external validity and confidence in nation-wide applicability. Additionally, the majority of reported studies are from North American countries where students are postgraduate, compared to undergraduate medical training in the UK, which may limit exteral validity. Limited resources were a recurring limitation that will also hinder the application of our curriculum. These include limitations on time and

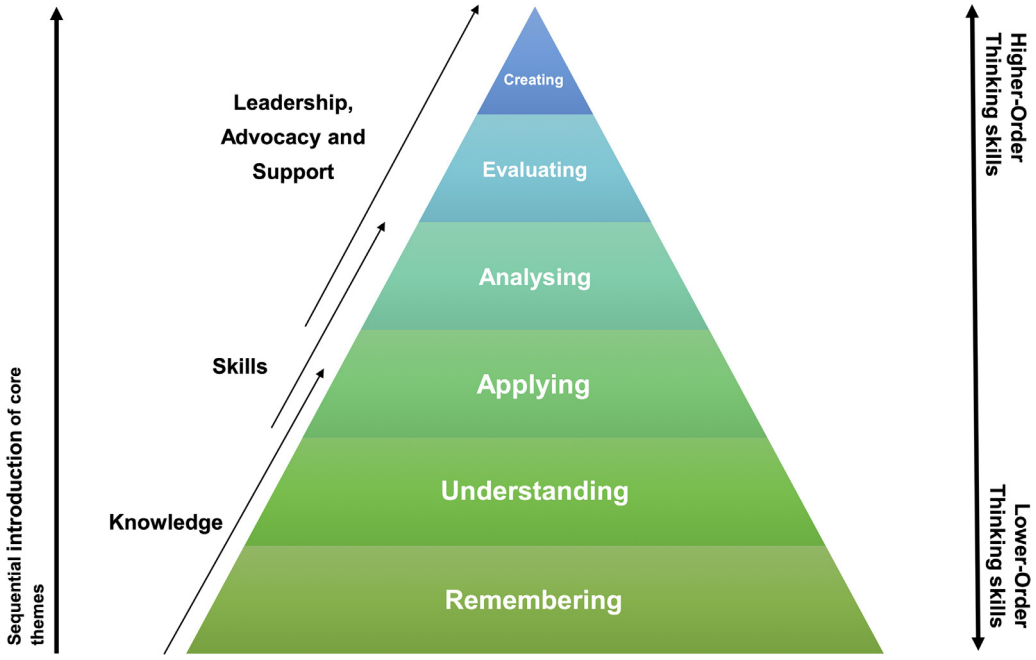

Fig. 3. Curriculum themes and Anderson's revised taxonomy of learning. The five core learning themes of the proposed curriculum are mapped against Anderson's revised taxonomy of learning. This demonstrates the sequential introduction of higher order cognitive processing as students progress through the curriculum.[19–21]

appropriate staff for programme establishment and supervision, delivery of specialist teaching, and providing adequate support.[28,61] Current literature does not discuss the ethical and governance barriers which may hinder direct student involvement with refugees. Finally, integration of such education necessitates accompanying measures of assessment, to engage learners and monitor the value of the teaching.[8]

Ultimately, the aim of our curriculum is to improve patient care. In addition to the indirect impact on patient care of this curriculum that has been discussed, a number of student-delivered interventions demonstrated more direct impact on care provision for refugees. Pottie *et al* found that service users reported an improved understanding of the healthcare system and that families who had been part of their programme were more trusting.[30] Duke *et al* reported that clinicians found student histories useful, with high levels of patient satisfaction.[34,35] These findings demonstrate the potential for involving and empowering medical students to directly improve patient care; an exciting and novel prospect. It will be important to measure the long-term patient outcomes which result from employing this curriculum.

There are many ways to implement this curriculum. Encouraging already-motivated students to drive local initiatives would allow them to identify the deficiencies in their current learning and fuel engagement from peers. Implementing the curriculum framework through service-learning opportunities would tailor curricula to local RaMH needs. The application of this using an iterative process with regular feedback and modification would aim to completely integrate the RaMH curriculum over time, while also serving local population needs. Simultaneously, a top-down approach may be needed to encourage educational leaders and governing bodies in the UK to recognise and prioritise this educational need.

Doctors have an ethical and professional responsibility to deliver effective care to refugees and migrants; yet UK medical training does not adequately equip graduates with the required knowledge and skills. We present this curriculum framework as an adaptable and novel approach to delivering RaMH education, that can be integrated into existing curricula. We propose that it will address the current shortfalls in RaMH education by updating the existing learning outcomes of undergraduate medical training. Importantly, it will also enhance key transferrable knowledge and skills relevant to other vulnerable populations, hence better equipping graduates to provide care to all.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

CRediT authorship contribution statement

Hilary Warrens: Writing – review & editing, Writing – original draft, Supervision, Resources, Project administration, Methodology, Investigation, Data curation, Conceptualization. **Jeyapragash Jeyapala:** Writing – review & editing, Resources, Project administration, Methodology, Investigation, Conceptualization. **Helena Blakeway:** Writing – review & editing, Resources, Methodology, Investigation. **Amy Craig:** Writing – review & editing, Resources, Methodology, Investigation. **Isabel Tol:** Project administration, Conceptualization.

Supplementary materials

Supplementary material associated with this article can be found, in the online version, at doi:10.1016/j.fhj.2024.100190.

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